

## **APRILIA WOULD LIKE TO THANK YOU**

for choosing one of its products. We have compiled this booklet to provide a comprehensive overview of your vehicle's quality features. Please read it carefully before riding the vehicle for the first time. It contains information, tips and precautions for using your vehicle. It also describes features, details and devices to assure you that you have made the right choice. We believe that if you follow our suggestions, you will soon get to know your new vehicle well and that it will continue to give you satisfactory service for many years to come. This booklet is an integral part of the vehicle and must be handed over to the new owner in the event of sale.

# **Tuono V4 1100 RR/Factory**

The Aprilia logo, consisting of the word "aprilia" in white lowercase letters on a red rectangular background.

The instructions given in this manual are intended to provide a clear, simple guide to using your vehicle; it also describes routine maintenance procedures and regular checks that should be carried out on the vehicle at an **Aprilia Dealer or Authorised Workshop**. The booklet also contains instructions for simple repairs. Any operations not specifically described in this booklet require the use of special tools and/or particular technical knowledge: for these operations, please take your vehicle to an **Aprilia Dealer or Authorised Workshop**.



### **Personal safety**

Failure to completely observe these instructions will result in serious risk of personal injury.



### **Safeguarding the environment**

Sections marked with this symbol indicate the correct use of the vehicle to prevent damaging the environment.



### **Vehicle intactness**

The incomplete or non-observance of these regulations leads to the risk of serious damage to the vehicle and sometimes even the invalidity of the guarantee

*The symbols illustrated above are very important. They are used to highlight parts of the booklet that should be read with particular care. The different symbols are used to make each topic in the manual simple and quick to locate. Before starting the engine, read this booklet carefully, particularly the "SAFE RIDING" section. Your safety as well as other's does not only depend on the quickness of your reflexes and agility, but also on how well you know your vehicle, the state of maintenance of the vehicle itself and your knowledge of the rules for SAFE RIDING. For your safety, get to know your vehicle well so as to safely ride and master it given any riding condition. **IMPORTANT** This booklet is an integral part of the vehicle, and must be handed to the new owner in the event of sale.*



# INDEX

- GENERAL RULES**..... 7
  - Foreword..... 8
  - Motorcycle care..... 8
  - Carbon monoxide..... 11
  - Fuel..... 12
  - Hot components..... 12
  - Coolant..... 13
  - Used engine oil and gearbox oil..... 13
  - Brake and clutch fluid..... 14
  - Battery hydrogen gas and electrolyte..... 14
  - Stand..... 15
  - Reporting of defects that affect safety..... 15
  - System a-PRC (Aprilia Performance Ride Control)..... 16
- VEHICLE**..... 17
  - Arrangement of the main components..... 19
  - Dashboard..... 24
  - Analog instrument panel..... 25
  - Light unit..... 26
  - Digital lcd display..... 26
    - Alarms..... 29
    - Mapping selection..... 31
    - Control buttons..... 33
    - Advanced functions..... 35
    - Ignition switch..... 45
    - Locking the steering wheel..... 46
  - a-PRC setting buttons..... 47
  - Horn button..... 47
  - Switch direction indicators..... 48
  - High/low beam selector..... 49
  - Passing button..... 49
  - Start-up button..... 50
  - Engine stop switch..... 50
  - System ABS..... 50
  - System a-PRC (Aprilia Performance Ride Control)..... 54
    - Immobilizer system operation..... 63
    - Opening the saddle..... 64
    - Glove/tool kit compartment..... 67
  - Identification..... 67
- USE**..... 69
  - Checks..... 70
  - Refuelling..... 73
  - Rear shock absorbers adjustment..... 75
    - Rear shock absorbers setting..... 78
  - Front fork adjustment..... 81
    - Front fork setting..... 83
  - Steering shock absorber adjustment..... 87
  - Justering af greb til forbremse..... 88
  - Clutch lever adjustment..... 89
  - Running in..... 89
  - Starting up the engine..... 90
  - Moving off / riding..... 93
  - Stopping the engine..... 98
  - Parking..... 98
  - Catalytic silencer..... 99
  - Stand..... 101
  - Suggestion to prevent theft..... 101
  - Safe driving..... 102
  - Basic safety rules..... 103
- MAINTENANCE**..... 109
  - Foreword..... 110
    - Engine oil level check..... 110
    - Engine oil top-up..... 111
    - Engine oil filter replacement..... 112
  - Tyres..... 112
  - Spark plug dismantlement..... 114
  - Removing the air filter..... 114

Cooling fluid level.....	114
Coolant check.....	115
Coolant top-up.....	116
Checking the brake oil level.....	116
Braking system fluid top up.....	116
Battery removal.....	119
Use of a new battery.....	120
Checking the electrolyte level.....	121
Charging the battery.....	121
Long periods of inactivity.....	122
Fuses.....	123
Lamps.....	127
Low/High beam lamp replacement.....	127
Position light replacement.....	129
Headlight adjustment.....	130
Front direction indicators.....	131
Rear optical unit.....	131
Rear turn indicators.....	132
Number plate light.....	132
Rear-view mirrors.....	132
Front and rear disc brake.....	134
Periods of inactivity.....	135
Cleaning the vehicle.....	136
Transport.....	139
Chain backlash check.....	140
Chain backlash adjustment.....	140
Checking wear of chain, front and rear sprockets.....	140
Chain lubrication and cleaning.....	141
<b>TECHNICAL DATA.....</b>	<b>143</b>
Kit equipment.....	153
<b>PROGRAMMED MAINTENANCE.....</b>	<b>155</b>
Scheduled maintenance table.....	156
Table of recommended products.....	159

# Tuono V4 1100 RR/Factory

aprilia



**Chap. 01**  
**General rules**

## Foreword

### NOTE

**CARRY OUT THE MAINTENANCE OPERATIONS AT HALF THE INTERVALS SPECIFIED IF THE VEHICLE IS USED IN WET OR DUSTY AREAS, OFF ROAD OR FOR SPORTING APPLICATIONS.**

## Motorcycle care

Aprilia recommends using quality products to clean the vehicle. The use of unsuitable products can damage vehicle components. For cleaning do not use solvents such as "nitro thinner", "cold cleaning agents", fuels or similar, or cleaning products that contain alcohol.

### WASHING THE MOTORCYCLE

Aprilia recommends softening with plenty of water and then carefully removing the insects and more stubborn stains before washing the vehicle.

To prevent stains, do not wash the motorcycle immediately after exposure to sunlight, and do not wash it in the sun.

If the vehicle is used during the winter months, be sure to frequently wash the motorcycle. To remove anti-icing salt sprayed on roads in the winter, wash the motorcycle with cold water immediately after use.

### CAUTION

**AFTER CLEANING YOUR MOTORCYCLE, THE EFFICIENCY OF THE BRAKING SYSTEM MAY BE TEMPORARILY AFFECTED DUE TO THE PRESENCE OF WATER ON THE FRICTION SURFACES. CONSIDER AN INCREASE IN BRAKING SPACE, OPERATE THE BRAKES REPEATEDLY TO RESTORE NORMAL CONDITIONS. CARRY OUT THE PRE-RIDE CHECKS BEFORE USE.**





**USE OF HOT WATER INTENSIFIES THE EFFECT OF THE SALT. USE ONLY PLENTY OF COLD WATER TO WASH AND REMOVE ANTI-ICING SALT**



**USE OF HIGH PRESSURE WASHING SYSTEMS (OR STEAM CLEANERS) CAN DAMAGE THE SEALS, OIL SEALS, BRAKING SYSTEM, ELECTRICAL SYSTEM AND THE SADDLE. DO NOT USE STEAM OR HIGH PRESSURE CLEANING SYSTEMS. DO NOT USE STEAM OR HIGH PRESSURE CLEANING SYSTEMS.**

## **CLEANING OF SENSITIVE PARTS**

### **BODYWORK**

To keep the motorcycle bright, wash it regularly, especially if used in areas with high levels of pollution or mud. Aggressive stains from tree resins, gasoline, oil, brake fluid or bird excrement in general

must be removed immediately, otherwise permanent stains on the paint can appear. After washing it is easy to identify marks and residual stains, remove them from the body using a soft cloth and brand-name, non-abrasive polish, and protect with a protective wax for cars. Periodic care, a thorough cleaning and regular protective wax for the bodywork preserves the aesthetic quality of the motorcycle over the long term.

### **PLASTIC COMPONENTS**



**IF THE PLASTIC COMPONENTS ARE CLEANED USING AGGRESSIVE AGENTS, THE SURFACE MAY BE DAMAGED. DO NOT USE CLEANING PRODUCTS CONTAINING ALCOHOL, SOLVENTS OR THAT ARE ABRASIVE FOR THE CLEANING**

**OF PLASTIC PARTS. ROTARY BRUSHES OR SPONGES WITH HARD SURFACES CAN MAKE SCRATCHES**

#### **CHROME PARTS AND POLISHED METAL**



**TREAT THE PARTS MADE OF CHROME, ALUMINIUM OR POLISHED STEEL IN A SPECIAL MANNER. WASH THEM WITH PLENTY OF WATER AND CAR SHAMPOO, POLISH AND REGULARLY BRIGHTEN THEM WITH POLISH PASTE, PROTECT THEM WITH WAXES OR SUITABLE ACID-FREE PRODUCTS (E.G. VASELINE)**

#### **RADIATOR**



**IF USING THE MOTORCYCLE IN THE WINTER ON ROADS WITH DE-ICING SALT, REGULARLY WASH THE RADIATOR TO PREVENT AESTHETIC DAMAGE AND THE ENGINE FROM OVERHEATING. WASH USING PLENTY OF WATER. FOR EXAMPLE USE GARDEN RUBBER WITH WATER AT LOW PRESSURE.**

#### **RUBBER PARTS**

Clean the rubber parts using water and mild shampoo (brand-name, suitable for car bodies)



**THE USE OF SILICONE SPRAY TO CLEAN THE RUBBER SEALS MAY CAUSE DAMAGE. DO NOT USE OTHER PRODUCTS CONTAINING SILICON FOR CLEANING THE MOTORCYCLE**

### **Carbon monoxide**

If you need to keep the engine running in order to perform a procedure, please ensure that you do so in an open or very well ventilated area. Never let the engine run in an enclosed area. If you do work in an enclosed area, make sure to use a smoke-extraction system.

#### **CAUTION**



**EXHAUST EMISSIONS CONTAIN CARBON MONOXIDE, A POISONOUS GAS WHICH CAN CAUSE LOSS OF CONSCIOUSNESS AND EVEN DEATH.**

#### **CAUTION**



**CARBON MONOXIDE IS ODOURLESS AND COLOURLESS, THEREFORE IT CANNOT BE DETECTED BY SMELL, SIGHT OR OTHER SENSES. DO NOT BREATHE IN EXHAUST FUMES UNDER ANY CIRCUMSTANCES.**

## Fuel

### CAUTION



**THE FUEL USED TO POWER INTERNAL COMBUSTION ENGINES IS HIGHLY FLAMMABLE AND MAY BE EXPLOSIVE UNDER CERTAIN CONDITIONS. IT IS THEREFORE RECOMMENDED TO CARRY OUT REFUELLING AND MAINTENANCE PROCEDURES IN A VENTILATED AREA WITH THE ENGINE SWITCHED OFF. DO NOT SMOKE DURING REFUELLING AND NEAR FUEL VAPOURS, AVOIDING ANY CONTACT WITH NAKED FLAMES, SPARKS OR OTHER SOURCES WHICH MAY CAUSE THEM TO IGNITE OR EXPLODE.**

**DO NOT DISPERSE FUEL IN THE ENVIRONMENT.**

**KEEP OUT OF THE REACH OF CHILDREN**



**IF THE VEHICLE FALLS OR IS ON A STEEP INCLINE FUEL CAN LEAK.**

### Hot components

The engine and the exhaust system components get very hot and remain in this condition for a certain time interval after the engine has been switched off. Before handling these components, make sure that you are wearing insulating gloves or wait until the engine and the exhaust system have cooled down.

## Coolant

The coolant contains ethylene glycol which, under certain conditions, can become flammable. When ethylene glycol burns, it produces an invisible flame which can nevertheless cause burns.

### CAUTION



**TAKE CARE NOT TO POUR COOLANT ONTO HOT ENGINE OR EXHAUST SYSTEM COMPONENTS; THE FLUID MAY CATCH FIRE AND BURN WITH INVISIBLE FLAMES. WHEN CARRYING OUT MAINTENANCE OPERATIONS, IT IS ADVISABLE TO WEAR LATEX GLOVES. EVEN THOUGH IT IS TOXIC, COOLANT HAS A SWEET FLAVOUR WHICH MAKES IT VERY ATTRACTIVE TO ANIMALS. NEVER LEAVE THE COOLANT IN OPEN CONTAINERS IN AREAS ACCESSIBLE TO ANIMALS AS THEY MAY DRINK IT.**

**KEEP OUT OF THE REACH OF CHILDREN**

**DO NOT REMOVE THE RADIATOR CAP WHEN THE ENGINE IS STILL HOT. THE COOLANT IS UNDER PRESSURE AND MAY CAUSE BURNS.**

## Used engine oil and gearbox oil

### CAUTION



**IT IS ADVISABLE TO WEAR PROTECTIVE IMPERMEABLE GLOVES WHEN SERVICING THE VEHICLE.**

**THE ENGINE OR GEARBOX OIL MAY CAUSE SERIOUS INJURIES TO THE SKIN IF HANDLED FOR PROLONGED PERIODS OF TIME AND ON A REGULAR BASIS.**

**WASH YOUR HANDS CAREFULLY AFTER HANDLING OIL.**

**HAND THE OIL OVER TO OR HAVE IT COLLECTED BY THE NEAREST USED OIL RECYCLING COMPANY OR THE SUPPLIER.**

**DO NOT DISPOSE OF OIL IN THE ENVIRONMENT**

**KEEP OUT OF THE REACH OF CHILDREN**

### **Brake and clutch fluid**



**BRAKE FLUID MAY BE HARMFUL TO PAINTWORK, PLASTIC AND RUBBER. WHEN SERVICING THE BRAKING SYSTEM PROTECT THESE COMPONENTS WITH A CLEAN CLOTH. ALWAYS WEAR PROTECTIVE GOGGLES WHEN SERVICING THESE SYSTEMS. BRAKE FLUID IS EXTREMELY HARMFUL TO THE EYES. IN THE EVENT OF ACCIDENTAL CONTACT WITH THE EYES, RINSE THEM IMMEDIATELY WITH ABUNDANT COLD, CLEAN WATER AND SEEK MEDICAL ADVICE.**

**KEEP OUT OF THE REACH OF CHILDREN**

### **Battery hydrogen gas and electrolyte**

**CAUTION**



**THE BATTERY ELECTROLYTE IS TOXIC, CORROSIVE AND AS IT CONTAINS SULPHURIC ACID, IT CAN CAUSE BURNS WHEN IN CONTACT WITH THE SKIN. WHEN HANDLING BATTERY ELECTROLYTE, WEAR TIGHT-FITTING GLOVES AND PROTECTIVE APPAREL. IN THE EVENT OF SKIN CONTACT WITH THE**

**ELECTROLYTIC FLUID, RINSE WELL WITH PLENTY OF CLEAN WATER. IT IS PARTICULARLY IMPORTANT TO PROTECT YOUR EYES BECAUSE EVEN TINY AMOUNTS OF BATTERY ACID MAY CAUSE BLINDNESS. IF THE FLUID GETS IN CONTACT WITH YOUR EYES, WASH WITH ABUNDANT WATER FOR FIFTEEN MINUTES AND CONSULT AN EYE SPECIALIST IMMEDIATELY. THE BATTERY RELEASES EXPLOSIVE GASES; KEEP IT AWAY FROM FLAMES, SPARKS, CIGARETTES OR ANY OTHER HEAT SOURCES. ENSURE ADEQUATE VENTILATION WHEN SERVICING OR RECHARGING THE BATTERY.**

**KEEP OUT OF THE REACH OF CHILDREN**

**BATTERY LIQUID IS CORROSIVE. DO NOT POUR IT OR SPILL IT, PARTICULARLY ON PLASTIC COMPONENTS. ENSURE THAT THE ELECTROLYTIC ACID IS COMPATIBLE WITH THE BATTERY TO BE ACTIVATED.**

## **Stand**



**BEFORE SETTING OFF, MAKE SURE THE STAND HAS BEEN COMPLETELY RETRACTED TO ITS POSITION.**

**DO NOT REST THE RIDER OR PASSENGER WEIGHT ON THE SIDE STAND.**

## **Reporting of defects that affect safety**

Unless otherwise specified in this Use and Maintenance Booklet, do not remove any mechanical or electrical component.

## CAUTION

**SOME OF THE VEHICLE'S CONNECTORS ARE INTERCHANGEABLE AND IF MOUNTED INCORRECTLY CAN JEOPARDISE REGULAR FUNCTIONING OF THE VEHICLE AND/OR DAMAGE PARTS OF IT IRREPARABLY.**

### **System a-PRC (Aprilia Performance Ride Control)**

#### **a-PRC system (Aprilia Performance Ride Control)**

The a-PRC system consists of the following control systems:

#### **ALC (Aprilia Launch Control)**

A system designed to help the rider optimise acceleration during standing starts.

#### **ATC (Aprilia Traction Control)**

A system designed to help the rider control wheelspin.

#### **AWC (Aprilia Wheelie Control)**

A system designed to help the rider control wheeling by reducing torque to gently lower the front wheel to the ground.

#### **AQS (Aprilia Quick Shift)**

This system enables upshifts without using the clutch and without changing the throttle position.

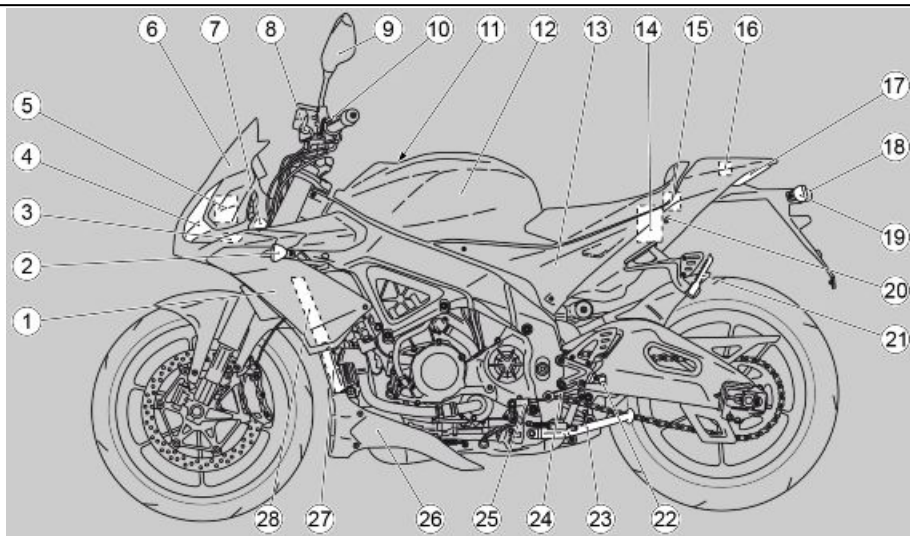


# Tuono V4 1100 RR/Factory

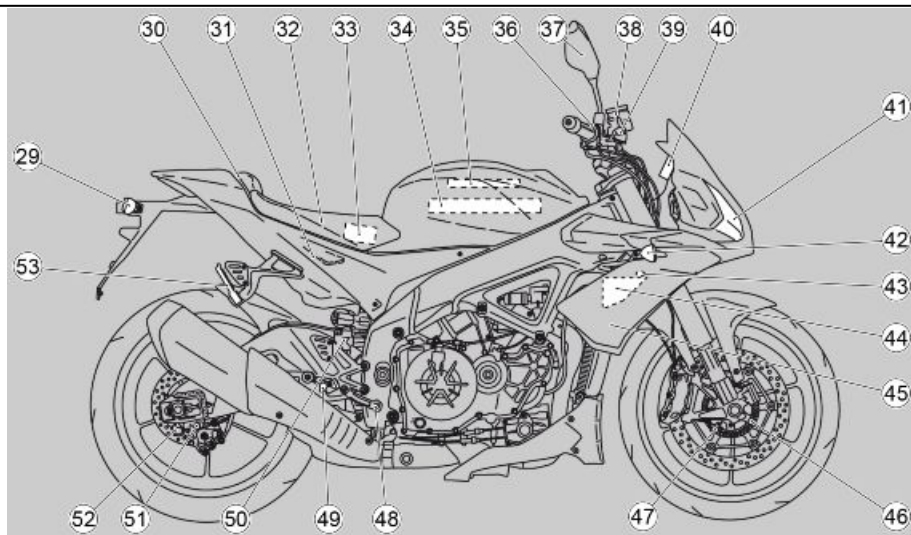
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Chap. 02  
Vehicle



02\_01



02\_02

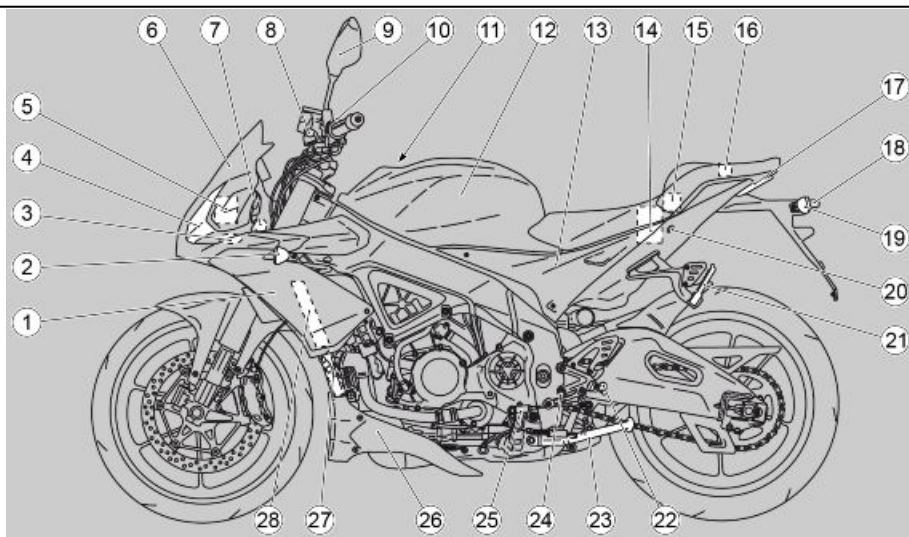
## Arrangement of the main components (02\_02)

### Key (Tuono V4 1100 Factory):

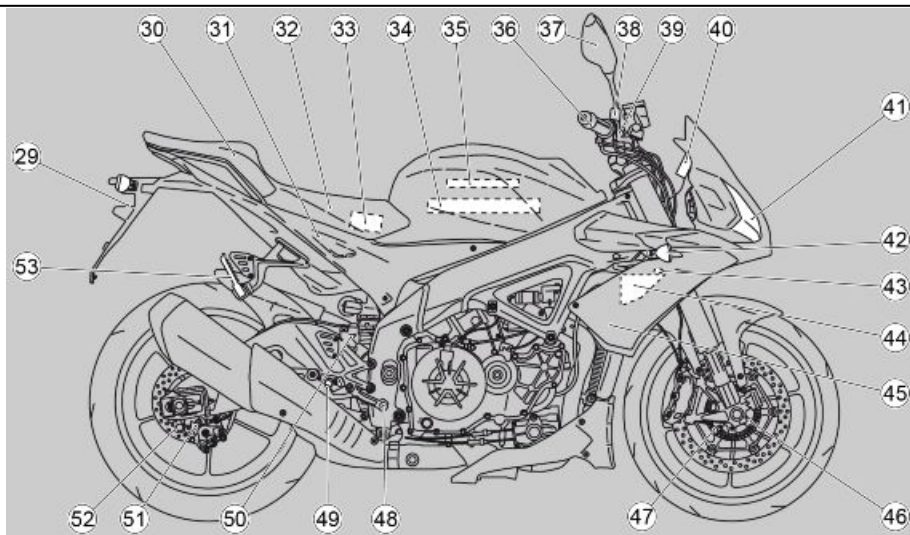
1. Left side fairing
2. Left turn indicator
3. Horn
4. Left headlamp
5. CLF ECU (Tone Wheel Reading ECU)
6. Top fairing
7. Steering damper
8. Clutch lever
9. Left rear-view mirror
10. Left hand switch
11. Fuel tank cap

12. Fuel tank
13. Left side fairing
14. Battery
15. Auxiliary fuses
16. Main fuses
17. Taillight
18. Licence plate light
19. Rear left turn indicator
20. Saddle / glovebox / toolkit compartment lock
21. Left hand passenger footrest
22. Left hand rider footrest
23. Side stand
24. Gear lever
25. AQS (Aprilia Quick Shift)
26. Left hand fairing lug
27. Engine oil radiator
28. Coolant radiator
29. Rear right turn indicator
30. Tail fairing / Passenger saddle
31. Right side fairing
32. Rider saddle
33. Sensor box (inertia sensor platform)
34. Air filter
35. ECU
36. Right hand switch
37. Right rear-view mirror
38. Front brake fluid reservoir
39. Front brake lever
40. Instrument/indicator light panel
41. Front right headlamp
42. Front right turn indicator
43. Expansion tank cap
44. Coolant expansion tank
45. Right side fairing
46. Front tone wheel
47. Front speed sensor
48. Gear lever
49. Right hand rider footrest

- 50. Rear brake pump and fluid reservoir
- 51. Rear speed sensor
- 52. Rear tone wheel
- 53. Right hand passenger footrest



02\_03



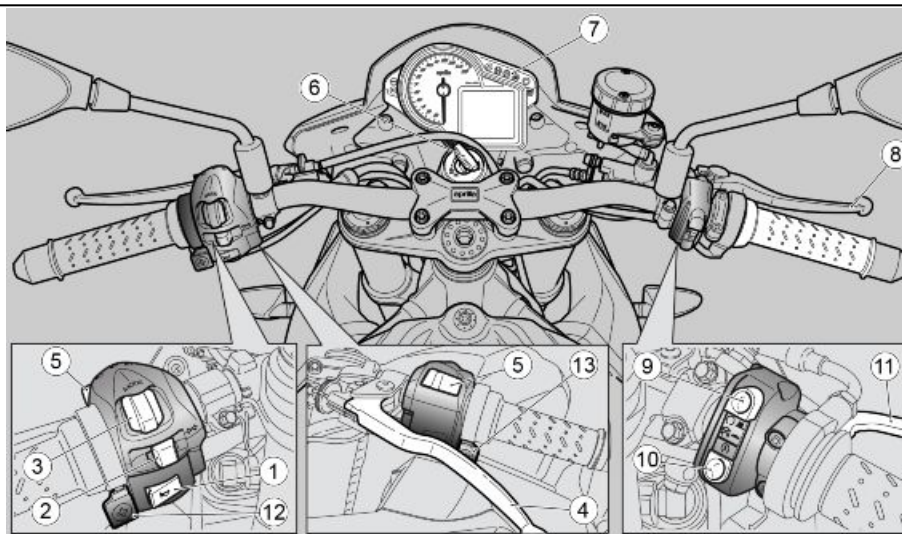
02\_04

**Key (Tuono V4 1100 RR):**

1. Left side fairing
2. Left turn indicator
3. Horn
4. Left headlamp
5. CLF ECU (Tone Wheel Reading ECU)
6. Top fairing
7. Steering damper
8. Clutch lever
9. Left rear-view mirror
10. Left hand switch
11. Fuel tank cap
12. Fuel tank
13. Left side fairing

14. Battery
15. Auxiliary fuses
16. Main fuses
17. Taillight
18. Licence plate light
19. Rear left turn indicator
20. Saddle / glovebox / toolkit compartment lock
21. Left hand passenger footrest
22. Left hand rider footrest
23. Side stand
24. Gear lever
25. AQS (Aprilia Quick Shift)
26. Left hand fairing lug
27. Engine oil radiator
28. Coolant radiator
29. Rear right turn indicator
30. Passenger seat
31. Right side fairing
32. Rider saddle
33. Sensor box (inertia sensor platform)
34. Air filter
35. ECU
36. Right hand switch
37. Right rear-view mirror
38. Front brake fluid reservoir
39. Front brake lever
40. Instrument/indicator light panel
41. Front right headlamp
42. Front right turn indicator
43. Expansion tank cap
44. Coolant expansion tank
45. Right side fairing
46. Front tone wheel
47. Front speed sensor
48. Gear lever
49. Right hand rider footrest
50. Rear brake pump and fluid reservoir
51. Rear speed sensor

- 52. Rear tone wheel
- 53. Right hand passenger footrest
- 54. ABS control unit



02\_05

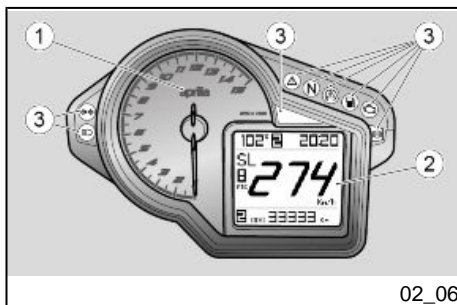
## Dashboard (02\_05)

key:

- 1. Horn button
- 2. Turn indicator control
- 3. MODE Control
- 4. Clutch control lever



5. High beam flashing switch
6. Ignition switch /steering lock
7. Instruments and gauges
8. Throttle grip
9. Engine stop button
10. Starter button
11. Front brake lever
12. "+" button (if applicable)
13. "-" button (if applicable)



## Analog instrument panel (02\_06)

### key:

1. Rpm indicator
2. Multifunctional digital display
3. Warning lights

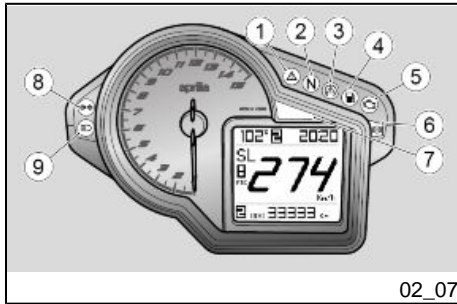
The instrument panel has an immobilizer system which prevents start-up in case the system does not identify a key which has been stored before.

The vehicle is supplied with two keys already programmed. The instrument panel accepts a maximum of four keys at the same time: contact an Official **Aprilia** Dealer to enable these keys or to disable a key that has been lost. When the vehicle is delivered and approximately ten seconds after the key is set to ON, the instrument panel requests a personal five-digit code to be entered. This request is no longer displayed once the personal code is entered. For code entering procedure, see the CODE MODIFICATION section

### It is important to remember the personal code because:

- **the vehicle can be started if the immobilizer system is faulty**

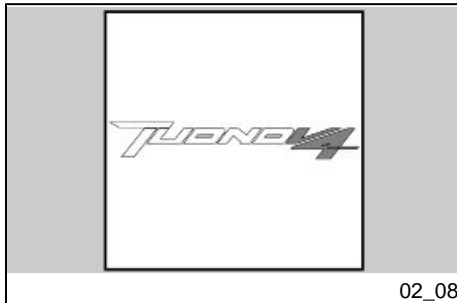
- the instrument panel need not be replaced should the ignition switch be changed
- new keys can be programmed



### Light unit (02\_07)

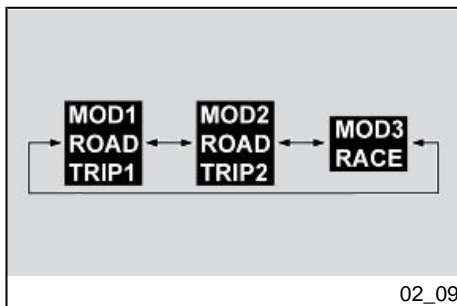
#### key:

1. General warning light, red
2. Gear in neutral warning light, green
3. a-PRC (Aprilia Performance Ride Control) indicator light, orange
4. Low fuel warning light, orange
5. MI warning light, orange (if active)
6. ABS Warning Light, orange
7. Gear shift warning light, red
8. Green turn indicator warning light
9. High beam indicator light, blue



### Digital lcd display (02\_08, 02\_09, 02\_10, 02\_11, 02\_12, 02\_13, 02\_14)

- By turning the ignition key to 'KEY ON', the following indicators on the instrument panel are lit for two seconds:
  - The 'Tuono V4' logo
  - All warning lights
- The rpm indicator pointer moves and then goes back to its original position.



02\_09

**NOTE**

**EVERY TIME THE SELECTOR IS HELD DOWN TO THE RIGHT OR LEFT, YOU CAN GO FROM ONE CONFIGURATION TO ANOTHER.**

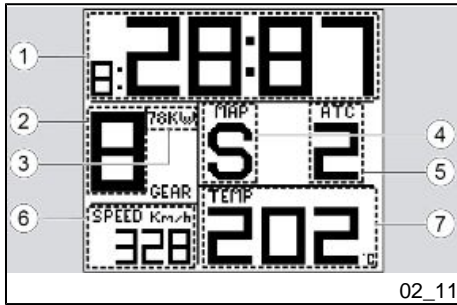


02\_10

**ROAD MODE - TRIP 1/TRIP 2**

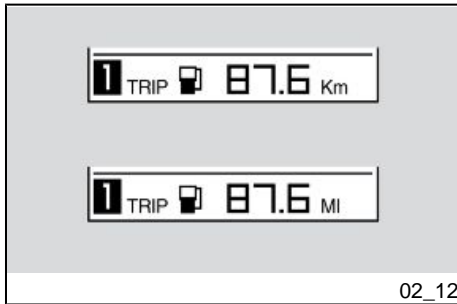
- 1) Water temperature (displayed either in °C or °F);
- 2) Gear selected;
- 3) Clock (in 24H format or in 12H format with no AM/PM indication) or chronometer (selectable from menu).
- 4) Map selected;
- 5) ALC (Aprilia Launch Control);
- 6) ATC (Aprilia Traction Control); The level is displayed in negative against a black background when AWC (Aprilia Wheelie Control) is active.
- 7) Speed (speedometer);
- 8) Information, if available, relative to maps stored in ECU;
- 9) Service interval spanner symbol, if applicable.

10) Trip computer log or alarms stored.



#### RACE MODE

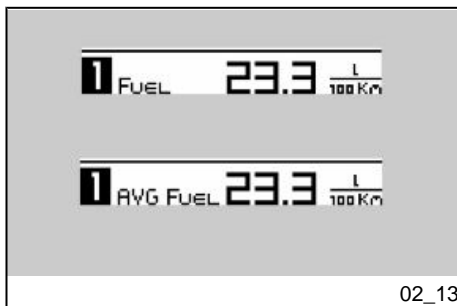
- 1) Chronometer or Launch control;
- 2) Gear selected;
- 3) Information, if available, relative to maps stored in ECU;
- 4) Map selected;
- 5) ATC (Aprilia Traction Control); The level is displayed in negative against a black background when AWC (Aprilia Wheelie Control) is active;
- 6) Speed (speedometer);
- 7) Water temperature (displayed either in °C or °F).



2 km (1.24 mi) after the low fuel warning light turns on, the kilometres travelled with low fuel are shown on the digital display.

Pressing the centre button of the MODE control while the low fuel warning light is active temporarily deactivates the warning light for 60 seconds.

At "KEY-ON" the indication of reserve can have a delay of 60 seconds.

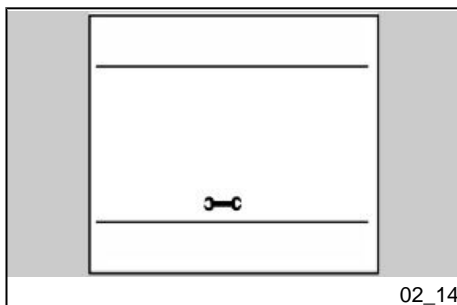


02\_13

The instrument panel can display instantaneous fuel consumption.

The instrument panel can display average fuel consumption since the last journey log reset.

Upon entering reserve, the distance in Km (or mi) travelled since entering reserve state is displayed instead of the trip counter.

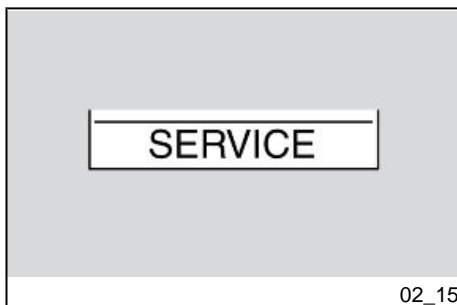


02\_14

When a maintenance interval threshold is exceeded, an icon with a spanner is shown. This indicator may be reset once the scheduled service has been completed by an **authorised Aprilia Dealer or service centre**.

The "spanner" icon flashes for five seconds when the key is turned to "KEY ON" when there is less than 300 Km (186 mi) remaining before the next scheduled maintenance interval.

With the key set to "KEY OFF" the general alarm warning light flashes to indicate activation of the locking system. To minimise battery consumption the light stops flashing after 48 hours.



02\_15

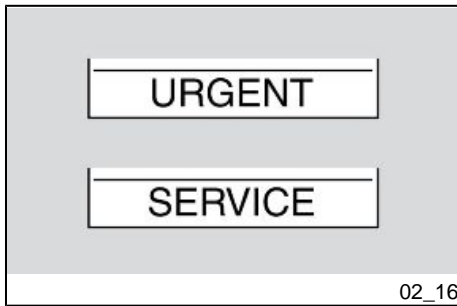
### Alarms (02\_15, 02\_16, 02\_17, 02\_18, 02\_19)

In case of failure, a different icon is displayed according to the cause at the bottom of the display.

Take your vehicle as soon as possible to an Official **Aprilia Dealer**.

#### **SERVICE ALARM**

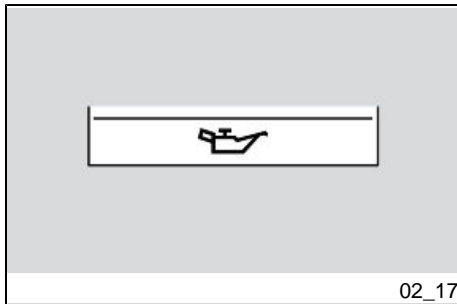
In case of failure found in the instrument panel or in the electronic control unit, the instrument panel signals the failure by displaying the SERVICE icon and the red general warning light comes on.



If there is an immobilizer failure at ignition, the instrument panel requests you to enter a user code. If the code is entered correctly, the instrument panel signals the failure by displaying the SERVICE icon and the red general warning light comes on.

#### **URGENT SERVICE ALARM**

A serious failure is signalled by a fast flashing (two flashes per second) of the general warning light and by the URGENT and SERVICE words alternately being shown on the digital display. Take your vehicle as soon as possible to an Official **Aprilia** Dealer. In these cases, the control unit activates a safety procedure that limits the vehicle performance so that the rider is able to reach an Official **Aprilia** Dealer at low speed. According to the type of failure, performance can be limited in two ways: a) by reducing the maximum torque produced; b) by keeping the engine at idle speed but slightly accelerated (during this operation, the throttle control is disabled).

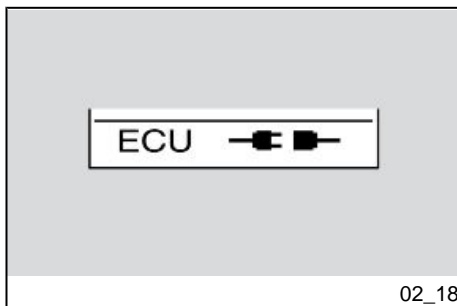


#### **Oil failure**

In case of failing oil pressure or oil pressure sensor failure, the bulb and the red general warning light turn on the instrument panel.

#### **Engine overheating alarm**

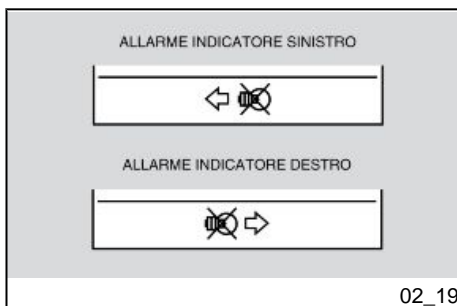
The engine overheating alarm is activated when the temperature reaches 115 °C (239 °F). It is signalled when the general red warning light turns on.



02\_18

### Electronic control unit disconnected alarm

In case no connection is detected, the disconnection icon is displayed on the instrument panel and the red general warning light turns on to signal this condition.



02\_19

### Turn indicator malfunction

When the instrument panel detects a failing turn indicator, the turn indicator warning light flashes twice as fast and the problem is signalled on the digital display.



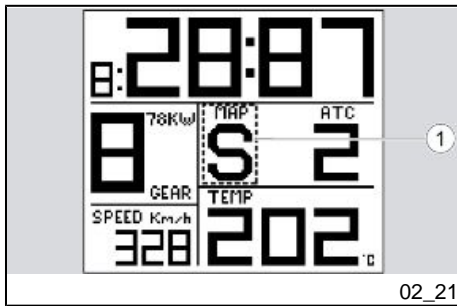
02\_20

### Mapping selection (02\_20, 02\_21)

The engine control unit has three different user-selectable electronic throttle management maps, which are indicated as follows at the top left of the instrument panel digital display (1) :

- **T** is the **TRACK** mapping
- **S** is the **SPORT** mapping
- **R** is the **RACE** mapping

The engine map "T" is developed to allow the best power management in all conditions. It is recommended for the use on racetrack and road.



The engine map "S" has a gentler power. Recommended for use on road conditions and low grip surfaces

The engine map "R" has an even more reduced engine brake in the medium/high range compared to the "T" mapping. Recommended for track use

The rider may cycle through the different engine maps by pressing the starter button, which may be used to select maps once 5 seconds have elapsed after engine start

#### CAUTION

**MAP SELECTION IS ONLY PERMITTED WITH THE ENGINE RUNNING AND THE THROTTLE RELEASED. MAP SELECTION IS ALSO POSSIBLE WITH THE MOTORCYCLE IN MOTION, PROVIDED THAT THE THROTTLE GRIP IS RELEASED.**

To change engine maps, proceed as follows:

- Press the starter button once. The symbol of engine map currently in use is displayed in negative against a black background
- Press the button twice within 1.5 seconds; the next engine map is displayed in negative against a black background. To select this engine map, press the starter button within 1.5 seconds. Otherwise, the next engine map in the sequence will be displayed in negative against a black background. When the desired map is shown, press the starter button and the desired map will be displayed normally. In any case, do not "open" the throttle during this operation. If the throttle is opened, the activation process for the new engine map



by the ECU is interrupted (the map symbol is displayed normally and flashing) until the throttle is closed again, allowing the ECU to complete the procedure.

### CAUTION

**IF THE THROTTLE IS OPENED WHILE A NEW MAP IS DISPLAYED IN NEGATIVE AGAINST A BLACK BACKGROUND (INDICATING THAT IT IS STILL BEING ACTIVATED BY THE ECU), THE NEW MAP SELECTED WILL START TO FLASH (DISPLAYED NORMALLY) BUT WILL NOT BE EFFECTIVELY APPLIED UNTIL THE THROTTLE IS RELEASED AGAIN.**

## Control buttons (02\_22)

### Trip journal 1 and 2

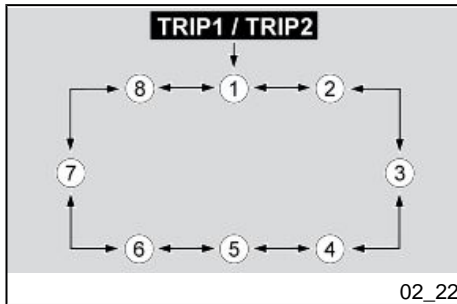
There are two trip journals available.

Press and hold down the MODE control to the left to select the TRIP JOURNAL 1; icon "1" on the DIGITAL DISPLAY turns on.

Press and hold down the MODE control to the right to select the TRIP JOURNAL 2; icon "2" on the DIGITAL DISPLAY turns on.

In each journal, each time the MODE control is briefly pressed to the right or left, the following information is displayed in sequence:

- 1) ODOMETER;
- 2) TRIP ODOMETER;
- 3) JOURNEY TIME;
- 4) MAXIMUM SPEED;
- 5) AVERAGE SPEED;
- 6) AVERAGE FUEL CONSUMPTION;
- 7) INSTANTANEOUS FUEL CONSUMPTION;
- 8) MENU (only with vehicle at a standstill)



With the following options: TRIP ODOMETER, TRAVELLING TIME, MAXIMUM SPEED, MEAN SPEED, AVERAGE FUEL CONSUMPTION, press and hold down the central key to reset all the indications stored in the active TRIP JOURNAL.

## **CHRONOMETER**

To use the chronometer, select the CHRONOMETER function from the MENU of the instrument panel advanced functions.

The chronometer appears at the top of the digital display, replacing the clock.

With the vehicle in motion the chronometer functioning is controlled by means of the MODE control central button.

Press the central button briefly to start the chronometer. Timekeeping starts when the button is pressed. If the button is pressed again within 15 seconds after starting timekeeping, the chronometer is reset. After that time, and if the button is pressed again, the data is stored and the next timekeeping begins.

Timekeeping is cancelled by pressing and holding down the central button, or when speed goes back to zero; the display shows the last timekeeping. Timekeeping starts again following the steps described above.

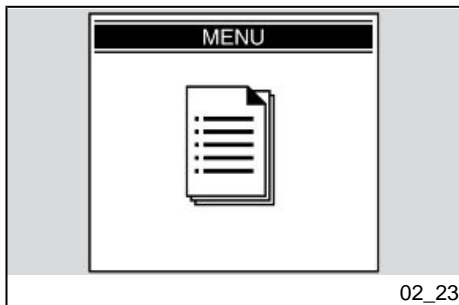
Once 40 timekeeping sessions have been acquired, acquisition stops and the message "FULL" is shown on the digital display. A new series of timekeeping can be started again only after deleting previous times stored by means of the MENU of the instrument panel advanced functions.

## Advanced functions (02\_23, 02\_24, 02\_25, 02\_26, 02\_27, 02\_28, 02\_29, 02\_30, 02\_31)

### MENU

The configuration menu is accessible with the vehicle at a standstill by pressing and holding the MODE button, directly via the menu screen page, and contains the following functions:

- EXIT
- SETTINGS
- A-PRC SETTINGS
- CHRONOMETER
- CALIBRATION
- DIAGNOSIS
- LANGUAGE



02\_23



02\_24

### SETTINGS

The SETTINGS menu consists of the following options:

- EXIT
- TIME ADJUSTMENT
- GEAR SHIFT
- BACKLIGHTING
- CHANGE THE CODE

- CODE RESET
- °C / °F
- 12/24 h

The functions of the settings menu are indicated in the following sections.

Once the operation is finished, the instrument panel goes back to the main menu.

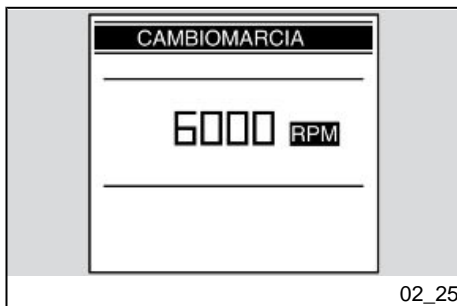
### **TIME ADJUSTMENT**

The clock can be set as follows. The main screen shows the "Hour Adjustment" control.

In this mode, the minute indicator is no longer displayed leaving only the hour indicator. Each time the MODE command is pressed to the right, the hour value increases; likewise, each time the MODE command is pressed to the left, the hour value decreases. Press the MODE command central part to store the set value and to shift to minute adjustment.

The hour indicator is no longer displayed when this function is activated; only the minute indicator is shown. Each time the MODE command is pressed to the right, the minute value increases; likewise, each time the MODE command is pressed to the left the minute value decreases.

Press the MODE command central part to store the set value and to exit the clock adjustment function.



### GEAR SHIFT THRESHOLD

The gear shift threshold can be set in this mode. The main screen appears again with the message "GEAR SHIFT THRESHOLD".

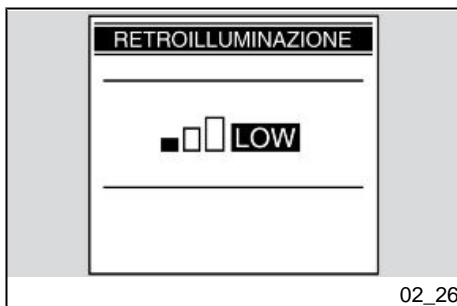
Each press to the right of the MODE command increases the threshold value by 100 RPM, vice versa, each press to the left of the MODE command decreases it by 100 RPM.

Pressing the command will have no effect once the top or bottom limits have been reached.

The operation ends by pressing the MODE command in the central position, in which set value is stored, the arrow goes back to zero and the instrument panel goes back to the configuration menu page.

The revolutions value is set at the first battery start (8500 rpm), at the followings it is set to the last value entered.

If the set threshold value is exceeded, the gear change warning light on the instrument panel starts to flash. It turns off when the value goes back below the threshold limit.



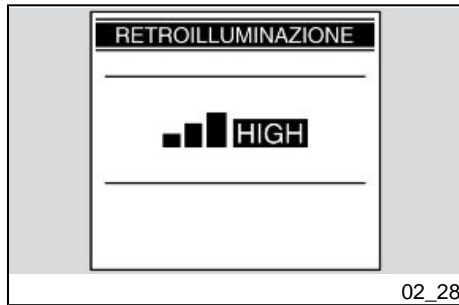
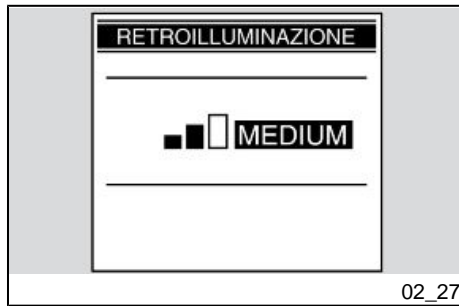
### BACKLIGHTING BRIGHTNESS

This function adjusts the backlighting brightness to three levels. Each time the MODE command is pressed to the right or left, the following icons are shown:

- LOW
- MEAN
- HIGH

Once the operation is finished, when the MODE command is pressed at central position, the instrument panel shows the SETTINGS menu.

When the battery is detached, the display is configured with the maximum level of brightness.



### **CODE CHANGE**

This function is used to modify an old code. Once you have entered this function, the following message is displayed:

"ENTER OLD CODE"

After recognising the old code, the new code is requested and the display shows the following message:

"ENTER NEW CODE"

Once the operation is finished, the display shows the DIAGNOSIS menu. If the code has been used, this operation is not allowed.

Once the operation is finished, the instrument panel shows the SETTINGS menu.

If it is the first time a code is stored, only the new code is requested.

### **CODE RESET**

This function is used to set a new code when the old one is not available; in this case, at least two keys will have to be inserted in the ignition lock. After the first key has been inserted, the second one is requested with the following message:

"INSERT KEY II"

In between keys, the instrument panel remains lit; if the key is not inserted within 20 seconds, the operation finishes. After recognising the second key, the insertion of the new code is required with the message:

"ENTER NEW CODE"

Once the operation is finished, the display shows the DIAGNOSIS menu. If the code has been used, this operation is not allowed.

Once the operation is finished, the instrument panel shows the SETTINGS menu.

### **°C/°F**

Select the °C / °F option from the SETTINGS menu for this function.

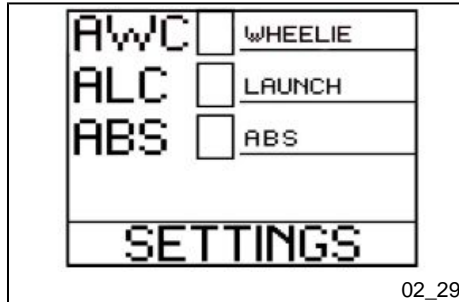
This function selects the unit of measurement for the coolant temperature: °C or °F.

### **12H / 24H**

Select the 12H / 24H option from the SETTINGS menu for this function.

This menu selects the clock display mode as 12h or 24h.

### **a-PRC SETTINGS**

**NOTE**

**THIS MODE CAN ONLY BE ACCESSED IF THE ATC (Aprilia Traction Control) SYSTEM IS ACTIVE.**

This mode allows the rider to set/activate AWC (Aprilia Wheelie Control) level, ALC (Aprilia Launch Control) and ABS (Antilock Braking System) levels, with the vehicle at a standstill.

Once SETTINGS a-PRC has been selected, from the menu or directly from the RACE mode page, you can select AWC, ALC or ABS by quickly pressing the MODE selector right or left.

**NOTE**

**THE ENTRIES AWC AND ALC CAN BE SELECTED ONLY IF ATC IS ACTIVE.**

When the AWC is selected (shown in negative) its level can be changed by short presses of the buttons "+" and "-" from the value 1 (minimal intervention) to the value 3 (maximum intervention).

The AWC function can be deactivated from level 1 with a long press of the button "-".

The AWC function is reactivated with a quick press of the button "+".

When the ALC is selected (shown in negative) its level can be changed by short presses of the buttons "+" and "-" from the value 1 (minimal intervention) to the value 3 (maximum intervention).

**CAUTION**

**TO GAIN FAMILIARITY WITH THE AWC AND ALC SYSTEMS, PREFERABLY USE LEVEL "3" TO START WITH. AND THEN, ONCE YOU FEEL COMFORTABLE WITH THE SYSTEMS, TRY THE OTHER LEVELS TO IDENTIFY WHICH ARE THE**



**BEST SUITED TO YOUR RIDING STYLE AND FOR DIFFERENT ROAD AND WEATHER CONDITIONS.**

**LEVEL "1" IS RECOMMENDED FOR USE BY EXPERT RIDERS IN IDEAL ROAD SURFACE CONDITIONS.**

**LEVEL "2" IS AN INTERMEDIATE SETTING BETWEEN LEVEL "1" AND LEVEL "3".**

#### **NOTE**

**WHEN A FUNCTION IS DISABLED, IT IS INDICATED WITH THE SYMBOL "-".**

When the ABS is selected (shown in negative) its level can be changed by short presses of the buttons "+" and "-" from the value 1 (minimal intervention) to the value 3 (maximum intervention). The ABS function can be deactivated from level 1 with a long press of the button "-".

The ABS function is reactivated with a quick press of the button "+".

#### **NOTE**

**THE DISABLING OF THE ABS REMAINS EVEN AFTER A "KEY OFF".**

#### **CAUTION**



**TO GAIN FAMILIARITY WITH THE ABS SYSTEM, PREFERABLY USE LEVEL "3" TO START WITH. AND THEN, ONCE YOU FEEL COMFORTABLE WITH THE SYSTEMS, TRY THE OTHER LEVELS TO IDENTIFY WHICH ARE THE BEST SUITED TO YOUR RIDING STYLE AND FOR DIFFERENT ROAD AND WEATHER CONDITIONS.**

Level "1" is suitable for track use, for advanced users and is not recommended for use on the road. At this level the lifting control of the rear wheel is not active.

Level "2" is suitable for on-road use in good grip conditions. In this case the lifting control of the rear wheel is active for speeds below 80 km/h (49.71 mi).

Level "3" is suitable for use in any road conditions. It does not allow, in most cases, for the lifting of the rear wheel.

#### **CAUTION**



**BEFORE RIDING OFF, CHECK THE ABS LEVEL OF INTERVENTION SELECTED. TURNING OFF THE ENGINE DOES NOT RESET SETTING MADE PREVIOUSLY.**

#### **NOTE**

**WHEN A FUNCTION IS DISABLED, IT IS INDICATED WITH THE SYMBOL "-".**

#### **NOTE**

**THE a-PRC SETTING FUNCTION MAY ALSO BE ACCESSED FROM THE RACE DISPLAY MODE BY PRESSING THE MODE SELECTOR BRIEFLY.**

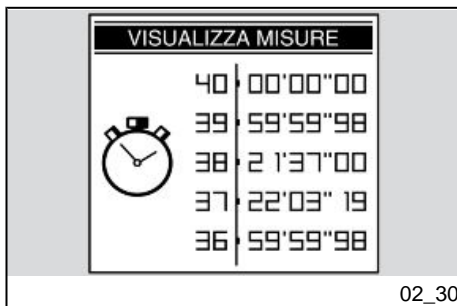
### **CHRONOMETER**

Select the CHRONOMETER option from the configuration menu to access the chronometer function. When the CHRONOMETER function is selected the screen page shows the following options:

- EXIT
- CLOCK/CHRONOMETER
- DELETE TIMES

### **CLOCK/CHRONOMETER**

This function allows you to select which function to have at the top of the display: clock or chronometer.

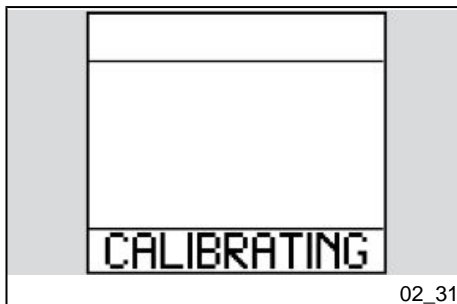


### View times

This option shows the stored chronometer times. Press the MODE selector for a couple of seconds to the right or left to scroll the time screens; hold it down to display the CHRONOMETER menu. If the battery is removed, the stored times are lost.

### Delete times

This option deletes the stored chronometer times. A deletion confirmation is requested. Once the operation is finished, the display goes back to the chronometer menu.



### CALIBRATION

Select the CALIBRATION function from the configuration menu to access the CALIBRATION function.

When the CALIBRATION function is selected (with vehicle at a standstill), a screen is shown with the following message at the bottom of the display:

CALIBRATING

To calibrate the a-PRC (Aprilia Performance Ride Control) system, ride for approximately 10 seconds in a straight line on a flat section of road in second gear and at a speed of 40 +/- 2 Km/h (24.85 +/- 1.24 mph), until the message CALIBRATING is no longer shown on the display.

### NOTE

**ONCE THE MESSAGE 'CALIBRATING' CEASES TO BE DISPLAYED, STOP THE VEHICLE, TURN THE IGNITION SWITCH OFF AND LEAVE OFF FOR AT LEAST 30 SECONDS TO COMPLETE THE CALIBRATION PROCEDURE.**

**THIS ALLOWS THE CALIBRATION TO BE STORED IN THE MEMORY.**

#### **NOTE**

**THE CALIBRATION PROCEDURE IS USED TO OPTIMISE a-PRC FUNCTIONALITY IN THE EVENT OF CHANGING TYRE TYPE OR FINAL DRIVE RATIO (PINION-SPROCKET COMBINATION).**

**IF THE VEHICLE IS FITTED WITH TYRES OTHER THAN THOSE INDICATED IN THIS USE AND MAINTENANCE MANUAL, THE LEVEL SETTINGS OF THE SYSTEM MAY NEED TO BE MODIFIED IN ORDER TO OBTAIN THE SAME BEHAVIOUR AS BEFORE.**

#### **NOTE**

**TURN THE IGNITION SWITCH OFF TO ABORT THE CALIBRATION PROCEDURE.**

**DURING CALIBRATION, ATC IS AUTOMATICALLY DEACTIVATED (IF PREVIOUSLY ACTIVATED).**

#### **CAUTION**

**WHEN THE MOTORCYCLE IS IN RESERVE, IT IS NOT POSSIBLE TO CARRY OUT THE CALIBRATION PROCEDURE BECAUSE, DURING THIS PHASE, ON THE INSTRUMENT PANEL, THE MESSAGE CALIBRATING IS REPLACED BY THE INDICATION OF THE KILOMETRES TRAVELLED SINCE ENTERING RESERVE STATE**

#### **DIAGNOSIS**

Open the configuration menu to display the DIAGNOSIS option.

This menu interfaces with the systems present on the vehicle and diagnoses them. To enable this menu, enter an access code available only from official Aprilia dealers.

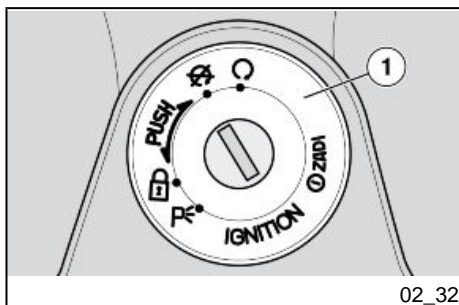
#### **LANGUAGES**

Open the configuration menu to access the LANGUAGES function. Select the LANGUAGES option to choose the interface language.

The options are:

- ITALIANO
- ENGLISH
- FRANÇAIS
- DEUTSCH
- ESPAÑOL

Once the operation is finished, the display goes back to the LANGUAGES menu.



### Ignition switch (02\_32)

The ignition switch (1) is located on the headstock upper plate.

The vehicle is supplied with two keys (one is the spare key).

The lights go off when the ignition switch is set to «OFF».

#### NOTE

**THE KEY ACTIVATES THE IGNITION SWITCH AND OPERATES THE STEERING LOCK.**

#### NOTE

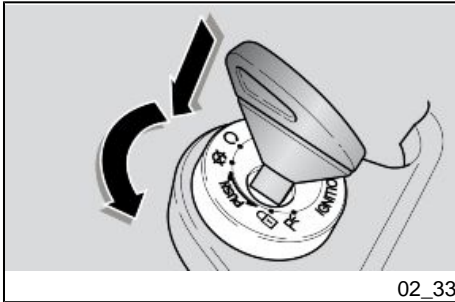
**THE HIGH AND LOW BEAM LIGHTS TURN ON AUTOMATICALLY UPON ENGINE START-UP.**

**LOCK:** The steering is locked. It is not possible to start the engine or switch on the lights. The key can be extracted

**OFF:** The engine and lights cannot be set to work. The key can be extracted.

**ON:** The engine can be started. The key cannot be removed

**PARKING:** The steering is blocked. The engine cannot be started. The lights of the front and rear headlamps are activated. The ignition key can be extracted. Once the key has been extracted, the immobilizer system is active (if present).



## Locking the steering wheel (02\_33)

### To lock the steering:

- Turn the handlebar completely to the left.
- Turn the key to «**OFF**».
- Push in the key and turn it anticlockwise (to the left), steer the handlebar slowly until the key is set to «**LOCK**».
- Remove the key.

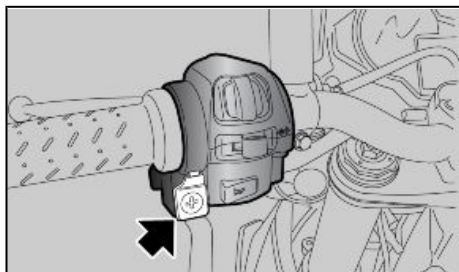
### CAUTION



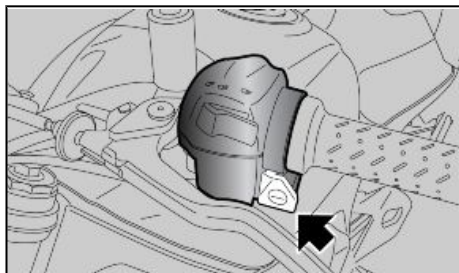
**TO AVOID LOSING CONTROL OF THE VEHICLE, NEVER TURN THE KEY TO "LOCK" WHILE RIDING.**

### a-PRC setting buttons (02\_34, 02\_35)

These allow the rider to adjust the settings of the different functions of the a-PRC system.



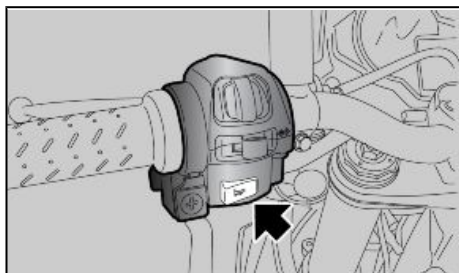
02\_34



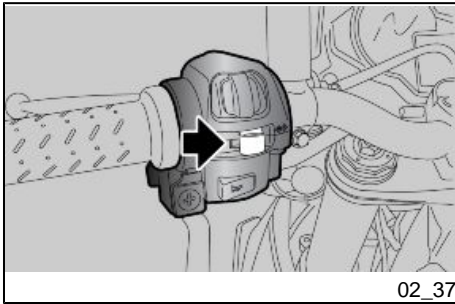
02\_35

### Horn button (02\_36)

Press it to activate the horn.



02\_36



## Switch direction indicators (02\_37)

Move the switch to the left, to indicate a left turn; move the switch to the right to indicate a right turn. Pressing the switch deactivates the turn indicator.

### CAUTION

**IF THE WARNING LIGHT WITH ARROWS FLASHES QUICKLY, IT MEANS THAT ONE OR BOTH TURN SIGNALS LIGHT BULBS ARE BURNT OUT.**

The turn indicators have a self-cancelling function that implements the following logic.

With the vehicle at a standstill (speed = zero), the turn indicators continue flashing indefinitely.

With the vehicle in motion, the turn signals self-cancel when one the two following conditions is met:

- After a time (t) = 40 sec.
- After riding 500 m (0.31 mi).

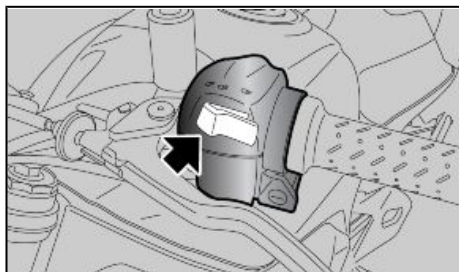
If the vehicle speed reaches zero during this period, the time and distance counts are reset and start again from zero when the vehicle starts moving once again.

Switching on the opposite side turn indicators without pressing the switch in the intermediate reset position causes both the time and distance counters to reset and recommence from zero.



### High/low beam selector (02\_38)

Press the light switch to turn on the low beam light; press it again to turn on the high beam light.

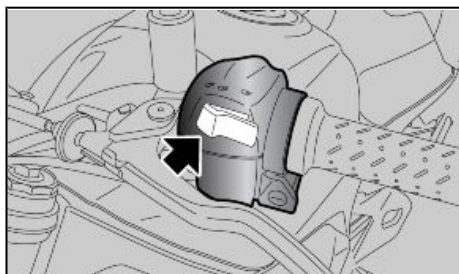


02\_38

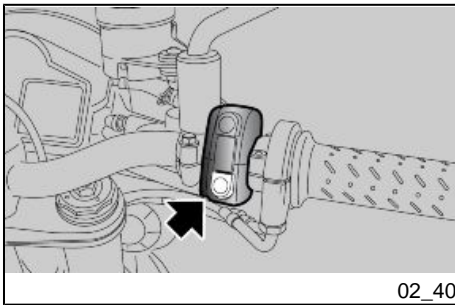
### Passing button (02\_39)

Uses the high beam flash in case of danger or emergency.

Releasing the switch deactivates the high beam flash.



02\_39

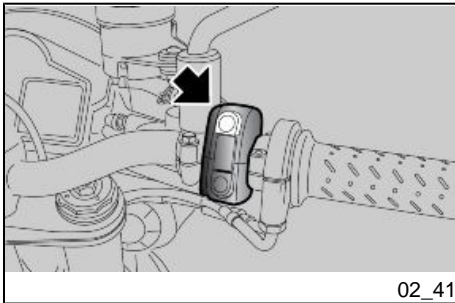


### Start-up button (02\_40)

With the key inserted in the ignition and turned to ON, when the button is pushed the starter motor will start the engine



**AFTER A FEW SECONDS FROM THE ENGINE START-UP, THE START-UP BUTTON ASSUMES THE MAPPING CHANGE FUNCTION.**



### Engine stop switch (02\_41)

It acts as an engine cut-off or emergency stop switch.

Press this switch to stop the engine.

### System ABS

The ABS system is a device that prevents wheel locking in case of an emergency braking, thus increasing vehicle stability when braking, compared with a conventional braking system.

The ABS system enhances control over the vehicle, taking into consideration never to exceed the physical limits of vehicle grip on the road. The rider is fully responsible

for riding at a suitable speed based on weather and road conditions, always leaving an appropriate safety margin.

Under no circumstances can the ABS system compensate for the rider's misjudgment or improper use of brakes.

#### **NOTE**

**WHEN THE ABS SYSTEM STARTS WORKING, A VIBRATION IS FELT ON THE BRAKE LEVER.**



**THE ANTILOCK BRAKING SYSTEM OF THE WHEEL DOES NOT PREVENT FALLS WHILE CORNERING.**

**AN EMERGENCY BRAKING WITH THE VEHICLE INCLINED, HANDLEBAR TURNED, ON UNEVEN OR SLIPPERY ROADS, OR WITH POOR GRIP, CREATES A LACK OF STABILITY DIFFICULT TO HANDLE. RIDE CAREFULLY AND SENSIBLY AND ALWAYS BRAKE GRADUALLY.**

**DO NOT SPEED RECKLESSLY. THE VEHICLE GRIP ON THE ROAD IS SUBJECT TO LAWS OF PHYSICS WHICH NOT EVEN THE ABS SYSTEM CAN ELIMINATE.**

During the vehicle start-up, after the instrument panel initial check, the ABS warning light will stop flashing when the speed is under 5 km/h (3.1 mph).

The ABS system may be disabled using the setting buttons of the A-PRC, the "a-PRC settings" screen. In this case, the ABS warning light stays on permanently.

If with the ABS activated (level 3, 2, 1) the ABS warning light turns on permanently, or continues to flash even when exceeding 5km/h (3.1 mph), a failure has been detected and the ABS has been deactivated.

In this case carry out the following operations:

- stop the vehicle;
- key OFF-ON;
- ride over 5 km/h (3.1 mph): the ABS warning light must be turned off;
- the ABS system is working.

If the ABS disabled indication remains:

#### **NOTE**

**SHOULD THIS OCCUR, CONTACT AN aprilia Official Dealer.**



**THE ABS SYSTEM ACTS ON BOTH THE FRONT AND REAR WHEELS BY OBTAINING INFORMATION FROM THE ROTATION/ LOCKING TONE WHEELS. ALWAYS CHECK THAT THE TONE WHEEL IS CLEAN, AND REGULARLY CHECK THAT THE DISTANCE FROM THE SENSOR IS CONSTANT ON ALL 360 GRADES. SHOULD THE WHEELS BE REMOVED AND REFITTED, IT IS VERY IMPORTANT TO CHECK THAT THE DISTANCE BETWEEN TONE WHEEL AND SENSOR IS THE ONE SPECIFIED. FOR CHECKING AND ADJUSTMENT, CONTACT AN Authorised APRILIA Workshop.**



**IN THE CASE OF A MOTORCYCLE WITH THE ABS SYSTEM, BRAKE PADS WITH FRICTION MATERIALS THAT ARE NOT TYPE APPROVED WILL JEOPARDISE BRAKING, DRASTICALLY REDUCING RIDING SAFETY.**

#### **NOTE**

**THE SYSTEM SENSORS WITH A SIGNIFICANT ACCURACY IN READING THE TONE WHEELS CAN GENERATE, WITH THE MOTORCYCLE AT A STANDSTILL**

AND ENGINE ON, A SPEED INDICATION OF A FEW km / h (mi) IN THE DIGITAL DISPLAY.

SUCH BEHAVIOUR IS TO BE CONSIDERED NORMAL AND DOES NOT CREATE MALFUNCTIONS IN THE SYSTEM.



IF THE GAP FOR ONE OR BOTH SENSORS IS NOT WITHIN THE TOLERANCE INDICATED BELOW, TAKE THE MOTORCYCLE TO AN official Aprilia DEALER-SHIP

### Characteristic

**Distance between tone wheel and front sensor**

0.3 - 2.00 mm (0.012 - 0.079 in)

**Distance between tone wheel and rear sensor**

0.3 - 2.00 mm (0.012 - 0.079 in)

### NOTE



PROLONGED ROTATION OF THE REAR WHEEL WHILE THE FRONT WHEEL IS STATIONARY (BURNOUT, MOTORCYCLE ON CENTRE STAND ETC.) MAY CAUSE THE SYSTEM TO AUTOMATICALLY DEACTIVATE AND THE ABS AND a-PRC INDICATOR LIGHT TO LIGHT CONSTANTLY.

TO REACTIVATE, TURN THE IGNITION SWITCH OFF AND THEN ON AGAIN AND SELECT THE REQUIRED SETTING.

**NOTE**

**THE VEHICLE IS WORKING PERFECTLY EVEN WITH ABS DISABLED BUT IT IS NOT RECOMMENDED TO DISABLE IT UNLESS ABSOLUTELY NECESSARY.**

**WITH ABS NOT ENABLED PAY THE UTMOST CAUTION WHILE DRIVING.**

**NOTE**

**THE SAFETY PROVIDED BY THE ABS DOES NOT, IN ANY CASE, JUSTIFY RISKY MANOEUVRES. DESPITE THE GREATER CONTROL OF THE VEHICLE IN CASES OF EMERGENCY BRAKING, IT IS RECOMMENDED TO RESPECT THE SAFETY DISTANCE FROM OTHER VEHICLES.**

## **System a-PRC (Aprilia Performance Ride Control)**

### **a-PRC system (Aprilia Performance Ride Control)**

Aprilia Performance Ride Control is an engine torque control system that helps improve performance and enhance safety for the rider.

**a-PRC** consists of four systems:

**ATC:** Aprilia Traction Control;

**AWC:** Aprilia Wheelie Control;

**ALC:** Aprilia Launch Control;

**AQS:** Aprilia Quick Shift.

## WARNING AND INDICATOR LIGHTS, KEY

- **Indicator light off:** with system activated with vehicle in motion or system activated after exceeding 5 Km/h (3.1 mph) after key-on;
- **Indicator light continuously lit:** with system intentionally deactivated by rider or in the event of a malfunction causing deactivation;
- **Indicator light flashing slowly:** with system active after key-on before exceeding 5 Km/h (3.1 mph) or in the case of certain malfunctions causing ATC level to be locked ("+" and "-" buttons disabled);
- **Indicator light flashing quickly:** when one of the a-PRC functions (ATC, AWC and ALC) is actively invoking traction control.

## Aprilia Traction Control

**Traction control:** a system designed to help the rider control wheelspin.

ATC is a system that monitors and, if necessary, limits rear wheelspin under acceleration to increase vehicle stability.

While ATC improves vehicle control, it does not allow the physical handling limits of the vehicle to be exceeded. The rider is fully responsible for riding at a suitable speed based on weather and road conditions, always leaving an appropriate safety margin.

Under no circumstances can ATC compensate for any rider error or improper use of the throttle.



**THE TRACTION CONTROL SYSTEM CANNOT PREVENT FALLS WHILE CORNERING.**

**ACCELERATING SUDDENLY WHILE THE VEHICLE IS INCLINED OR WITH THE HANDLEBARS TURNED WILL PUT THE VEHICLE IN AN UNSTABLE STATE THAT IS EXTREMELY DIFFICULT TO RECTIFY.**

**DO NOT SPEED RECKLESSLY. LIMITS OF GRIP ARE DETERMINED BY LAWS OF PHYSICS WHICH EVEN THE ATC SYSTEM CANNOT OVERCOME.**

The ATC system also responds optimally and limits wheelspin during cornering.

This is made possible by the inertia sensor platform, which provides the ECU with precise information concerning the inclination of the motorcycle.

#### **ATC SYSTEM DEACTIVATED MANUALLY**

At key-on and after the initial instrument panel check cycle, if the system is deactivated, the a-PRC indicator light remains lit constantly until the rider activates the system again.

#### **ATC SYSTEM ACTIVE**

At key-on and after the initial instrument panel check cycle, if the system was active at the last key-off, the a-PRC indicator light flashes until the vehicle exceeds 5 Km/h (3.1 mph), after which it extinguishes.

If the a-PRC indicator light remains constantly lit, this means that a fault has been detected and the ATC system has been automatically deactivated.

In this case carry out the following operations:

- stop the vehicle;
- key OFF-ON;
- reactivate the system manually
- ride over 5 km/h (3.1 mph): the a-PRC indicator light should extinguish;
- ATC system working correctly.



If the 'ATC system deactivated' indication persists:

**NOTE**

**SHOULD THIS OCCUR, CONTACT AN aprilia Official Dealer.**



**THE ATC SYSTEM ACTS ON THE REAR WHEEL ON THE BASIS OF INFORMATION RECEIVED FROM TONE WHEELS INSTALLED ON BOTH WHEELS. ALWAYS CHECK THAT THE TONE WHEELS ARE CLEAN, AND REGULARLY CHECK THAT THE GAP BETWEEN THE TONE WHEEL AND THE SENSOR IS CONSTANT AROUND THE ENTIRE CIRCUMFERENCE OF THE TONE WHEEL ITSELF. SHOULD THE WHEELS BE REMOVED AND REFITTED, IT IS VERY IMPORTANT TO CHECK THAT THE DISTANCE BETWEEN TONE WHEEL AND SENSOR IS THE ONE SPECIFIED. FOR CHECKING AND ADJUSTMENT, CONTACT AN Authorised APRILIA Workshop.**

**NOTE**

**PROLONGED ROTATION OF THE REAR WHEEL WHILE THE FRONT WHEEL IS STATIONARY (BURNOUT, MOTORCYCLE ON CENTRE STAND ETC.) MAY CAUSE THE SYSTEM TO AUTOMATICALLY DEACTIVATE AND THE a-PRC INDICATOR LIGHT TO LIGHT CONSTANTLY.**

**TO REACTIVATE, TURN THE IGNITION SWITCH OFF AND THEN ON AGAIN AND SELECT THE REQUIRED SETTING.**

**NOTE**

**a-PRC SYSTEM SENSORS, WITH HIGH PRECISION OF READING THE TONE WHEELS, CAN GENERATE, WITH MOTORCYCLE AT STANDSTILL AND RUNNING ENGINE, A km/h (mi) SPEED INDICATION IN THE DIGITAL DISPLAY.**

**SUCH PERFORMANCE IS NORMAL AND DOES NOT CAUSE MALFUNCTIONING OF THE a-PRC SYSTEM.**

## **Characteristic**

### **Distance between tone wheel and front sensor**

0.3 - 2.00 mm (0.012 - 0.079 in)

### **Distance between tone wheel and rear sensor**

0.3 - 2.00 mm (0.012 - 0.079 in)

To activate the system, press and hold the "+" setting button, the value "1" is shown on the display.

When the ATC system is activated with the vehicle at a standstill, the a-PRC indicator light flashes until the vehicle reaches a speed of 5 Km/h (3.1 mph).

Press the "+" and "-" buttons briefly to increase or decrease the ATC level setting from "1" (minimum system intervention) to "8" (maximum system intervention).

### **NOTE**

**THIS IS ALSO POSSIBLE WITH THE MOTORCYCLE IN MOTION.**

### **NOTE**

**EACH TIME THE SET VALUE IS MODIFIED, THE NUMERICAL SYMBOL FLASHES FOR APPROXIMATELY 2 SECONDS BEFORE THE NEW SETTING IS CONFIRMED.**

### **CAUTION**

**TO GAIN FAMILIARITY WITH THE ATC SYSTEM, PREFERABLY USE LEVEL "8" TO START WITH, THEN TRY THE OTHER LEVELS TO IDENTIFY WHICH ARE THE BEST SUITED TO YOUR RIDING STYLE AND FOR DIFFERENT ROAD AND WEATHER CONDITIONS.**

**LEVEL "1" IS RECOMMENDED FOR USE BY EXPERT RIDERS IN IDEAL ROAD SURFACE CONDITIONS.**

**ALL OTHER LEVELS ARE INTERMEDIATE SETTINGS BETWEEN LEVEL "1" AND LEVEL "8".**

To deactivate the system, select the minimum level "1" then press and hold the "-" setting button.

The a-PRC indicator light is constantly lit.

**NOTE**

**THIS IS ALSO POSSIBLE WITH THE MOTORCYCLE IN MOTION.**

**NOTE**

**WHEN THE BATTERY IS CONNECTED FOR THE FIRST TIME, THE a-PRC INDICATOR LIGHT IS CONSTANTLY LIT (SYSTEM NOT ACTIVE)**

**NOTE**

**IF THE IGNITION SWITCH IS TURNED OFF AND LEFT OFF FOR OVER 30 SECONDS, AT THE NEXT KEY-ON, THE ATC SYSTEM MAINTAINS THE PREVIOUSLY SELECTED SETTINGS.**

### **Aprilia Wheelie Control**

**Wheelie control:** a system designed to help the rider control wheeling by reducing torque to gently lower the front wheel to the ground.

While AWC improves vehicle control, it does not allow the physical handling limits of the vehicle to be exceeded. The rider is fully responsible for riding at a suitable speed based on weather and road conditions, always leaving an appropriate safety margin.

Under no circumstances can AWC compensate for any rider error or improper use of the throttle.

## CAUTION

### WITH AWC DEACTIVATED AND ATC ACTIVATED:

- WHEELING IS LIMITED TO A MAXIMUM DURATION OF 10 SECONDS. AFTER THIS PERIOD, THE SYSTEM BRINGS THE FRONT WHEEL BACK TO THE GROUND;

- WHEELING IS NOT PERMITTED IF THE MOTORCYCLE IS BANKED BY +/- 25° RELATIVE TO THE VERTICAL. IF THIS ANGLE IS EXCEEDED, THE SYSTEM RETURNS THE FRONT WHEEL TO THE GROUND.

**TABLE OF RECOMMENDED SETTINGS**

Engine map	ATC	AWC	ABS	Road surface
Race (R)	From 1 to 3	From off (-) to 1	From off (-) to 1	Dedicated to the racetrack with less engine braking
Sport (S)	From 4 to 6	2	2	Dry road, good grip conditions, engine braking greater than (R/T)
Track (T)	From 1 to 3	From 1 to 2	From 1 to 2	Dry road or racetrack, good grip conditions, engine braking greater than (R)

**ATC: LEVELS 7 / 8 ARE TO BE USED IN POOR GRIP, RAIN CONDITIONS**

**ABS: LEVEL 3 IS TO BE USED IN POOR GRIP, RAIN CONDITIONS.**

**AWC LEVEL 3 IS FOR USERS WHO WANT A GUIDE FREE OF SURGES.**

## NOTE

THE TABLE IS ONLY INTENDED AS A GUIDELINE FOR SETTING THE LEVELS OF EACH CONTROL SYSTEM. EACH RIDER MAY PERSONALISE THE LEVELS TO THEIR OWN PREFERENCE IN ACCORDANCE WITH ABILITY, RIDING STYLE

**AND ROAD CONDITIONS. FOR MORE INFORMATION ON LEVEL SETTINGS, SEE THE RELATIVE PARAGRAPHS FOR EACH INDIVIDUAL FUNCTION.**

### **Aprilia Launch Control**

**Launch control:** a system designed to help the rider optimise acceleration during standing starts.

#### **CAUTION**

**ALC MUST BE USED WITH EXTREME PRUDENCE AS THERE IS NO FUNCTION TO PREVENT THE MOTORCYCLE FROM FLIPPING IN ANY OF THE THREE POSSIBLE LEVELS.**

**THE SYSTEM IS FOR EXPERT RIDERS AND EXCLUSIVELY FOR TRACK USE.**

**RELEASE THE CLUTCH PROGRESSIVELY TO PREVENT EXCESS SLIPPAGE, WHICH COULD DAMAGE THE MECHANICALS OF THE VEHICLE.**

**ALC** launch control is a specific functioning scenario for the traction control system which takes into consideration the fact that initial speed is zero. Once the LAUNCH control function is activated and the throttle is opened completely, the engine speed increases to and is maintained at approximately 10,000 rpm, irrespective of the level set. The LAUNCH function is automatically deactivated in the event of any of the three following situations:

- A gear higher than second is selected;
- Vehicle speed exceeds 160 Km/h (99.42 mph).

To activate ALC in the level selected previously from the menu, with the vehicle stationary, simultaneously press and hold "+" and "-" for at least 3 seconds, until the message "LAUNCH" (in ROAD display mode) or "L" (in RACE display mode) is shown on the digital display.

When ALC is activated, the ATC and AWC systems are automatically deactivated and remain so until the ALC function is exited ALC (message cleared from digital display).

Once the ALC function is exited, the ATC and AWC systems resume operation with the settings selected previously.

#### **CAUTION**

**DURING THE INITIAL STAGE OF ALC FUNCTION (DURING CLUTCH RELEASE), THE SYSTEM HELPS THE RIDER KEEP THE FRONT WHEEL AS CLOSE TO THE GROUND AS POSSIBLE.**

**DURING THE SECOND STAGE OF ALC FUNCTION (WITH THE CLUTCH LEVER COMPLETELY RELEASED), THE OBJECTIVE OF THE SYSTEM IS TO HELP THE RIDER MAXIMISE VEHICLE ACCELERATION IN RELATION TO THE ALC LEVEL SELECTED. DURING THE SECOND STAGE OF OPERATION, THE SYSTEM ALLOWS THE FRONT WHEEL TO LIFT FROM THE GROUND TO MAXIMISE ACCELERATION.**

**AWC** and/or **ALC** can only be activated if the **ATC** system is on. This means that neither the wheelie control function nor launch control can be selected unless the traction control is on. The three systems can therefore be set independently of one another and can function simultaneously.

#### **Aprilia Quick Shift**

A system that enables upshifts without using the clutch and without changing the throttle position.

This system uses the gear shift signal from the gear lever to perform quicker gear changes with a smaller drop in engine speed than with a conventional gear shift.

The system is only active above an engine speed: of approximately 4000 rpm.

#### **CAUTION**

**THE CLUTCH MUST BE USED FOR UPSHIFTS AT ENGINE SPEEDS BELOW 4000 RPM.**

**CAUTION**

**THE SYSTEM IS ACTIVE ONLY DURING UPSHIFTS, WITH THE THROTTLE OPEN.**

**THE SYSTEM IS NOT ACTIVE DURING DOWNSHIFTS.**

**Immobilizer system operation (02\_42)**

For enhanced theft protection, the vehicle is equipped with an electronic immobilizer system that is activated automatically when the ignition key is removed.

Keep the second key in a safe place since it is not possible to make a copy if it gets lost.

This would imply replacing numerous parts of the vehicle (besides the locks).

Each key in the grip has an electronic device - transponder - which modulates the radio frequency signal emitted by a special aerial inside the switch when the vehicle is started.

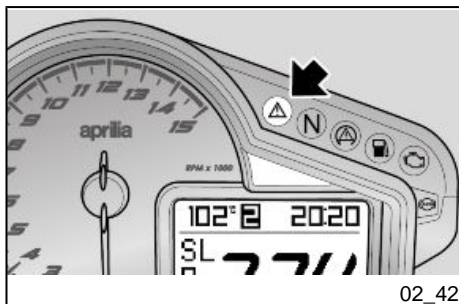
The modulated signal is the "password" by which the appropriate central unit recognises the key and only after this occurs, it allows the engine start-up.

**CAUTION**

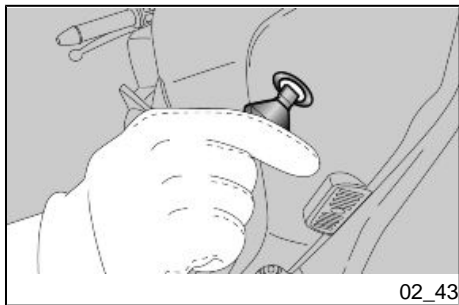
**THE IMMOBILIZER SYSTEM CAN MEMORISE UP TO FOUR KEYS.**

**DATA STORAGE OPERATION CAN ONLY BE PERFORMED AT AN Aprilia official DEALER.**

**DATA STORAGE PROCEDURE CANCELS THE EXISTING CODES. THEREFORE, IF A CUSTOMER WANTS TO PROGRAM SOME NEW KEYS, S/HE SHOULD GO TO THE DEALER TAKING ALL THE KEYS S/HE WANTS TO ENABLE.**



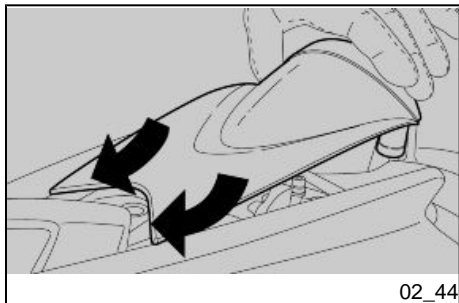
02\_42



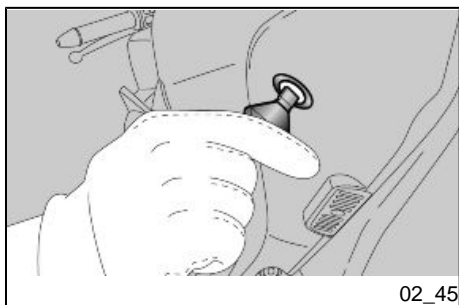
**Opening the saddle (02\_43, 02\_44, 02\_45, 02\_46, 02\_47, 02\_48, 02\_49, 02\_50, 02\_51)**

**PASSENGER SEAT REMOVAL  
(Tuono V4 1100 Factory)**

- Turn the key clockwise.



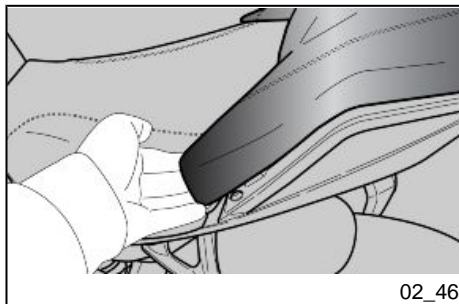
- Lift and remove the tail fairing / passenger saddle.



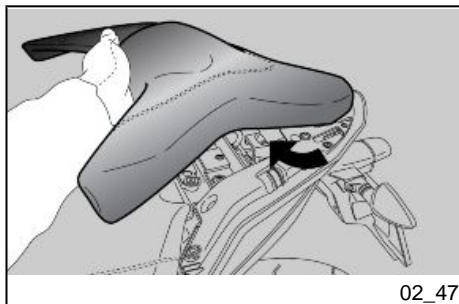
**(Tuono V4 1100 RR)**

- Turn the key clockwise.

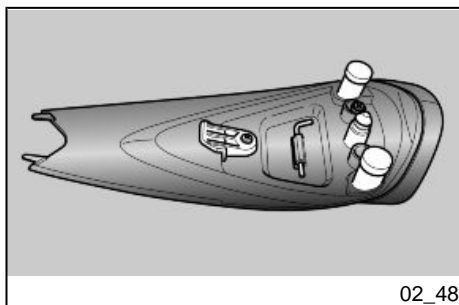




- Remove the passenger seat by raising first the end.

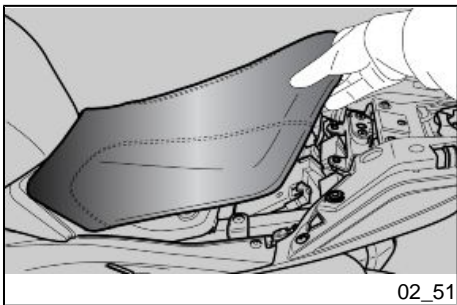
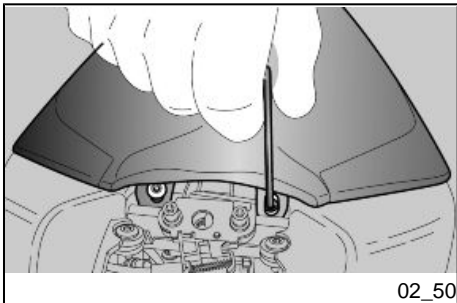
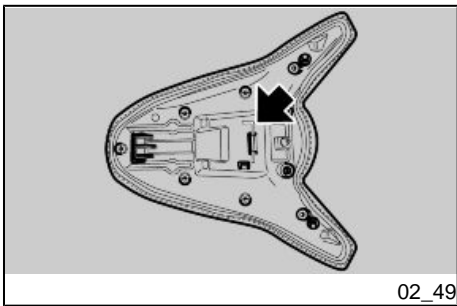


- Complete removal by raising and sliding the passenger seat.



#### RIDER SADDLE REMOVAL

- Using the Allen key located under the tail fairing / passenger saddle, unscrew and remove the two screws fastening the saddle and remove the saddle from the vehicle.



### Refitting

- Carry out the procedure described above in reverse order.
- After refitting and fastening the saddle, place the Allen key in the relative seat under the passenger seat.

### NOTE

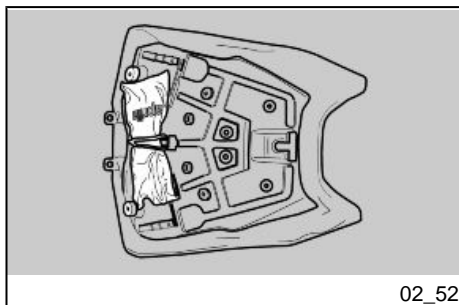
**AFTER REFITTING THE PASSENGER SEAT, PAY SPECIAL ATTENTION TO CORRECT AND COMPLETE POSITIONING OF THE END.**

**CAUTION**

**BEFORE LOWERING AND LOCKING THE SADDLE, CHECK THAT THE IGNITION KEY HAS NOT BEEN LEFT THE IGNITION KEY IN THE GLOVEBOX /TOOL KIT.**

**Glove/tool kit compartment (02\_52)**

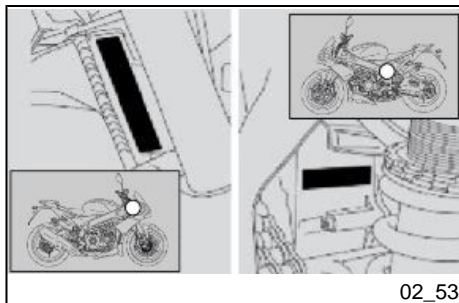
- The saddle must be removed in order to access the glovebox / toolkit.
- The tool kit is hooked to the bottom of the saddle.

**Identification (02\_53)**

Write down the chassis and engine number in the specific space in this booklet. The chassis number is handy when purchasing spare parts.

**CAUTION**

**CHANGING THE IDENTIFICATION CODE IS A CRIME THAT MAY BE PUNISHED WITH SERIOUS CRIMINAL CHARGES. FURTHERMORE, THE LIMITED WARRANTY FOR NEW VEHICLES WILL BE CANCELLED IF THE VEHICLE IDENTIFICATION NUMBER (VIN) HAS BEEN MODIFIED OR CANNOT BE QUICKLY DETERMINED.**



**CHASSIS NUMBER**

The chassis number is stamped on the right side of the headstock.

Chassis No. ....

**ENGINE NUMBER**

The engine number is printed on the base of the engine crankcase, left hand side.

Engine No. ....

# Tuono V4 1100 RR/Factory

aprilia



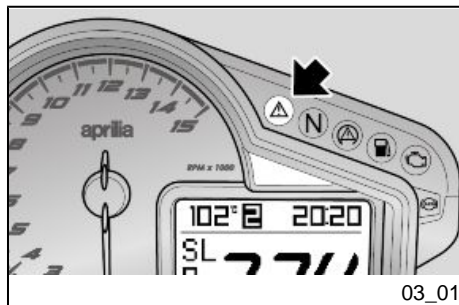
Chap. 03  
Use

## Checks (03\_01)

### CAUTION



**BEFORE RIDING, ALWAYS PERFORM A PRELIMINARY CHECK OF THE VEHICLE TO ENSURE CORRECT AND SAFE OPERATION. FAILURE TO DO SO MAY LEAD TO SERIOUS PERSONAL INJURY OR DAMAGE TO THE VEHICLE. DO NOT HESITATE TO CONTACT AN OFFICIAL Aprilia DEALER IF YOU DO NOT UNDERSTAND HOW SOME CONTROLS WORK OR IF A MALFUNCTION IS DETECTED OR SUSPECTED. CHECKING TAKES VERY LITTLE TIME BUT CONSIDERABLY INCREASES SAFETY.**



This vehicle has been programmed to indicate in real time any operation failure stored in the electronic control unit memory.

Every time the ignition switch is turned to "KEY ON", the alarm LED warning light turns on for about three seconds on the instrument panel.

### PRE-RIDE CHECKS

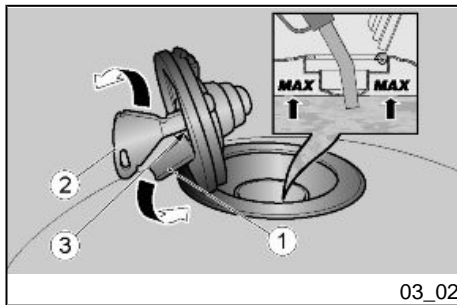
Front and rear disc brake

Check for proper operation. Check brake lever empty travel and brake fluid level. Check for leaks. Check

	brake pads for wear. If necessary top-up with brake fluid.
Throttle grip	Check that the throttle functions smoothly and can be fully opened and closed in all steering positions. Adjust and/or lubricate if necessary.
Engine oil	Check and/or top-up as required.
Wheels/ tyres	<p>Check that tyres are in good conditions. Check inflation pressure, tyre wear and potential damage.</p> <p>Remove any possible strange body that might be stuck in the tread design.</p>
Brake levers	<p>Check they function smoothly.</p> <p>Lubricate the joints and adjust the travel if necessary.</p>
Clutch lever	Check correct operation and empty travel. Check the condition of the cable on the handlebar and on the engine. The cable must be replaced if it shows any signs of fraying. Lubricate the joints if necessary.
Steering	Check that rotation is free and smooth to the end of the stroke on both sides, with no clearance or slack.

Side stand	<p>Check that it slides smoothly and that it snaps back to its rest position upon spring tension. Lubricate couplings and joints if necessary.</p> <p>Check that the side stand safety switch operates correctly.</p>
Clamping elements	<p>Check that the clamping elements are not loose.</p> <p>Adjust or tighten them as required.</p>
Fuel tank	<p>Check the coolant level and refill if necessary.</p> <p>Check the circuit for leaks or obstructions.</p> <p>Check that the tank cap closes correctly.</p>
Engine stop switch (ON - OFF)	Check function.
Lights, warning lights, horn, rear stop light switch and electrical devices	Check function of horn and lights. Replace bulbs or repair any faults noted.
Tone wheels	Check that the tone wheels are perfectly clean and in good conditions.





03\_02

## Refuelling (03\_02)

To refuel:

- Lift the cover (1).
- Introduce the key (2) in the fuel tank cap lock (3).
- Turn the key clockwise, pull and open the fuel tank lid.

### Characteristic

#### Fuel tank (reserve included)

18.5 l (4.07 UK gal; 4.88 US gal)

#### Fuel tank reserve

4 l (0.88 UKgal; 1.06 US gal)

- Refuel.

### CAUTION



**DO NOT ADD ADDITIVES OR ANY OTHER SUBSTANCES TO THE FUEL.  
WHEN USING A FUNNEL, ENSURE THAT IT IS PERFECTLY CLEAN.**



**WHEN FILLING THE TANK COMPLETELY, DO NOT FILL BEYOND THE LOWER EDGE OF THE RECESS (SEE FIGURE).**

**WHEN REFUELLING, AVOID FUEL LEAKS THAT MAY CAUSE DAMAGES TO PROPERTIES AND/OR PEOPLE AND FIRE HAZARD.**

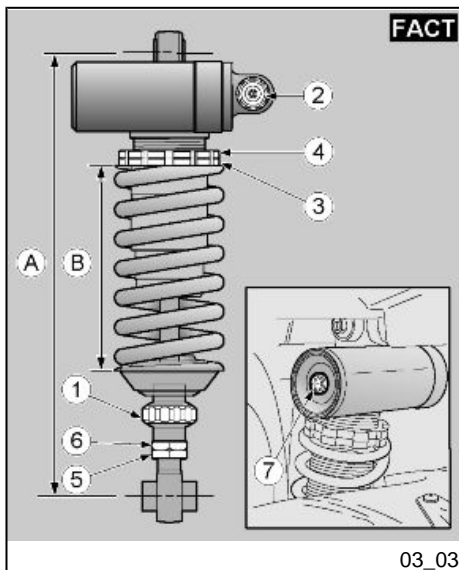
**DURING REFUELLING, AVOID THE USE OF ELECTRIC DEVICES AND/OR MOBILE PHONES, BECAUSE FUEL VAPOURS MAY CAUSE DAMAGE TO OBJECTS AND/OR PERSONAL INJURIES.**

**after refuelling:**

- The fuel cap may only be refitted with the key (2) inserted.
- Once the key (2) is inserted, press the cap to close it again.
- Remove the key (2).
- Close the cover (1).



**MAKE SURE THE CAP IS TIGHTLY CLOSED.**



## Rear shock absorbers adjustment (03\_03, 03\_04)

The rear suspension consists of a spring-shock absorber unit linked to the frame via uniball joints and to the swingarm via a linkage system.

To adjust the rear shock absorbers, the following adjustments can be performed: Rebound damping, adjusting with the knurled hand grip (1); compression damping by adjusting the thumbscrew with the knob (2); Spring preload by adjusting the ring nut (3) blocked in its seat by the lock ring nut (4).

### NOTE

**THE VEHICLE HAS A HEIGHT ADJUSTABLE SUSPENSION. FOR USE ON THE TRACK PLEASE OBSERVE THE VALUES RECOMMENDED FOR USE ON THE ROAD.**

### CAUTION

**CARRY OUT MAINTENANCE OPERATIONS AT HALF THE INTERVALS SPECIFIED IF THE VEHICLE IS USED IN PARTICULAR RAINY OR DUSTY CONDITIONS, OFF ROAD OR FOR TRACK USE.**

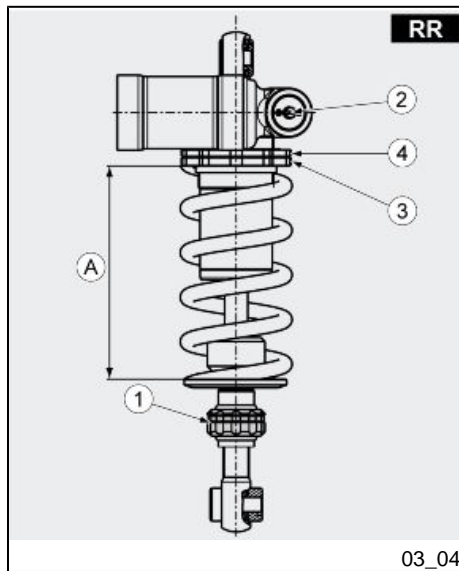
**REAR SHOCK ABSORBER STANDARD SETTING IS ADJUSTED TO MEET SPORTING RIDING.**

**IN ANY CASE IT IS POSSIBLE TO INSERT PERSONAL SETTINGS, DEPENDING ON VEHICLE UTILIZATION.**



**RACING TRACK SETTINGS MUST BE DONE ONLY FOR OFFICIAL COMPETITIONS OR SPORTS EVENTS WHICH ARE, IN ALL CASES, AWAY FROM NORMAL ROAD TRAFFIC AND WITH THE AUTHORISATION OF THE RELEVANT AUTHORITIES.**

**IT IS STRICTLY FORBIDDEN TO RIDE A VEHICLE SET FOR RACING ON ROADS AND MOTORWAYS.**



**TO COUNT THE NUMBER OF RELEASES AND/OR REVOLUTIONS OF ADJUSTMENT SETTINGS (1 - 2) ALWAYS START FROM THE MOST RIGID SETTING (WHOLE CLOCKWISE ROTATION OF THE SETTING).**

**DO NOT FORCE THE SET SCREWS (1 - 2) TO TURN BEYOND THE END OF THE STROKE ON BOTH SIDES SO AS NOT DAMAGE THEM.**

- Using the specific spanner, unscrew the locking ring nut (4).
- Operate on the adjusting ring nut (3) to adjust the spring preloading (B).
- Once the adjustment is done, screw the ring nut (4).
- Turn the (1) screw to adjust the shock absorber hydraulic rebound damping.
- Turn the knob (2) to adjust the shock absorber hydraulic compression damping.

**To change the vehicle setting:**

**(only for version Tuono V4 1100 Factory)**

- Loosen the lock nut (5) slightly.
- Turn the adjuster screw (6) to adjust the shock absorber centre-to-centre distance (A).
- After adjusting, tighten the lock nut (5).



**ONLY FOR VERSION Tuono V4 1100 FACTORY:**

**TO AVOID COMPROMISING SHOCK ABSORBER OPERATION, DO NOT LOOSEN THE SCREW (7) AND DO NOT TAMPER WITH THE SEAL UNDERNEATH, AS NITROGEN MAY COME OUT RESULTING IN RISK OF ACCIDENTS.**



**SET SPRING PRELOADING AND SHOCK ABSORBER REBOUND DAMPING ACCORDING TO THE VEHICLE USE CONDITIONS.**

**IF THE SPRING PRELOADING IS INCREASED, IT IS NECESSARY TO INCREASE THE REBOUND DAMPING ACCORDINGLY TO AVOID SUDDEN JERKS WHEN RIDING.**

**CAUTION**

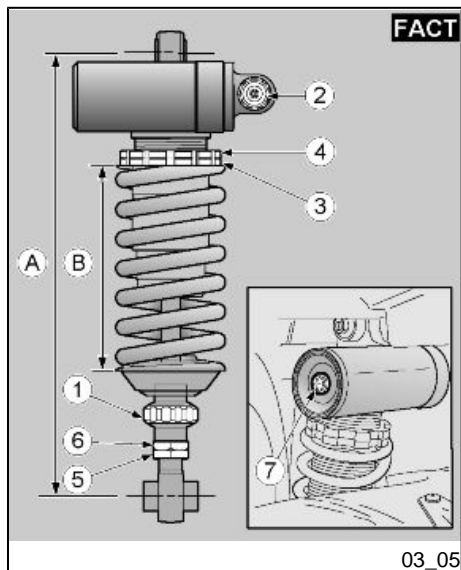
**ALWAYS OBSERVE THE RECOMMENDED ADJUSTMENT RANGE.**

**CAUTION**

**FOR THE CORRECT SETTING PARAMETERS, READ THE PARAGRAPH "SETTING THE REAR SHOCK ABSORBER" CAREFULLY.**

**Take your vehicle to an official Aprilia dealer, if necessary.**

**TRY RIDING THE VEHICLE ON THE STREET UNTIL THE OPTIMUM ADJUSTMENT IS OBTAINED.**



## Rear shock absorbers setting (03\_05)

Tuono V4 1100 Factory (Ohlins shock absorber)



**SPORT SETTINGS MAY BE USED ONLY FOR OFFICIAL COMPETITIONS TO BE CARRIED OUT ON TRACKS, AWAY FROM NORMAL ROAD TRAFFIC AND WITH THE AUTHORISATION OF THE RELEVANT AUTHORITIES.**

### **REAR SHOCK ABSORBER - TUONO V4 1100 FACTORY - STANDARD ADJUSTMENT (FOR ROAD USE ONLY)**

Shock absorber centre-to-centre distance (A)	303 mm (11.93 in)
(preloaded) Spring (B) length	148 mm (5.83 in)
Rebound adjustment, ring nut (1)	open (**) 17 clicks from fully closed (*)

---

Compression adjustment, knob (2) open (\*\*) 15 clicks from fully closed  
(\*)

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**REAR SHOCK ABSORBER - TUONO V4 1100 FACTORY -  
RACING ADJUSTMENT RANGE (TRACK USE ONLY)**

Shock absorber centre-to-centre distance (A)	308 mm (12.13 in)
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(preloaded) Spring (B) length	144 mm (5.67 in)
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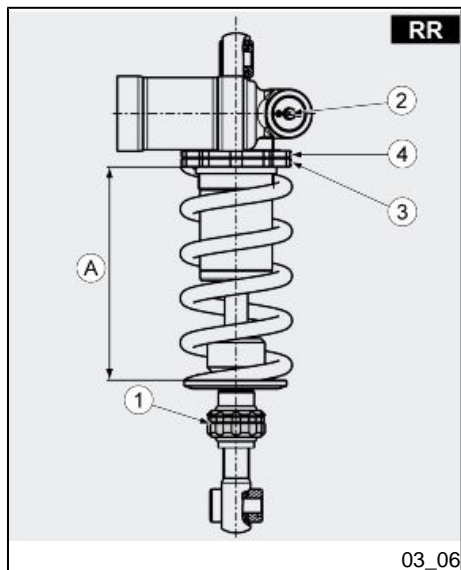
Rebound adjustment, ring nut (1)	open (**) 13 clicks from fully closed (*)
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Compression adjustment, knob (2)	open (**) 10 clicks from fully closed (*)
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(\*) = clockwise

(\*\*) = anticlockwise



## Rear shock absorbers setting (03\_05, 03\_06)

Tuono V4 1100 RR (Sachs shock absorber)



**SPORT SETTINGS MAY BE USED ONLY FOR OFFICIAL COMPETITIONS TO BE CARRIED OUT ON TRACKS, AWAY FROM NORMAL ROAD TRAFFIC AND WITH THE AUTHORISATION OF THE RELEVANT AUTHORITIES.**

### **REAR SHOCK ABSORBER - TUONO V4 1100 RR - STANDARD ADJUSTMENT RANGE (FOR ROAD USE ONLY)**

(preloaded) Spring (B) length	148.5 mm (5.85 in)
Rebound adjustment, ring nut (1)	open (**) 13 clicks from fully closed (*)
Compression adjustment, knob (2)	open (**) 2 click from fully closed (*)

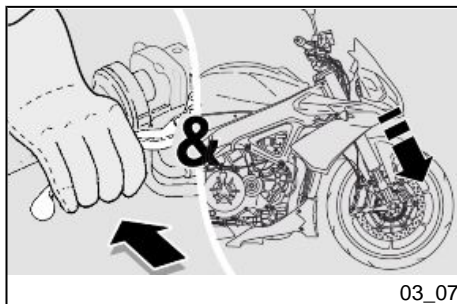


## REAR SHOCK ABSORBER - TUONO V4 1100 RR - RACING ADJUSTMENT RANGE (TRACK USE ONLY)

(preloaded) Spring (B) length	144 mm (5.67 in)
Rebound adjustment, ring nut (1)	open (**) 8 clicks from fully closed (*)
Compression adjustment, knob (2)	Open (**) half a turn from completely closed (*)

(\*) = clockwise

(\*\*) = anticlockwise

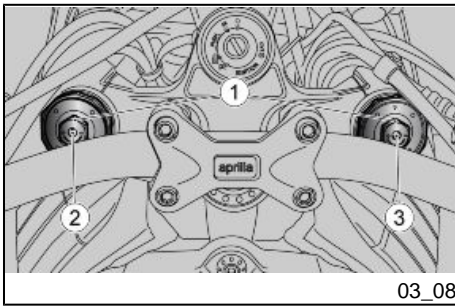


### Front fork adjustment (03\_07, 03\_08)

- Operating the front brake lever, press the handlebar repeatedly to send the fork fully down. The shock absorber should compress and extend smoothly with no signs of oil leakage on the stanchions.
- Check the tightening of all the elements and the correct operation of the front and rear suspension joints.

#### CAUTION

**PLEASE CONTACT AN Official Aprilia Dealer TO HAVE THE FRONT FORK OIL CHANGED AND ITS OIL SEALS REPLACED.**



The front suspension consists of a hydraulic fork connected to the headstock by means of two plates.

For adjusting the suspension setup, each stanchion has an upper nut (1) for adjusting the spring preload.

The left hand stem is also equipped with an upper adjuster screw (2) for adjusting hydraulic rebound damping.

The right hand stem is equipped with an upper set screw (3) for adjusting compression damping.

#### CAUTION

**TO PREVENT DAMAGE, DO NOT FORCE THE ADJUSTER (1-2) BEYOND THE RESPECTIVE END OF TRAVEL IN EITHER DIRECTION. USE THE SAME SPRING PRELOAD SETTINGS FOR BOTH STEMS: RIDING THE VEHICLE WITH DIFFERENT SETTINGS FOR THE TWO STANCHIONS REDUCES STABILITY. WHEN SPRING PRELOAD IS INCREASED, REBOUND DAMPING MUST ALSO BE INCREASED TO PREVENT EXCESSIVE SUSPENSION KICKBACK WHEN RIDING.**

#### ADJUSTMENTS

##### Regular adjustment (standard):

- rider only.

##### Medium load setting:

- (for example, rider with passenger and/or luggage).

##### Setting for sports use.

#### CAUTION



**TO COUNT THE NUMBER OF RELEASES AND/OR REVOLUTIONS OF ADJUSTMENT SETTINGS (1 - 2) ALWAYS START FROM THE MOST RIGID SETTING (WHOLE CLOCKWISE ROTATION OF THE SETTING). DO NOT FORCE THE SET**

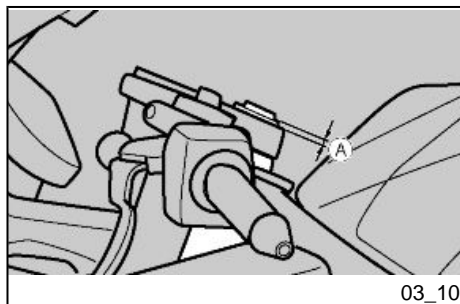
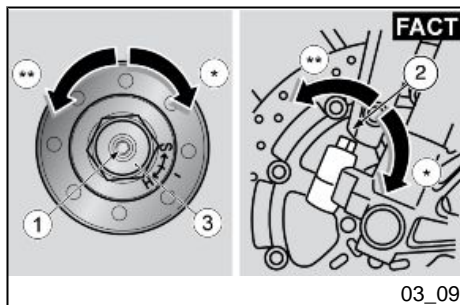
SCREWS (1 - 2) TO TURN BEYOND THE END OF THE STROKE ON BOTH SIDES SO AS NOT DAMAGE THEM.

### Front fork setting (03\_09, 03\_10)

TUONO V4 1100 FACTORY (Ohlins fork)



TO COUNT THE CLICKS AND/OR TURNS OF SET SCREWS (1 - 2 - 3) ALWAYS START FROM THE MOST RIGID SETTING (SET SCREW FULLY CLOCKWISE).



### **FRONT FORK - TUONo V4 1100 FACTORY - STANDARD** **ADJUSTMENT (FOR ROAD USE ONLY)**

Rebound damping adjustment,  
screw (1)

Unscrew (\*\*) 10 clicks from fully  
closed (\*)

Compression damping adjustment, screw (2)	Unscrew (**) 15 clicks from fully closed (*)
Spring preloading, nut (3)	screw (*) 10 turns from fully open (**)
Stems (A) (***) protrusion from top plate (excluding cover)	4 notches/ 16 mm (4 notches/0.63 in)

## **FRONT FORK - TUON0 V4 1100 FACTORY - RACING**

### **ADJUSTMENT RANGE (TRACK USE ONLY)**

Rebound damping adjustment, screw (1)	Unscrew (**) 8 clicks from fully closed (*)
Compression damping adjustment, screw (2)	Unscrew (**) 6 clicks from fully closed (*)
Spring preloading, nut (3)	screw (*) 10 turns from fully open (**)
Stems (A) (***) protrusion from top plate (excluding cover)	3 notches/ 12 mm (3 notches/0.47 in)

(\*) - Clockwise

(\*\*) - Anticlockwise

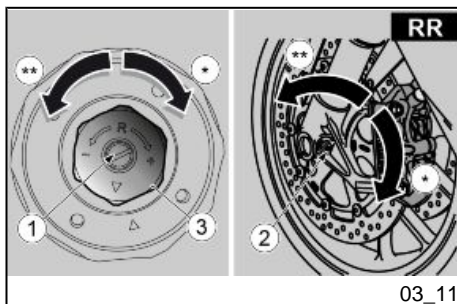
(\*\*\*) - this type of adjustment may only be made by an **aprilia Official Dealer**.

## Front fork setting (03\_10, 03\_11, 03\_12)

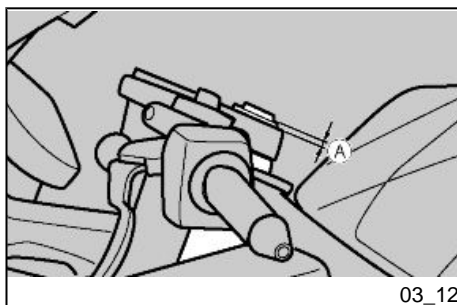
Tuono V4 1100 RR (Sachs fork)



**TO COUNT THE CLICKS AND/OR TURNS OF SET SCREWS (1 - 2 - 3) ALWAYS START FROM THE MOST RIGID SETTING (SET SCREW FULLY CLOCKWISE).**



03\_11



03\_12

### **FRONT FORK - TUONO V4 1100 RR - STANDARD**

#### **ADJUSTMENT (SACHS - FOR ROAD USE ONLY)**

Rebound damping adjustment, screw (1)	Unscrew (**) 10 clicks from fully closed (*)
Compression damping adjustment, screw (2)	Unscrew (**) 10 clicks from fully closed (*)
Spring preloading, nut (3)	screw (*) 5 turns from fully open (**)

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Stems (A) (\*\*\*) protrusion from top plate (excluding cover) 2 notches/ 8 mm (2 notches/0.31 in)

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## **FRONT FORK - TUONO V4 1100 FACTORY - RACING**

### **ADJUSTMENT RANGE (SACHS - TRACK USE ONLY)**

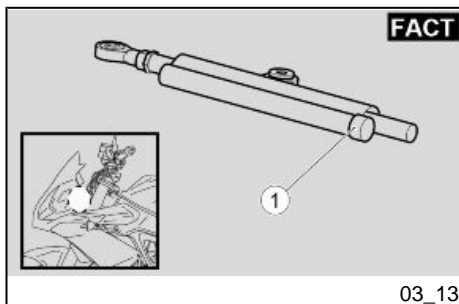
Rebound damping adjustment, screw (1)	Unscrew (**) 4 clicks from fully closed (*)
Compression damping adjustment, screw (2)	Unscrew (**) 8 clicks from fully closed (*)
Spring preloading, nut (3)	screw (*) 5 turns from fully open (**)
Stems (A) (***) protrusion from top plate (excluding cover)	3 notches/ 12 mm (3 notches/0.47 in)

---

(\*) - Clockwise

(\*\*) - Anticlockwise

(\*\*\*) - this type of adjustment may only be made by an **aprilia Official Dealer**.



## Steering shock absorber adjustment (03\_13, 03\_14)

### ONLY FOR VERSION Tuono V4 1100 FACTORY:

the steering damper may be adjusted by turning the knob (1).

- Turn the knob (1) clockwise to stiffen the steering.
- Turn the knob anticlockwise to loosen the steering.



**SPORT SETTINGS MAY BE USED ONLY FOR OFFICIAL COMPETITIONS TO BE CARRIED OUT ON TRACKS, AWAY FROM NORMAL ROAD TRAFFIC AND WITH THE AUTHORISATION OF THE RELEVANT AUTHORITIES.**



**ADJUST ONLY WHEN THE VEHICLE IS STANDING STILL. AFTER HAVING CHANGED THE SETTINGS, ALWAYS CHECK THAT THE STEERING IS FREE IN BOTH DIRECTIONS.**

### **STEERING DAMPER - STANDARD SETTING (FOR ROAD USE)**

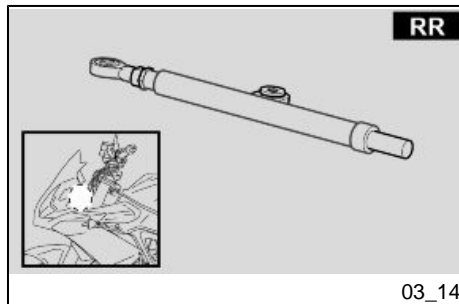
Hydraulic setting	From all open (**) tighten (*) 5 - 8 clicks
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### **STEERING DAMPER- RACING SETTING RANGE (FOR TRACK ONLY)**

Hydraulic setting	From all open (**) tighten (*) 10 - 13 clicks
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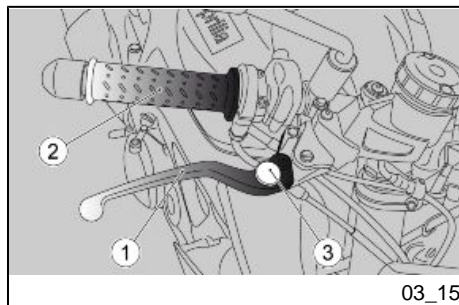
(\*) = clockwise

(\*\*) = anticlockwise



#### **ONLY FOR VERSION TUONO V4 1100 RR:**

The **Tuono V4 1100 RR** version is equipped with a non-adjustable steering damper. No adjustment can be made.

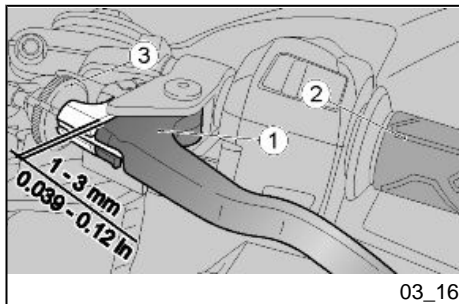


#### **Justering af greb til forbremse (03\_15)**

The distance between the end of the lever (1) and the hand grip (2) may be adjusted with the set screw (3).

- Push the control lever (1) forward and turn the set screw (3) until the lever (1) is at the desired distance.
- Turn the adjuster screw anticlockwise to bring the lever (1) closer to the hand grip (2).





03\_16

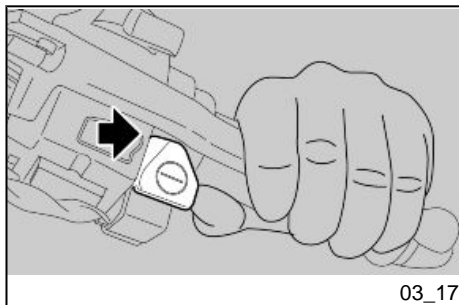
## Clutch lever adjustment (03\_16, 03\_17)

The clutch lever clearance (1) may be adjusted with the adjuster screw (3).

- Turn the adjuster screw (3) forward to increase clutch lever clearance (1) and check lever function while using the hand grip (2) as you would when riding the vehicle.
- Check that clearance is between 1 and 3 mm (0.039 e 0.12 in).

### CAUTION

**WHENEVER MODIFYING THE CLUTCH LEVER ANGLE, ALWAYS ENSURE THAT THERE IS NO INTERFERENCE AT ALL BETWEEN THE LEVER AND THE "-" BUTTON WHEN THE LEVER IS PULLED COMPLETELY. FAILURE TO DO SO MAY RESULT IN a-PRC MALFUNCTIONS.**



03\_17

## Running in

Running in is essential to ensure the durability of the vehicle. During the first 1000 Km (621.37 mi), observe the following rules to ensure the reliability and performance of the vehicle throughout its lifetime:

- Avoid full throttle starts and hard acceleration;
- Avoid hard or prolonged braking;
- Do not ride for prolonged periods at sustained high speed; preferably ride the motorcycle on varied routes with frequent, gentle acceleration and deceleration;

- Ride prudently to gradually gain familiarity with the motorcycle, testing progressively higher throttle apertures only as you gain confidence

**CAUTION**

**THE FULL PERFORMANCE OF THE VEHICLE IS ONLY AVAILABLE AFTER THE SERVICE AT THE END OF THE RUNNING IN PERIOD.**

**Follow these guidelines:**

- Do not twist the throttle grip abruptly and completely when the engine is working at a low revs, either during or after run-in.
- During the first 100 Km (62 miles) use the brakes gently, avoiding sudden or prolonged braking. That is to permit the adequate adjustment of the pad friction material to the brake discs.
- It is advisable to not exceed 7000 rpm for the first 1000 km (621 mi) and then not to exceed 8500 rpm up until 2000 km (1243 mi).



**AFTER THE SPECIFIED MILEAGE, TAKE YOUR VEHICLE TO AN Official Aprilia Dealer FOR THE CHECKS INDICATED IN THE "PERIODICAL MAINTENANCE" TABLE IN THE SCHEDULED MAINTENANCE SECTION TO AVOID INJURING YOURSELF, OTHERS AND /OR DAMAGING THE VEHICLE.**

**Starting up the engine (03\_18, 03\_19, 03\_20, 03\_21, 03\_22)**

**This vehicle is extremely powerful and must be used carefully and driven with caution and respect for its power and potential.**

**Do not carry objects in the top fairing (between the handlebar and the instrument panel) so that the handlebar can turn freely and the instrument panel is visible at all times.**



**EXHAUST FUMES CONTAIN CARBON MONOXIDE, AN EXTREMELY HARMFUL SUBSTANCE IF INHALED.**

**NEVER START THE ENGINE IN A CLOSED OR INSUFFICIENTLY VENTILATED SPACE.**

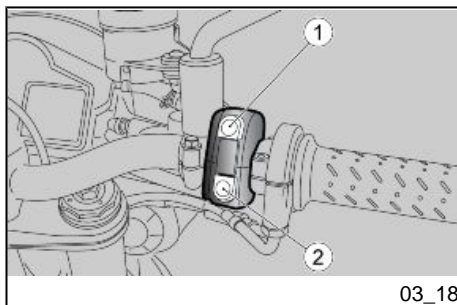


**FAILURE TO OBSERVE THIS WARNING COULD LEAD TO UNCONSCIOUSNESS AND EVEN DEATH DUE TO SUFFOCATION.**

#### CAUTION

**WITH THE SIDE STAND LOWERED, THE ENGINE MAY ONLY BE STARTED WITH THE GEARBOX IN NEUTRAL. IF YOU ATTEMPT TO ENGAGE A GEAR IN THIS CONDITION THE ENGINE WILL STOP.**

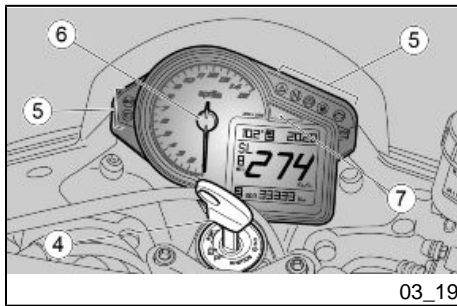
**WITH THE SIDE STAND RETRACTED, THE ENGINE MAY BE STARTED WITH THE GEARBOX IN NEUTRAL OR WITH GEAR ENGAGED AND THE CLUTCH LEVER PRESSED.**



- Get on the motorcycle, assuming the correct driving posture.
- Make sure that the side stand has been fully retracted.
- Operate the front or rear brake (or both).
- Operate the clutch lever (7) and make sure that the transmission (8) is in neutral. If the transmission is in neutral, the green coloured light "N" (9) will turn on.
- Press the engine stop switch (1) to "RUN", turn the ignition key (3) to "ON".
- Press the starter button (2) once only.

At this stage:

- The starting screen page will be shown on the multifunction display for 2 seconds.
- All warning lights (4) and the backlighting will turn on for 2 seconds on the instrument panel.



03\_19



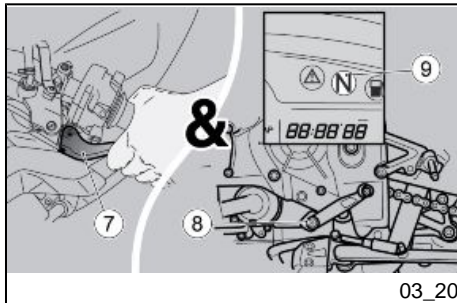
**IF THE LOW FUEL WARNING LIGHT ON THE INSTRUMENT PANEL TURNS ON, REFUEL THE VEHICLE AT ONCE.**



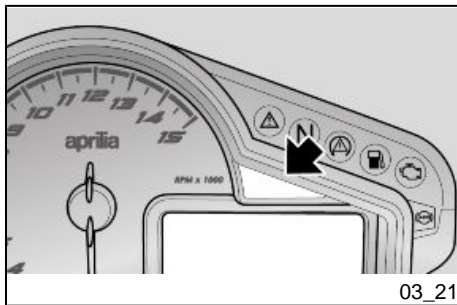
**INTENSE USE/ON THE TRACK IN RESERVE CAN DAMAGE THE ENGINE.**



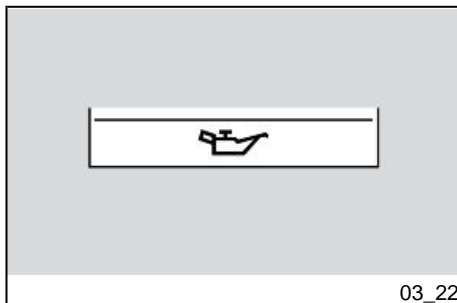
**THE OVERREVVING THRESHOLD IN NEW VEHICLES IS SET TO 6000 RPM. RAISE THE THRESHOLD GRADUALLY AS YOU BECOME FAMILIAR WITH THE VEHICLE AND RUNNING IN HAS BEEN COMPLETED.**



03\_20



03\_21



AFTER A FEW SECONDS FROM THE ENGINE START-UP, THE START-UP BUTTON ASSUMES THE MAPPING CHANGE FUNCTION.



IF THE ENGINE OIL PRESSURE ICON IS DISPLAYED AND THE GENERAL WARNING LIGHT IS ON, THE OIL PRESSURE IN THE CIRCUIT IS TOO LOW.



DO NOT SET OFF SUDDENLY WHEN THE ENGINE IS COLD. RIDE AT LOW SPEED FOR SEVERAL KILOMETRES. THIS WILL ALLOW THE ENGINE TO WARM UP AND REDUCE POLLUTING EMISSIONS AND FUEL CONSUMPTION.

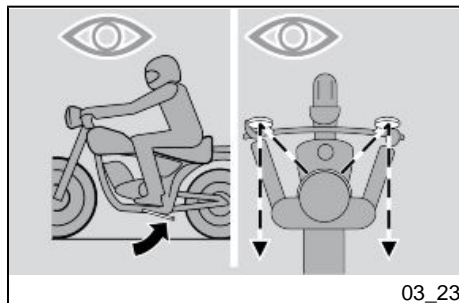


IF THE WORD "SERVICE" OR "URGENT SERVICE" IS SHOWN ON THE (MULTIFUNCTION) DISPLAY DURING REGULAR ENGINE OPERATION, IT MEANS THERE IS A MALFUNCTION.

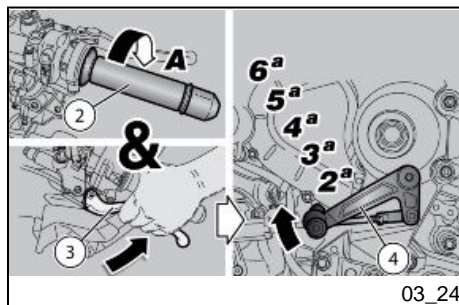
### Moving off / riding (03\_23, 03\_24, 03\_25, 03\_26)

#### CAUTION

WHEN TRAVELLING WITHOUT PASSENGERS, MAKE SURE THE PASSENGER FOOTRESTS ARE FOLDED UP.



03\_23



03\_24

**CAUTION**

**PASSENGERS MUST BE SUITABLY INSTRUCTED ON HOW TO BEHAVE TO PREVENT DANGEROUS SITUATIONS WHEN RIDING.**

**BEFORE SETTING OFF, MAKE SURE THE STAND HAS BEEN COMPLETELY RETRACTED TO ITS POSITION.**

**To start:**

- Turn on the engine.
- Adjust the inclination of the rear-view mirrors to ensure proper visibility.

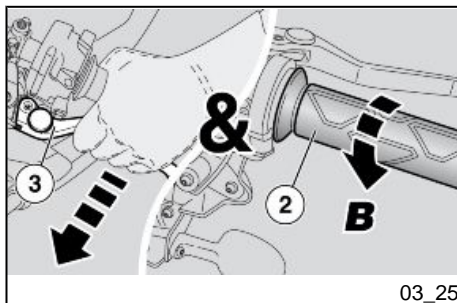
**CAUTION**

**WITH THE VEHICLE AT A STANDSTILL, PRACTICE USING THE REAR-VIEW MIRRORS. THE MIRRORS ARE CONVEX, SO OBJECTS MAY SEEM FARTHER AWAY THAN THEY REALLY ARE. THESE MIRRORS OFFER A WIDE-ANGLE VIEW AND ONLY EXPERIENCE HELPS YOU JUDGE THE DISTANCE SEPARATING YOU AND THE VEHICLE BEHIND.**

- With throttle grip (2) closed (**Pos. A**) and engine at idle, operate the clutch lever (3).
- Push the gearbox lever (4) downward to select the first gear.
- Release the clutch lever (activated during start-up).

**CAUTION**

**WHEN TURNING OFF THE VEHICLE, DO NOT RELEASE THE CLUTCH TOO QUICKLY OR SUDDENLY, AS THIS COULD CAUSE THE ENGINE TO STOP OR THE VEHICLE TO REAR UP ON THE BACK WHEEL. DO NOT ACCELERATE SUDDENLY WHEN RELEASING THE CLUTCH FOR THE SAME REASON.**



- Slowly release the clutch lever (3) and at the same time accelerate by slightly twisting the throttle grip (2) (**Pos. B**).

The vehicle starts moving forward.

- For the first kilometres travelled, limit the speed in order to warm up the engine.

#### NOTE

**THE VEHICLE IS EQUIPPED WITH AN RPM LIMITER THAT IS PART OF THE "RIDE-BY-WIRE" INJECTION SYSTEM.**

- Accelerate gradually by twisting the throttle grip (2) (**Pos. B**) without exceeding the recommended rpm.



**RIDE IN THE CORRECT GEAR AND SPEED FOR THE CONDITIONS.  
DO NOT OPERATE THE ENGINE AT A TOO LOW RPM LEVEL.**

- Release the throttle grip (2) (**Pos. A**), operate the clutch lever (3), lift the gearshift lever (4), release the clutch lever (3) and accelerate.
- Repeat the last two operations and engage a higher gear.



**IF THE ENGINE OIL PRESSURE ICON IS DISPLAYED DURING REGULAR ENGINE OPERATION, IT MEANS THAT THE ENGINE OIL PRESSURE IN THE CIRCUIT IS TOO LOW.**

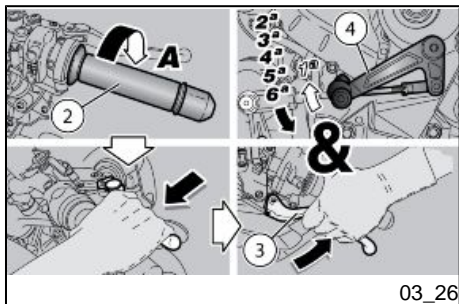
**IF THIS OCCURS, STOP THE ENGINE AND CONTACT AN APRILIA Official Dealer.**

**IT IS SUGGESTED TO DOWNSHIFT FROM A HIGHER GEAR TO A LOWER GEAR:**

- When riding downhill and when braking, in order to increase the braking power by using engine compression.
- When going uphill, when the engaged gear does not suit the speed (high gear, moderate speed) and the number of engine revs falls.

#### CAUTION

**DOWNSHIFT ONE GEAR AT A TIME; WHEN SHIFTING TO A LOWER GEAR, DOWNSHIFTING MORE THAN ONE GEAR AT A TIME COULD OVERREV THE ENGINE; THAT IS, THE MAXIMUM RPM VALUE PERMITTED FOR THE ENGINE COULD BE EXCEEDED.**



- Release the hand grip (2) (**Pos.A**).
- If necessary, pull the brake levers gently and reduce speed.
- Operate the clutch lever (3) and lower the gearshift lever (4) to engage a lower gear.
- Release the brake levers when it is operated.
- Release the clutch lever (3) and accelerate moderately.

#### CAUTION

**STOP THE VEHICLE MAINLY USING THE FRONT BRAKE. USE THE REAR BRAKE TO BALANCE THE BRAKING ONLY AND IN ANY CASE TOGETHER WITH THE FRONT BRAKE.**



**IF THE COOLANT TEMPERATURE SHOWN ON THE MULTIFUNCTIONAL DIGITAL DISPLAY IS HIGHER THAN 115°C (239°F), STOP THE VEHICLE AND LET THE ENGINE RUN AT 3000 rpm FOR ABOUT TWO MINUTES SO THAT THE COOLANT FLOWS REGULARLY IN THE SYSTEM; THEN SET THE ENGINE STOP SWITCH TO "OFF" AND CHECK THE COOLANT LEVEL.**

**IF THE TEMPERATURE INDICATOR CONTINUES FLASHING AFTER CHECKING THE COOLANT LEVEL, CONTACT AN OFFICIAL APRILIA DEALER.**



**DO NOT TURN THE IGNITION KEY TO "KEY OFF", BECAUSE THE COOLING FANS WOULD STOP REGARDLESS OF THE COOLANT TEMPERATURE, WHICH WOULD CAUSE A FURTHER TEMPERATURE RISE.**

**IN MANY CASES THE ENGINE WILL CONTINUE TO OPERATE WITH LIMITED PERFORMANCE; IMMEDIATELY CONTACT AN Official APRILIA Dealer.**

**IN ORDER TO AVOID CLUTCH OVERHEATING, SHUT THE ENGINE OFF AS SOON AS POSSIBLE ONCE THE VEHICLE HAS STOPPED AND AT THE SAME TIME THE GEAR IS ENGAGED AND THE CLUTCH LEVER OPERATED.**



**ACTIVATING ONLY THE FRONT BRAKE OR THE REAR BRAKE SIGNIFICANTLY REDUCES THE BRAKING FORCE OF THE VEHICLE AND A WHEEL COULD BECOME LOCKED WITH A RESULTING LOSS OF GRIP.**

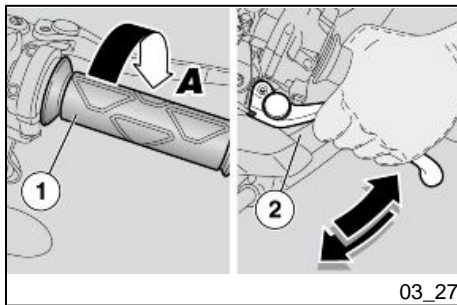
**WHEN STOPPING UPHILL, DECELERATE COMPLETELY AND ONLY USE THE BRAKES TO MAINTAIN THE VEHICLE IN THE STOPPED POSITION.**

**USING THE ENGINE TO KEEP THE MOTORCYCLE STOPPED COULD CAUSE THE CLUTCH TO OVERHEAT. BRAKING CONTINUOUSLY WHEN DRIVING DOWNHILL COULD CAUSE THE BRAKE PADS TO OVERHEAT, WHICH REDUCES BRAKING AND LIMITS BRAKING POWER.**

**IT IS RECOMMENDED TO USE THE ENGINE COMPRESSION, DOWNSHIFTING AND USING BOTH BRAKES INTERMITTENTLY.**

**WHEN DRIVING DOWNHILL, NEVER RIDE WITH THE ENGINE TURNED OFF.**

**WHEN RIDING ON WET SURFACES OR SURFACES WITH POOR GRIP (SNOW, ICE, MUD, ETC.) USE MODERATE SPEED, AVOID SUDDEN BRAKING OR MANOEUVRES THAT MAY CAUSE TO A LOSS OF TRACTION AND POSSIBLY TO A FALL OR CRASH.**



## Stopping the engine (03\_27)

- Release the throttle grip (1) (**Pos. A**), brake gradually and at the same time "downshift" gears to slow down.

### Once the speed is reduced, before stopping the vehicle:

- Operate the clutch lever (2) so that engine does not shut off.

### When the vehicle is at a standstill:

- Set the gearshift lever in neutral (green "N" indicator light lit).
- Release the clutch lever.
- While at a temporary halt, keep at least one of the vehicle brakes held.

### CAUTION



**WHENEVER POSSIBLE, AVOID ROUGH BRAKING, SUDDEN DECELERATION AND BRAKING IN EXCESS.**

## Parking

It is very important to select an adequate parking spot, in compliance with road signals and the guidelines described below.

### CAUTION

**PARK ON SAFE AND LEVEL GROUND TO PREVENT THE VEHICLE FROM FALLING.**

**DO NOT LEAN THE VEHICLE AGAINST A WALL OR LAY IT ON THE GROUND.**

**ENSURE THAT THE VEHICLE AND, IN PARTICULAR, PARTS OF THE VEHICLE WHICH MAY BECOME HOT (ENGINE, OIL RADIATOR AND LINES, EXHAUST SYSTEM, BRAKE DISCS) ARE NOT A HAZARD TO PERSONS OR CHILDREN.**

**DO NOT LEAVE YOUR VEHICLE UNATTENDED WITH THE ENGINE ON OR THE KEY IN THE IGNITION SWITCH.**

**CAUTION**

**IF THE VEHICLE FALLS OR IS ON A STEEP INCLINE FUEL CAN LEAK.**

**FUEL USED TO DRIVE INTERNAL COMBUSTION ENGINES IS HIGHLY FLAMMABLE AND CAN BECOME EXPLOSIVE UNDER CERTAIN CONDITIONS.**



**DO NOT REST THE RIDER OR PASSENGER WEIGHT ON THE SIDE STAND.**

### **Catalytic silencer**

The vehicle has a silencer with a "platinum - palladium - rhodium three-way" metal catalytic converter.

This device oxidises the CO (carbon monoxide) producing carbon dioxide, and the UHC (unburned hydrocarbons) producing water vapour and reduces NOx (nitrogen oxide) producing oxygen and nitrogen present in the exhaust fumes.



**DO NOT PARK THE VEHICLE NEAR DRY BRUSHWOOD OR IN PLACES EASILY ACCESSIBLE BY CHILDREN BECAUSE THE CATALYTIC CONVERTER REACHES HIGH TEMPERATURES DURING VEHICLE OPERATION; FOR THIS REASON, PAY UTMOST ATTENTION AND DO NOT TOUCH IT UNTIL IT HAS COMPLETELY COOLED DOWN.**



**DO NOT USE LEADED PETROL AS IT CAUSES IRREPARABLE DAMAGE TO THE CATALYTIC CONVERTER.**

Vehicle owners are warned that the law may prohibit the following:

- the removal of any device or element belonging to a new vehicle or any other action by anyone leading to render it non-operating, if not for maintenance, repair or replacement reasons, in order to control noise emission before the sale or delivery of the vehicle to the ultimate buyer or while it is used;
- using the vehicle after that device or element has been removed or rendered non-operating.

Check the muffler/exhaust silencer and the silencer pipes, make sure there are no signs of rust or holes and that the exhaust system works properly.

If you not an increase in exhaust noise, take your vehicle to an Official **Aprilia** Dealer at once.



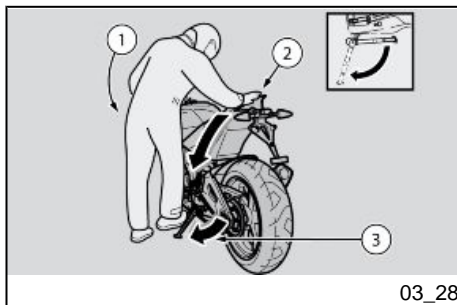
**THIS MOTORCYCLE HAS A VALVE IN THE EXHAUST SYSTEM THAT IS CONTROLLED BY THE ELECTRONIC CONTROL UNIT. WHEN THE MOTORCYCLE IS STOPPED AND IS IN NEUTRAL, THIS VALVE CLOSSES TO LIMIT THE NOISE PRODUCED BY THE EXHAUST SILENCER.**

**IT IS STRICTLY FORBIDDEN TO TAMPER WITH THE EXHAUST SYSTEM AND/OR THIS VALVE.**

## Stand (03\_28)

If the side stand must be lowered for any reason (for example after moving the vehicle), proceed as described below:

- Select an appropriate parking area.
- Grasp the left handgrip (1) and place your right hand on the rear upper part of the vehicle (2).
- Lower the side stand with your right foot, and extend it completely (3).
- Tilt the motorcycle until the stand touch the ground.
- Turn the handlebar fully leftwards.



03\_28



**MAKE SURE THAT THE GROUND ON WHICH THE MOTORCYCLE IS PARKED IS FIRM, EVEN AND FREE OF OBSTACLES.**

## Suggestion to prevent theft

### CAUTION

**WHEN USING A DISC LOCKING DEVICE, PAY UTMOST ATTENTION TO REMOVE IT BEFORE RIDING. FAILURE TO OBSERVE THIS WARNING MAY CAUSE SERIOUS DAMAGE TO THE BRAKING SYSTEM AND ACCIDENTS WITH CONSEQUENT PHYSICAL INJURIES OR EVEN DEATH.**

NEVER leave the ignition key in the lock and always use the steering lock. Park the vehicle in a safe place such as a garage or a place with guards. Whenever possible, use an additional anti-theft device. Make sure all vehicle documents are in order and the road tax paid. Write down your personal details and telephone number on this page to help identifying the owner in case of vehicle retrieval after a theft.

LAST NAME: .....

NAME: .....

ADDRESS: .....

TELEPHONE NO.: .....

#### **WARNING**

**IN MANY CASES, STOLEN VEHICLES CAN BE IDENTIFIED BY DATA IN THE USE / MAINTENANCE BOOKLET**

### **Safe driving**

Some simple tips are provided below that will enable you to use your motorcycle on a daily basis in greater safety and peace of mind. Your skill and your mechanical knowledge are the basis of a safe ride. We recommend trying out the motorcycle in traffic-free zones to familiarise with it.

1. Before riding off, remember to put the helmet on and fasten it correctly.
2. Reduce speed on rough roads and ride with care.
3. After riding on a long stretch of wet road without using the brakes, braking can be poor at the beginning. In these conditions, it is a good idea to apply the brakes from time to time.
4. Although the vehicle is equipped with an ABS system, pay attention when braking on wet surfaces, on dirt or on a slippery road surface.
5. Avoid riding off by mounting the scooter when it is resting on its support.
6. If the motorcycle is used on roads covered with sand, mud, snow mixed with salt, etc., clean the brake discs frequently with a mild detergent in order to prevent abrasive particles from building up inside the holes, which can result in early brake pads wear.

#### **CAUTION**

**ALWAYS RIDE WITHIN YOUR LIMITS. RIDING UNDER THE INFLUENCE OF ALCOHOL OR OTHER DRUGS AND CERTAIN MEDICINES IS EXTREMELY DANGEROUS.**

**CAUTION**

ANY ELABORATION THAT MODIFIES THE VEHICLE'S PERFORMANCES, SUCH AS TAMPERING WITH ORIGINAL STRUCTURAL PARTS IS STRICTLY FORBIDDEN BY LAW, AND RENDERS THE MOTORCYCLE NO LONGER CONFORMING TO THE APPROVED TYPE AND DANGEROUS FOR RIDING.

**CAUTION**

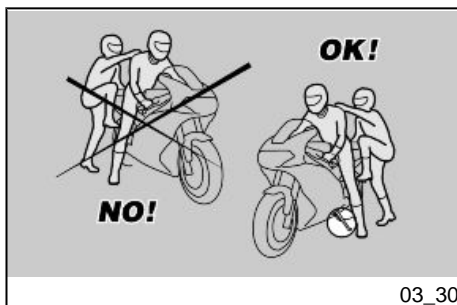
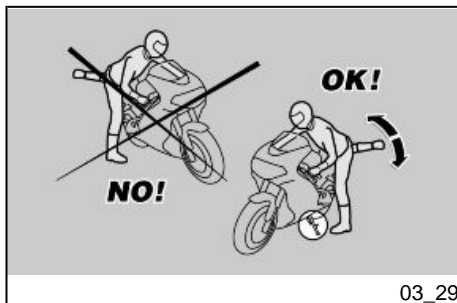
DO NOT ADJUST THE MIRRORS WHILE RIDING. THIS COULD CAUSE YOU TO LOOSE CONTROL OF THE MOTORCYCLE.

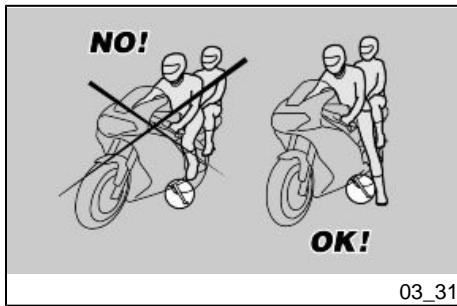
**Basic safety rules (03\_29, 03\_30, 03\_31, 03\_32, 03\_33)**

The following recommendations should receive your maximum attention, because they are provided to increase your safety, and decrease damage to people, things and vehicles, in the case of a fall of the rider or passenger from the vehicle and/or from the fall or overturning of the vehicle.

Mounting and dismounting the vehicle should always be performed with total freedom of movement and with the hands free of all objects. (i.e.- objects, helmet, gloves, or glasses).

Mount and dismount only on the left side of the vehicle, and only with the side stand lowered.





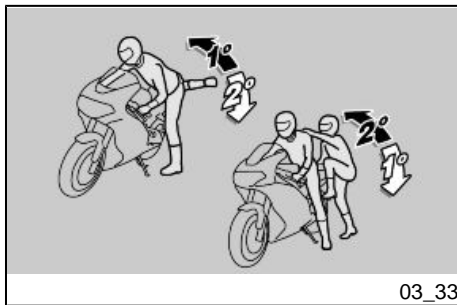
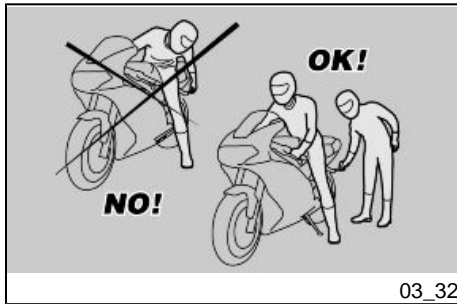
The stand is designed to support the weight of the vehicle and a small additional weight, which does not include the rider and passenger.

Mounting into driving position, with the side stand in place, is permitted only to prevent the possibility of the vehicle falling or overturn, and does not indicate the possibility for the rider and passenger's weight to be placed on the side stand.

During mounting and dismounting the vehicle's weight can cause a loss of balance, with consequent loss of equilibrium and the possibility of falling or overturning.

#### CAUTION

**THE RIDER SHOULD ALWAYS BE THE FIRST TO MOUNT AND THE LAST TO DISMOUNT FROM THE VEHICLE, AND SHOULD CONTROL THE STABILITY AND EQUILIBRIUM OF THE VEHICLE WHILE THE PASSENGER IS MOUNTING AND DISMOUNTING**





In any case, the passenger should mount and dismount the vehicle using caution to avoid causing the vehicle or the rider to lose balance.

#### **CAUTION**

**THE RIDER TO INSTRUCT THE PASSENGER ABOUT THE PROPER WAY TO MOUNT AND DISMOUNT FROM THE VEHICLE.**

**THE VEHICLE INCLUDES PASSENGER FOOTRESTS WHICH SHOULD BE USED DURING MOUNTING AND DISMOUNTING. THE PASSENGER SHOULD ALWAYS USE THE LEFT FOOTREST FOR MOUNTING AND DISMOUNTING FROM THE VEHICLE.**

**DO NOT DISMOUNT OR EVEN ATTEMPT TO DISMOUNT BY JUMPING OR STRETCHING OUT YOUR LEG IN ORDER TO TOUCH THE GROUND. IN BOTH CASES THE STABILITY AND EQUILIBRIUM OF THE VEHICLE COULD BE COMPROMISED.**

#### **CAUTION**

**BAGGAGE OR OBJECTS ATTACHED TO THE REAR PART OF THE VEHICLE CAN CREATE AN OBSTACLE DURING MOUNTING AND DISMOUNTING FROM THE VEHICLE.**

**IN ALL CASES, THINK AHEAD AND MOVE YOUR RIGHT LEG CAREFULLY, AS IT WILL HAVE TO AVOID AND CLEAR THE REAR PART OF THE VEHICLE (INCLUDING BAGGAGE AND THE TAIL FAIRING) WITHOUT CAUSING LOSS OF BALANCE.**

#### **MOUNTING**

- Grip the handlebar properly and mount the vehicle without placing your weight upon the side stand.

#### **CAUTION**

**IN THE CASE THAT YOU ARE NOT ABLE TO REST BOTH FEET ON THE GROUND, PUT THE RIGHT FOOT ON THE GROUND, (IN THE CASE OF A LOSS**

**OF BALANCE THE LEFT SIDE IS "PROTECTED" BY THE SIDE STAND) AND KEEP YOUR LEFT FOOT READY TO BE POSITIONED.**

- Place both feet on the ground and straighten the vehicle into the driving position, always maintaining its equilibrium.

#### **CAUTION**

**THE RIDER SHOULD NOT OPEN OR TRY TO OPEN THE PASSENGER FOOTRESTS FROM THE RIDER'S SEAT, AS IT COULD COMPROMISE THE STABILITY AND EQUILIBRIUM OF THE VEHICLE.**

- Have the passenger fold out the two passenger footrests.
- Give instructions as necessary to help the passenger mount the vehicle.
- Lift and retract the side stand completely with the left foot.

#### **GETTING OFF THE VEHICLE**

- Select an appropriate parking spot.
- Stop the vehicle.
- Stop the engine.



**MAKE SURE THAT THE GROUND ON WHICH THE MOTORCYCLE IS PARKED IS FIRM, EVEN AND FREE OF OBSTACLES.**

- Use the heel of your left foot to completely open the side stand.

#### **CAUTION**

**IN THE CASE THAT YOU ARE NOT ABLE TO REST BOTH FEET ON THE GROUND, PUT THE RIGHT FOOT ON THE GROUND, (IN THE CASE OF A LOSS**

**OF BALANCE THE LEFT SIDE IS "PROTECTED" BY THE SIDE STAND) AND KEEP YOUR LEFT FOOT READY TO BE POSITIONED.**

- Place both feet on the ground and keep the vehicle balanced in the driving position.
- Show the passenger how to dismount from the vehicle.



**RISK OF FALLING OR OVERTURNING.**

**MAKE SURE THAT THE PASSENGER HAS DISMOUNTED FROM THE VEHICLE.**

**DO NOT PLACE YOUR WEIGHT UPON THE SIDE STAND.**

- Lean the motorcycle until the stand touches the ground.
- Correctly grip the handlebar, and dismount from the vehicle.
- Turn the handlebar completely to the left.
- Place the passenger footrest in its place.

**CAUTION**



**MAKE SURE THE VEHICLE IS STABLE.**

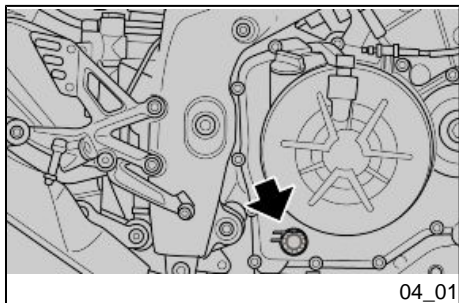


# Tuono V4 1100 RR/Factory

**aprilia**



**Chap. 04  
Maintenance**



## Foreword

### WARNING

**THIS VEHICLE IS DESIGNED TO DETECT IN REAL TIME ANY MALFUNCTIONS, STORED BY THE ECU AND WHICH CAN BE READ BY MEANS OF THE DIAGNOSIS SYSTEM SUPPLIED TO THE Aprilia Official Dealer.**

### Engine oil level check (04\_01)

Check the engine oil level frequently.

### NOTE

**CARRY OUT MAINTENANCE OPERATIONS AT HALF THE INTERVALS SPECIFIED IF THE VEHICLE IS USED IN PARTICULAR RAINY OR DUSTY CONDITIONS, OFF ROAD OR FOR TRACK USE.**



**ENGINE OIL LEVEL MUST BE CHECKED WHEN THE ENGINE IS WARM.**

### CAUTION

**DO NOT LET THE ENGINE IDLE WITH THE VEHICLE AT A STANDSTILL TO WARM UP THE ENGINE AND OBTAIN THE OPERATING TEMPERATURE OF ENGINE OIL.**

**PREFERABLY CHECK THE OIL AFTER A JOURNEY OF AFTER TRAVELLING APPROXIMATELY 15 Km (10 miles) IN EXTRAURBAN CONDITIONS (ENOUGH TO WARM UP THE ENGINE OIL TO OPERATING TEMPERATURE).**

- Shut off the engine and wait for a few seconds.
- Keep the vehicle upright with both wheels on the ground.

- Ensure that the vehicle is on a level surface.
  - Check via the inspection glass in the crankcase, on the right-hand side of the vehicle, that the oil level is near the upper marking.
- Upper marking = Max. level
- Lower marking = Min. level

**CAUTION**

**NEVER ALLOW THE OIL LEVEL TO DROP BELOW THE MINIMUM LEVEL OR FILL ABOVE THE MAXIMUM LEVEL; IF YOU DO NOT COMPLY WITH THE MINIMUM AND MAXIMUM OIL LEVELS THE ENGINE COULD BE SERIOUSLY DAMAGED**

**Engine oil top-up (04\_02)**

If necessary, top up the engine oil level as follows:

- Unscrew and remove the cap.

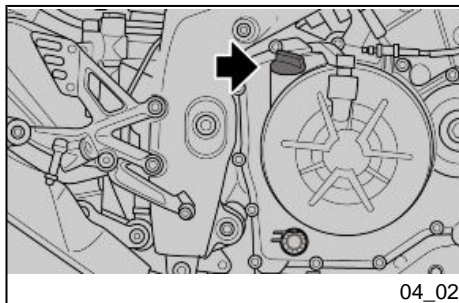
**CAUTION**

**USE RECOMMENDED OIL ONLY. REFER TO THE RECOMMENDED PRODUCTS TABLE.**

- Add the quantity of oil necessary to reach the correct level.

**CAUTION**

**DO NOT ADD ADDITIVES OR ANY OTHER SUBSTANCES TO THE OIL. WHEN USING A FUNNEL OR ANY OTHER ELEMENT, MAKE SURE IT IS PERFECTLY CLEAN.**



## Engine oil filter replacement

### CAUTION

**THE ENGINE OIL FILTER MUST BE CHECKED AND CHANGED BY AN Official Aprilia Dealership**

## Tyres

This vehicle is fitted with tyres without inner tubes (Tubeless).



**CHECK TYRE INFLATION PRESSURE REGULARLY AT AMBIENT TEMPERATURE.**

**MEASUREMENTS MAY BE INCORRECT IF TYRES ARE WARM.**

**CHECK PRESSURE MAINLY BEFORE AND AFTER LONG TRIPS.**

**IF THE TYRE PRESSURE IS TOO HIGH, UNEVENNESS IN THE ROAD SURFACE WILL NOT BE CUSHIONED AND WILL BE TRANSMITTED TO THE HANDLEBAR, RESULTING IN AN UNPLEASANTLY HARSH RIDE AND POOR ROAD HOLDING, ESPECIALLY WHEN CORNERING.**

**AN UNDERINFLATED TYRE, ON THE OTHER HAND, WILL EXTEND THE CONTACT PATCH TO INCLUDE A LARGER PORTION OF THE TYRE SIDEWALLS. WHEN THIS IS THE CASE, THE TYRE MIGHT SLIP ON OR BECOME DETACHED FROM THE WHEEL RIM, LEADING TO LOSS OF CONTROL OVER THE VEHICLE.**

**TYRES MAY EVEN DETACH FROM THE WHEEL RIMS UNDER VERY HARD BRAKING.**

**THE VEHICLE MAY EVEN SKID IN A BEND.**

**INSPECT TREAD SURFACE AND CHECK IT FOR WEAR. BADLY WORN TYRES MAY COMPROMISE TRACTION AND HANDLING.**



**REPLACE TYRES WHEN WORN OR IF THERE IS A PUNCTURE IN THE TREAD AREA BIGGER THAN 5 mm (0.197 in).**

**BALANCE WHEELS AFTER A TYRE IS MENDED. USE ONLY TYRE SIZES INDICATED BY THE MANUFACTURER.**

**CHECK THAT THE INFLATION VALVES HAVE THEIR CAPS FITTED TO AVOID UNEXPECTED FLAT TYRES. REPLACEMENT, REPAIR, MAINTENANCE AND BALANCING OPERATIONS ARE HIGHLY IMPORTANT AND SO THEY SHOULD BE CARRIED OUT USING THE SPECIFIC TOOLS AND WITH THE ADEQUATE KNOWLEDGE.**

**IT IS THEREFORE ESSENTIAL TO TAKE YOUR VEHICLE TO AN Official Aprilia Dealer OR SPECIALISED TYRE WORKSHOP TO CARRY OUT THE OPERATIONS ABOVE. NEW TYRES MAY BE COATED WITH A SLIPPERY COATING: RIDE WITH CAUTION DURING THE FIRST KILOMETRES. DO NOT APPLY UNSUITABLE LIQUIDS ON TYRES. WHEN TYRES ARE OLD, THE MATERIAL MAY HARDEN AND NOT PROVIDE ADEQUATE ROAD HOLDING, EVEN IF TYRES ARE STILL WITHIN THE WEAR LIMIT.**

**SHOULD THIS OCCUR, REPLACE THE TYRES.**

#### **WARNING**

**ONLY USE TYRES RECOMMENDED BY Aprilia. THE USE OF DIFFERENT TYRES, EVEN IF THEY ARE OF THE SAME SIZE, CANNOT GUARANTEE BIKE RIDING PERFORMANCE.**

#### **Minimum tread depth:**

front and rear 2 mm (0.079 in) (USA 3 mm - 0.118 in) or more if so required by applicable legislation in the country where the vehicle is used.

## Spark plug dismantlement

### CAUTION

TO REMOVE, CHECK, CLEAN AND REPLACE THE SPARK PLUGS, CONTACT AN Official aprilia Dealer

## Removing the air filter

### CAUTION

TO REMOVE, CHECK AND REPLACE THE AIR FILTER, CONTACT AN Official aprilia Dealer

## Cooling fluid level

Do not use the vehicle if the coolant is below the minimum level.

### CAUTION



**COOLANT IS TOXIC IF INGESTED; CONTACT WITH YOUR EYES OR SKIN MAY CAUSE IRRITATION. IF THE FLUID GETS IN CONTACT WITH THE EYES OR SKIN, RINSE REPEATEDLY WITH PLENTY OF WATER AND SEEK MEDICAL ADVICE. IF SWALLOWED, INDUCE VOMITING, RINSE MOUTH AND THROAT WITH PLENTY OF WATER AND SEEK MEDICAL ADVICE IMMEDIATELY.**

Coolant solution is 50% water and 50% antifreeze fluid.

This is the ideal mixture for most operating temperatures and provides good corrosion protection.

It is advisable to use the same mixture even in hot weather as this minimises loss due to evaporation and the need of frequent top-ups.

Less water evaporation means fewer mineral salts depositing in the radiators, which helps preserve the efficiency of the cooling system.

If the external temperature drops below 0 °C (32 °F), check the cooling system frequently and add more antifreeze fluid if needed (up to 60% max.).

Use distilled water in the coolant mixture to avoid damaging the engine.

#### CAUTION



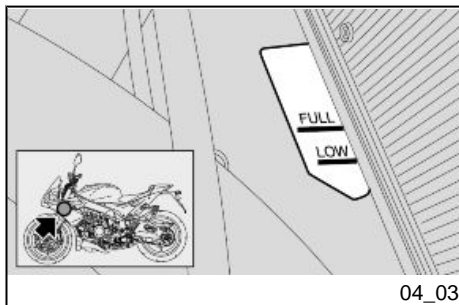
**DO NOT UNSCREW THE RADIATOR CAP WHEN THE ENGINE IS HOT, SINCE COOLANT IS UNDER PRESSURE AND VERY HOT. CONTACT WITH SKIN OR CLOTHES MAY CAUSE SEVERE BURNS AND/OR INJURIES.**

#### Coolant check (04\_03)

- Shut off the engine and wait until it cools off.
- Keep the vehicle upright on a level surface with both wheels on the ground.
- Looking through the relative slit on the inner right hand fairing, check that the liquid level in the expansion tank is between the "FULL" and "LOW" markings.

#### WARNING

**STOP THE ENGINE AND WAIT FOR IT TO COOL DOWN BEFORE CHECKING OR TOPPING UP COOLANT LEVEL.**



## Coolant top-up

- Remove the right side fairing.
- Remove the expansion tank cap.
- Top-up with recommended liquid to the "FULL" marking on the expansion tank, visible from the left hand side through the slit in the inner right hand fairing.

## Checking the brake oil level

### Brake fluid check

- Rest the vehicle on its stand.
- For the front brake, turn the handlebar fully to the right.
- For the rear brake, keep the vehicle upright so that the fluid in the reservoir is at the same level with the plug.
- Make sure that the fluid level in the reservoir is above the "**MIN**" reference mark:

**MIN** = minimum level

**MAX** = maximum level

If the fluid does not reach at least the "**MIN**" reference mark:

- Check brake pads and disc for wear.
- If the pads and/or the disc do not need replacing, top-up the fluid.

## Braking system fluid top up (04\_04, 04\_05)



**RISK OF BRAKE FLUID SPILLING. DO NOT OPERATE THE BRAKE LEVER IF THE BRAKE FLUID RESERVOIR CAP IS LOOSE OR HAS BEEN REMOVED.**

**CAUTION**

**AVOID PROLONGED AIR EXPOSURE OF THE BRAKE FLUID. BRAKE FLUID IS HYGROSCOPIC AND ABSORBS MOISTURE WHEN IN CONTACT WITH AIR. LEAVE THE BRAKE FLUID RESERVOIR OPEN ONLY FOR THE TIME NEEDED TO COMPLETE THE TOPPING-UP PROCEDURE.**



**TO AVOID BRAKE FLUID SPILLING OUT DURING THE PROCEDURE, MAINTAIN THE FLUID IN THE TANK PARALLEL TO THE EDGES OF THE TANK (HORIZONTAL). DO NOT ADD ADDITIVES OR OTHER SUBSTANCES TO THE FLUID. IF YOU USE A FUNNEL OR ANOTHER IMPLEMENT, MAKE SURE THAT THEY ARE PERFECTLY CLEAN.**

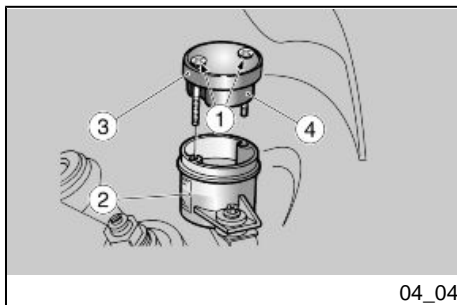


**THE BRAKE FLUID IS HIGHLY CORROSIVE, AVOID CONTACT WITH SKIN AND EYES AND PARTS OF THE MOTORCYCLE.**

**WHEN TOPPING OFF, PROTECT THE AREAS NEAR THE TANK WITH ABSORBENT MATERIAL.**

**Recommended products****AGIP BRAKE 4***Brake fluid*

As an alternative to the recommended fluid, other fluids that meet or exceed the required specifications may be used. SAE J1703, NHTSA 116 DOT 4, ISO 4925 Synthetic fluid



### Front braking system

- Use a short crosshead screwdriver to undo the screws (1) of the front braking system (2) fluid reservoir.
- Lift and remove the cover (3) together with the screws (1) and the gasket (4).
- Top up the reservoir (2) with recommended brake fluid to above the "MIN" level marking.

#### CAUTION

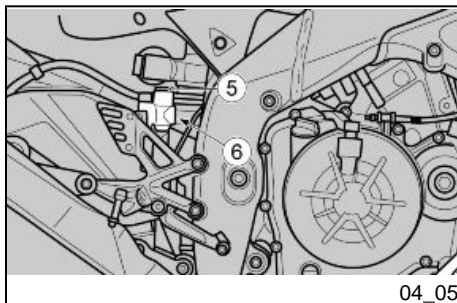


**TOP-UP TO MAXIMUM LEVEL MARK ONLY WHEN BRAKE PADS ARE NEW. FILLING UP TO THE MAXIMUM LEVEL WITH WORN PADS IS NOT ADVISED, AS THIS WILL CAUSE FLUID SPILLAGE WHEN REPLACING THE BRAKE PADS.**

**CHECK BRAKING EFFICIENCY.**

**IF THE FREE STROKE OF THE BRAKE PEDAL OR THE BRAKE LEVER IS TOO LONG, OR IN THE CASE OF LEAKS, IT MAY BE NECESSARY TO BLEED AIR FROM THE SYSTEM.**

**SHOULD THIS OCCUR, CONTACT AN Official Aprilia Dealer.**



### Rear braking system

- Unscrew and remove the upper nut (5) from the rear brake pump.
- Top up the reservoir with the recommended brake fluid to reach the correct level on the sight glass (6).

#### CAUTION

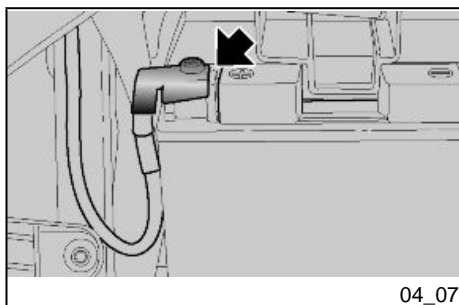
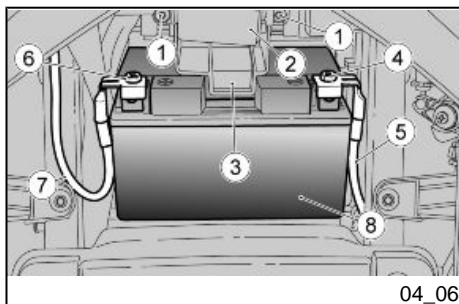


**TOP-UP TO MAXIMUM LEVEL MARK ONLY WHEN BRAKE PADS ARE NEW. FILLING UP TO THE MAXIMUM LEVEL WITH WORN PADS IS NOT ADVISED, AS THIS WILL CAUSE FLUID SPILLAGE WHEN REPLACING THE BRAKE PADS.**

**CHECK BRAKING EFFICIENCY.**

**IF THE FREE STROKE OF THE BRAKE PEDAL OR THE BRAKE LEVER IS TOO LONG, OR IN THE CASE OF LEAKS, IT MAY BE NECESSARY TO BLEED AIR FROM THE SYSTEM.**

**SHOULD THIS OCCUR, CONTACT AN Official Aprilia Dealer.**

**Battery removal (04\_06, 04\_07)**

- Make sure that the ignition switch is set to "OFF".
- Remove the rider saddle.
- Unscrew and remove the two screws (1) using the spanner supplied in the tool kit.
- Remove the secondary fuse box (2).
- Remove the battery retainer (3).
- Undo and remove the screw (4) of the negative terminal (-).
- Move the negative lead (5) aside.
- Move the rubber cap that protects the positive clamp (+).
- Undo and remove the screw (6) of the positive terminal (+).
- Move the positive lead (7) aside.



**PAY MAXIMUM ATTENTION AND PREVENT ALL CONTACT BETWEEN THE BATTERY POLES AND ANY METAL OBJECT TO PREVENT THE RISK OF SHORT-CIRCUITS.**

- Hold the battery (8) firmly and lift it out of its compartment.

- Put the battery away on a level surface, in a cool and dry place.
- Refit the rider saddle.

### Use of a new battery (04\_08, 04\_09)

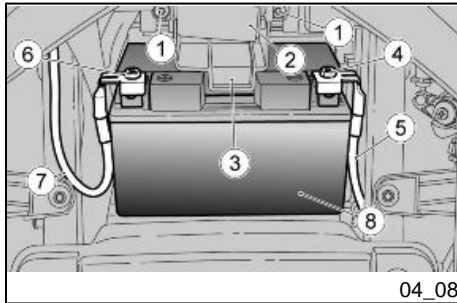


**CHECK THAT THE BATTERY LEADS AND TERMINALS ARE:**

- IN GOOD CONDITION (NOT CORRODED OR COVERED BY DEPOSITS);
- COVERED BY NEUTRAL GREASE OR PETROLEUM JELLY.

#### CAUTION

**UPON REFITTING, CONNECT THE LEAD TO THE POSITIVE TERMINAL (+) FIRST AND AFTERWARDS THE LEAD TO THE NEGATIVE TERMINAL (-).**



- Remove the saddle if refitted.
- Place the battery (8) in its housing.
- Fasten the positive cable (7) to the positive terminal (+), tightening the screw (6).

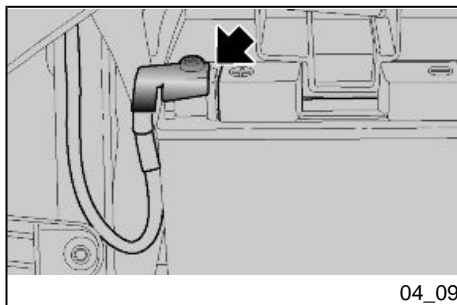
The positive cable (7) must be positioned to the side of the battery (8).

- Place the protective rubber cap on the positive clamp (+).
- Fasten the negative cable (5) to the negative terminal (+), tightening the screw (4).

The negative cable (5) must be positioned to the side of the battery (8).

- Fit the battery retainer (3).
- Fit the secondary fuse box (2).
- Tighten the two screws (1) using the spanner supplied in the tool kit.
- Fit and fasten the rider's saddle as described in the paragraph "opening the saddle".





## Checking the electrolyte level

### WARNING

THE MOTORCYCLE IS SUPPLIED WITH A BATTERY THAT DOES NOT REQUIRE MAINTENANCE OTHER THAN OCCASIONALLY CHECKING THE CHARGING LEVEL.

## Charging the battery

- Remove the battery.
- Get an adequate battery charger.
- Set the battery charger for the recharge type indicated.
- Connect the battery to the battery charger.

### CAUTION



WHEN RECHARGING OR USING THE BATTERY, BE CAREFUL TO HAVE THE ROOM ADEQUATELY AIRED. DO NOT BREATHE GASES RELEASED WHEN THE BATTERY IS RECHARGING.

Switch on the battery charger.

### **Characteristic**

#### **RECHARGE MODES:**

Recharge - Ordinary

Electric Current - 1.0 A

Time - 8-10 hours

Recharge - Fast

Electric Current - 10 A

Time - 1 hour

### **Long periods of inactivity**



**IF THE VEHICLE IS INACTIVE LONGER THAN FIFTEEN DAYS, DISCONNECT THE 30A FUSE TO AVOID BATTERY DETERIORATION DUE TO CURRENT CONSUMPTION BY THE MULTIFUNCTION COMPUTER.**

#### **CAUTION**

**REMOVING THE 30A FUSE RESETS THESE FUNCTIONS: DIGITAL CLOCK, TRIP INFORMATION AND CHRONOMETER TIMES.**

If the vehicle is inactive longer than fifteen days, it is necessary to recharge the battery to avoid sulphation.

- Remove the battery.

In winter or when the vehicle is out of use for prolonged periods, check charge level frequently (about once a month) to prevent deterioration.

- Recharge it fully with an ordinary charge.

If the battery is still on the vehicle, disconnect the cables from the terminals.

### **Fuses (04\_10, 04\_11, 04\_12, 04\_13)**

Check fuses in case of failure or irregular functioning of an electrical component or engine starting failure.

Check the auxiliary fuses first and then the main 30A fuse.

#### **CAUTION**

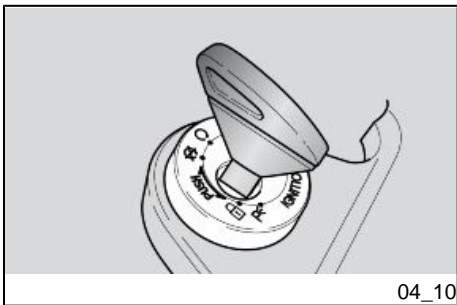


**DO NOT REPAIR FAULTY FUSES.**

**NEVER USE A FUSE THAT IS DIFFERENT THAN WHAT IS SPECIFIED TO PREVENT DAMAGES TO THE ELECTRICAL SYSTEM OR SHORT CIRCUITS, AND THE RISK OF FIRE.**

#### **CAUTION**

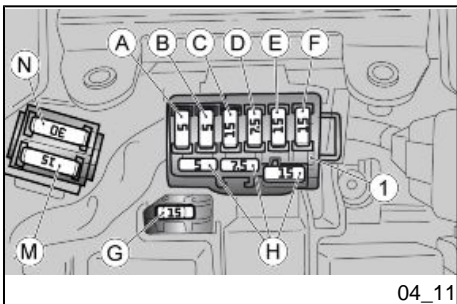
**A FUSE THAT BLOWS FREQUENTLY MAY INDICATE A SHORT CIRCUIT OR OVERLOAD. IF THIS OCCURS, CONSULT AN APRILIA Official Dealer.**



04\_10

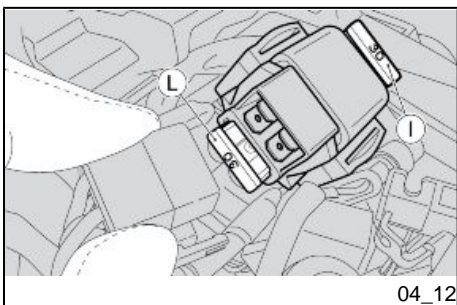
To check:

- Set the ignition switch to "OFF" to avoid an accidental short circuit.

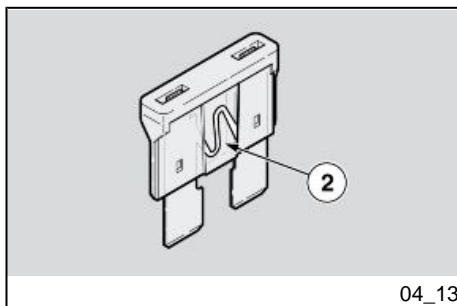


04\_11

- Remove the rider saddle.
- Open the cover of the auxiliary fuse box (1).



04\_12



04\_13

- Take out one fuse at a time and check whether the filament (2) is broken.
- Before replacing the fuse, find and solve, if possible, the reason that caused the problem.
- If the fuse is damaged, replace it with one of the same current rating.
- Remove the rider saddle.
- To check the main fuses, carry out the same operations described above for auxiliary fuses.

**NOTE**

**IF THE SPARE FUSE IS USED, REPLACE WITH ONE OF THE SAME TYPE IN THE CORRESPONDING FITTING.**

**CAUTION**

**REMOVING THE 30A FUSE RESETS THESE FUNCTIONS: DIGITAL CLOCK, TRIP INFORMATION AND CHRONOMETER TIMES.**

**SECONDARY FUSES DISTRIBUTION**

A) 5A fuse	Stop and running lights relay
B) 5A fuse	Instrument panel, turn indicators, Bluedash and USB (predisposition)
C) 15A fuse	ECU
D) 7.5A fuse	ECU (2)
E) 15A fuse	High beam/low beam, horn.
F) 15A fuse	Coils, injectors, fuel pump, secondary air, injection relay

G) 15A fuse

Fans.

*Secondary fuses are placed in the central part of the motorcycle, under the rider saddle.*

**CAUTION**

**THREE OF THE FUSES ARE SPARES (H).**

**MAIN FUSES DISTRIBUTION**

L) 30A fuse

Battery recharge, positive switched live, permanent positive under instrument panel, sensor box positive switched live, fan relay

*Main fuses are placed in the rear part of the motorcycle, under the passenger seat.*

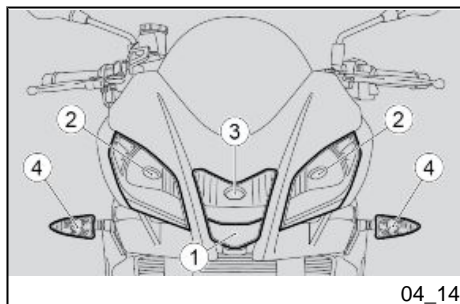
**CAUTION**

**THERE IS ONE SPARE FUSE (I).**

**ABS FUSE DISTRIBUTION**

M) fuse of 15A

ABS solenoid valves.

**WHERE CONTEMPLATED**

04\_14

**Lamps (04\_14)**

It is not necessary to remove the top fairing to replace the high / low beam light bulbs.

In the front headlight assembly there are:

- one LED daylight running light (1);
- two low beam light bulbs (2).
- one high beam light bulb (3)

Front turning indicators (4) are placed on the side fairing.

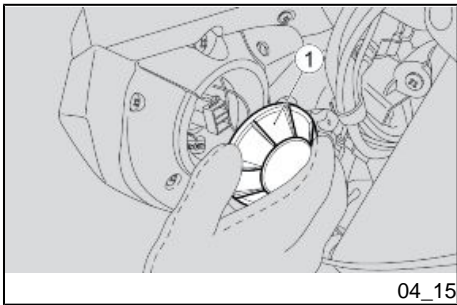
**Low/High beam lamp replacement (04\_15, 04\_16, 04\_17, 04\_18)****CAUTION**

**BEFORE REPLACING A BULB, TURN THE IGNITION SWITCH TO «KEY OFF» AND WAIT A FEW MINUTES FOR THE BULB TO COOL OFF.**

**WEAR CLEAN GLOVES OR USE A CLEAN DRY CLOTH TO REPLACE THE BULB.**

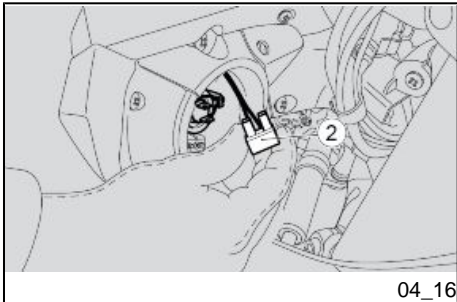
**DO NOT LEAVE PRINTS ON THE BULB AS THIS MAY CAUSE IT TO OVERHEAT OR EVEN BLOW OUT. IF YOU TOUCH THE BULB WITHOUT WEARING GLOVES, CLEAN OFF PRINTS WITH ALCOHOL TO AVOID DAMAGING THE BULB.**

**DO NOT FORCE ELECTRICAL CABLES.**

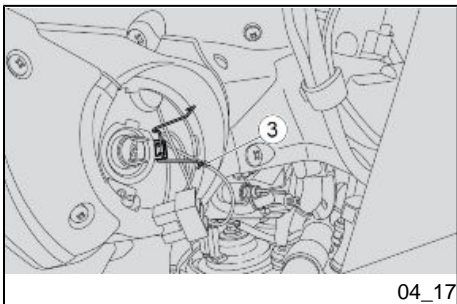


To replace the low beam bulb:

- Rest the vehicle on its stand.
- Working from the left side of the motorcycle, remove the cover (1) by turning it anticlockwise

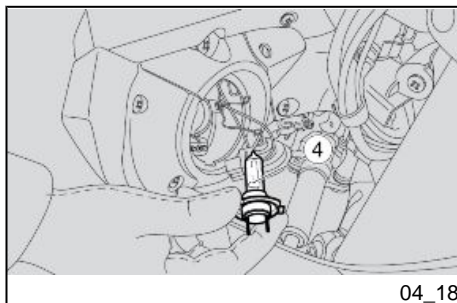


- Remove the connector (2)



- Release the retainer (3)





- Remove the bulb (4)
- Replace with a new bulb of the same type

**To replace the right bulb, perform the operations described above**

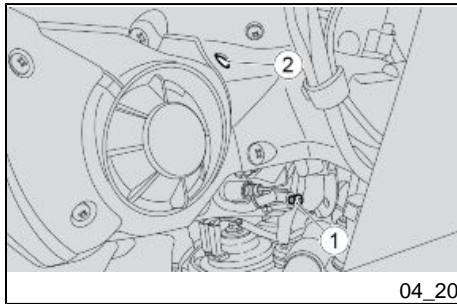
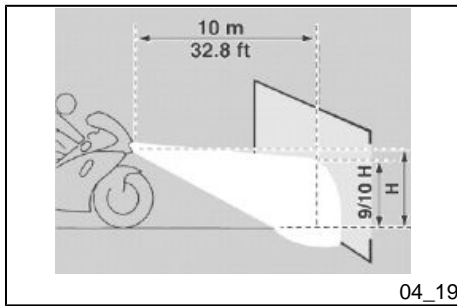
#### **CAUTION**

**FOR DISASSEMBLY, VERIFICATION AND REPLACEMENT OF THE HIGH BEAM LIGHT BULB, CONTACT AN Official Aprilia Dealership**

#### **Position light replacement**

#### **CAUTION**

**FOR DISASSEMBLY, VERIFICATION AND REPLACEMENT OF THE LED DAY-LIGHT RUNNING LIGHT CONTACT AN Official Aprilia Dealership**



## Headlight adjustment (04\_19, 04\_20, 04\_21)

### NOTE

**IN COMPLIANCE WITH LOCAL LEGISLATION, SPECIFIC PROCEDURES MUST BE FOLLOWED WHEN ALIGNING THE LIGHTS.**

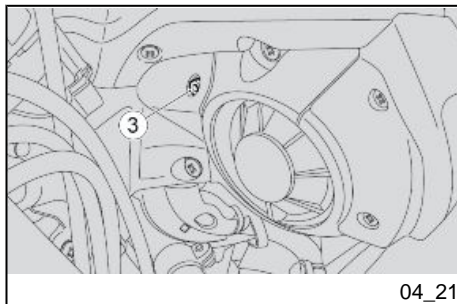
To quickly and easily check the alignment of the front light, place the vehicle on a level surface 10 m (32.8 ft) away from a vertical wall. Turn on the low beam light, sit on the vehicle and check that the light beam projected onto the wall is a little below the level of the headlight (about 9/10 of the total height).

### To carry out vertical adjustment of the light beam:

- Rest the vehicle on its stand.
- Working from the rear side of the top fairing, **SCREW** the adjuster screw (1) (clockwise) to raise the light beams; **UNDO** the screw (anticlockwise) to lower the light beam.
- With this adjuster screw, it is possible to adjust the inclination of the front headlight assembly.

### NOTE

**CHECK THAT THE LIGHT BEAM VERTICAL DIRECTION IS CORRECT.**



### In order to carry out horizontal adjustment of the light beam:

- Rest the vehicle on its stand.
- Working from the rear left hand side of the top fairing, adjust both screws simultaneously with a short cross headed screwdriver (2) and (3):
  - Tightening the left hand screw (2) while simultaneously loosening the right hand screw (3), the light beam moves to the right.
  - Loosening the left hand screw (2) while simultaneously tightening the right hand screw (3), the light beam moves to the left.

#### NOTE

**CHECK THAT THE LIGHT BEAM HORIZONTAL DIRECTION IS CORRECT.**

### Front direction indicators

#### NOTE

**FOR DISASSEMBLY, VERIFICATION AND REPLACEMENT OF FRONT INDICATORS PLEASE CONTACT AN Official Aprilia Dealership**

### Rear optical unit

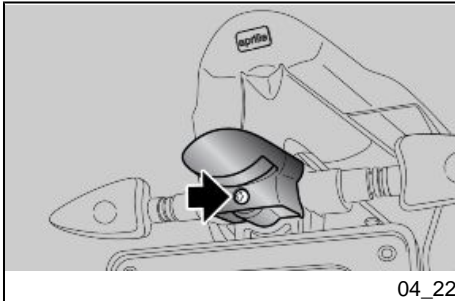
#### CAUTION

**THE REAR TAILLIGHT ASSEMBLY MUST BE CHECKED AND CHANGED BY AN Official Aprilia Dealership.**

## Rear turn indicators

### NOTE

**FOR DISASSEMBLY, VERIFICATION AND REPLACEMENT OF REAR TURN INDICATORS PLEASE CONTACT AN Official Aprilia Dealership**



### Number plate light (04\_22)

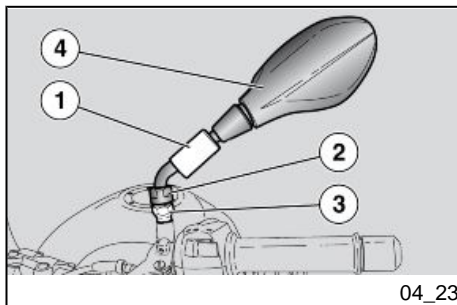
- Rest the vehicle on its stand.
- Unscrew and remove the screw.
- Take out the license plate light bulb holder.
- Slide off and replace the bulb with another of the same type.

### Rear-view mirrors (04\_23, 04\_24)

- Park the vehicle on its centre stand on safe and level ground.
- Move the protection casing (1) (if applicable).



**HOLD THE REAR-VIEW MIRROR (4) TO AVOID DROPPING IT BY ACCIDENT.**



- Keep the screw (2) blocked and completely unscrew the nut (3).



**HANDLE PLASTIC AND PAINTED COMPONENTS WITH CARE, DO NOT SCRATCH OR SPOIL THEM.**

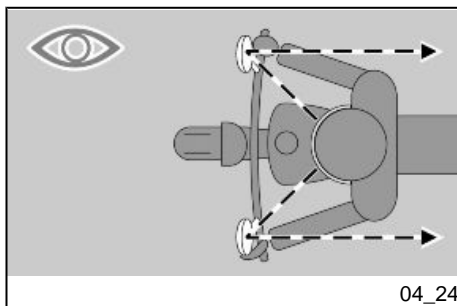
- Remove the rear-view mirror (4).

#### CAUTION

**REPEAT THE PROCEDURE TO REMOVE THE OTHER MIRROR.**

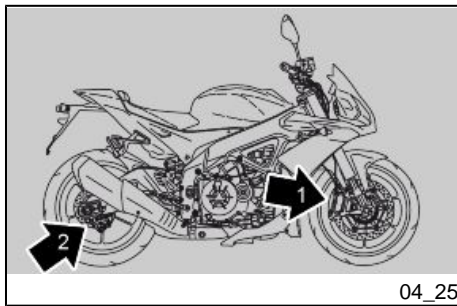


**AFTER REFITTING, ADJUST THE REAR-VIEW MIRRORS CORRECTLY AND TIGHTEN THE NUTS IN ORDER TO ENSURE STABILITY.**



#### After refitting:

- Adjust the rear-view mirror angle correctly.

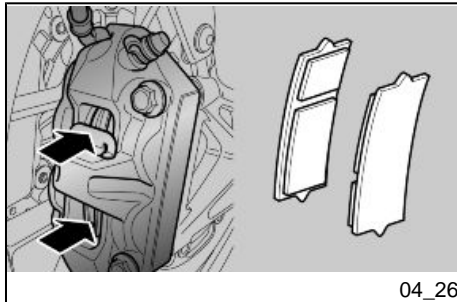


## Front and rear disc brake (04\_25, 04\_26, 04\_27)

### CAUTION



CHECK BRAKE PADS FOR WEAR MAINLY BEFORE EACH RIDE.

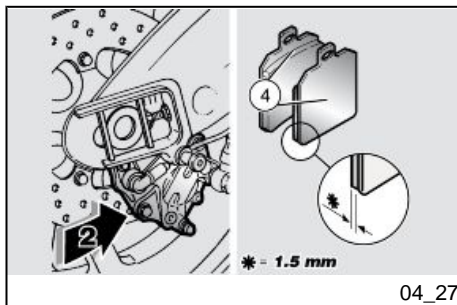


### To perform a quick pad wear check:

- Rest the vehicle on its stand.
- Carry out a visual inspection of brake disc and pads as follows:
  - inspect the front brake callipers from above and behind (1);
  - inspect the rear brake calliper (2) from below and behind;

### CAUTION

**EXCESSIVE WEAR OF THE FRICTION MATERIAL MAKES THE PAD METAL SUPPORT GET INTO CONTACT WITH THE DISC, WHICH RESULTS IN A METALLIC NOISE AND SPARKS IN THE CALLIPER; THEREFORE, BRAKING EFFICIENCY AND DISC SAFETY AND INTEGRITY ARE AT RISK.**



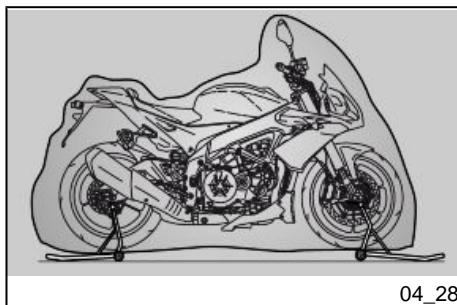
04\_27

If the friction material thickness (even of one front (3) or rear (4) pad) is reduced to a value of about **1.5 mm (0.06 in)** (or even if one of the wear indicators is not very visible), contact an Official **Aprilia** Dealer to have the calliper pads replaced.



**USE ORIGINAL PADS ONLY.**

**IF NON ORIGINAL PADS ARE USED THE PERFORMANCE OF THE BRAKING SYSTEM COULD BE COMPROMISED AND/OR DAMAGED.**



04\_28

### Periods of inactivity (04\_28)

Take some measures to avoid the side effects of not using the scooter. Besides, it is necessary to carry out general repairs and checks before garaging the motorcycle as one can forget to do so afterwards.

Proceed as follows:

- Remove the battery.
- Wash and dry the vehicle.
- Polish the painted surfaces.
- Inflate the tyres.
- Set the vehicle in a room with no heating or humidity, with minimum temperature variations and not exposed to sun rays.
- Wrap and tie a plastic bag around the exhaust pipe opening to keep moisture out.

### NOTE

**PLACE A SUITABLE SUPPORT UNDER THE VEHICLE TO KEEP BOTH WHEELS OFF THE GROUND.**

- Put the vehicle on the front stand (optional) and on the back stand (optional).

- Cover the vehicle (do not use plastic or waterproof materials).

## AFTER STORAGE

### NOTE

**TAKE THE PLASTIC BAGS OFF THE EXHAUST PIPE OPENING.**

- Uncover and clean the vehicle.
- Check the battery for correct charge and install it.
- Refill the fuel tank.
- Carry out the pre-ride checks.

### CAUTION



**AS A TEST, RIDE THE MOTORCYCLE FOR A FEW KILOMETRES AT A MODERATE SPEED AND AWAY FROM TRAFFIC AREAS.**

## Cleaning the vehicle (04\_29, 04\_30, 04\_31)

**Clean the motorcycle frequently if exposed to adverse conditions, such as:**

- Air pollution (cities and industrial areas).
- Salinity and humidity in the atmosphere (seashore areas, hot and wet weather).
- Special environmental/seasonal conditions (use of salt, anti-icing chemical products on the roads in winter).
- Always clean off any smog and pollution residue, tar stains, insects, bird droppings, etc. from the bodywork.



- Avoid parking the vehicle under trees. During some seasons, resins, fruits or leaves containing aggressive chemical substances that may damage the paintwork may fall from trees.

**CAUTION**

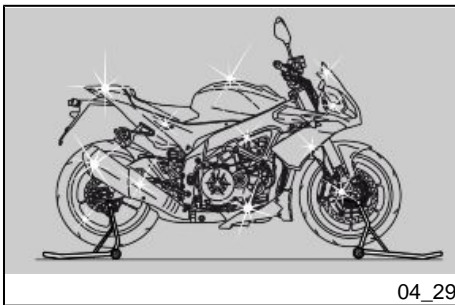
**BEFORE WASHING THE VEHICLE, COVER THE ENGINE AIR INTAKES AND THE EXHAUST PIPES.**

**CAUTION**

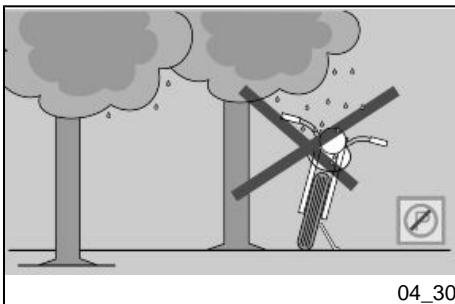
**CLEAN THE INSTRUMENT PANEL WITH A SOFT CLOTH MOISTENED WITH WATER.**

**CAUTION**

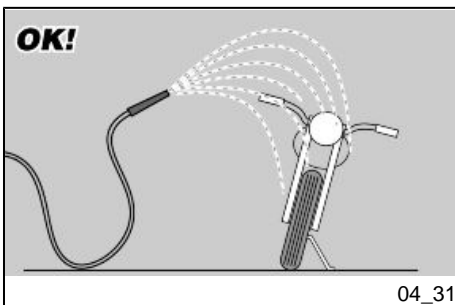
**AFTER CLEANING YOUR MOTORCYCLE, BRAKING EFFICIENCY MAY BE TEMPORARILY AFFECTED DUE TO THE PRESENCE OF WATER ON THE FRICTION SURFACES OF THE BRAKING CIRCUIT. ALLOW LONGER BRAKING DISTANCES TO PREVENT ACCIDENTS. BRAKE REPEATEDLY TO RESTORE NORMAL OPERATION. CARRY OUT THE PRE-RIDE CHECKS.**



04\_29



04\_30



04\_31

To remove dirt and mud accumulated on painted surfaces, wet the soiled areas thoroughly with a low-pressure water jet, then remove dirt and mud with a soft car body sponge soaked abundantly in a solution of car body shampoo in water (2 - 4% shampoo dissolved in water). Then rinse with plenty of water, and dry with a chamois leather. To clean the engine outer parts, use degreasing detergent, brushes and old cloths. Wash anodised or painted aluminium parts with neutral soap and water. Using aggressive detergents may damage the surface treatment of these components.



**TO CLEAN THE HEADLIGHTS USE A SPONGE SOAKED IN WATER AND MILD DETERGENT, RUBBING THE SURFACE GENTLY AND RINSING FREQUENTLY WITH PLENTY OF WATER. REMEMBER TO CLEAN THE VEHICLE CAREFULLY BEFORE APPLYING SILICON WAX POLISH. DO NOT POLISH MATT-PAINTED SURFACES WITH POLISHING PASTE. THE VEHICLE SHOULD NEVER BE WASHED IN DIRECT SUNLIGHT, ESPECIALLY DURING SUMMER, OR WITH THE BODYWORK STILL HOT AS THE CAR SHAMPOO CAN DAMAGE THE PAINTWORK IF IT DRIES BEFORE BEING RINSED OFF.**

**CAUTION**



**DO NOT USE WATER (OR LIQUIDS) AT TEMPERATURES OVER 40°C (104°F) WHEN CLEANING THE VEHICLE PLASTIC PARTS. DO NOT AIM HIGH PRESSURE AIR/WATER JETS OR STEAM JETS DIRECTLY ON THESE COMPONENTS. DO NOT USE ALCOHOL OR SOLVENTS TO CLEAN ANY RUBBER OR PLASTIC SADDLE COMPONENTS: USE WATER AND MILD SOAP.**

**CAUTION**

**DO NOT USE SOLVENTS OR PETROL BY-PRODUCTS (ACETONE, TRICHLOROETHYLENE, TURPENTINE, PETROL, THINNERS) TO CLEAN THE SADDLE. USE INSTEAD DETERGENTS WITH SURFACE ACTIVE AGENTS NOT EXCEEDING 5% (NEUTRAL SOAP, DEGREASING DETERGENTS OR ALCOHOL).**

**DRY THE SADDLE WELL AFTER CLEANING.**

**CAUTION**

**DO NOT APPLY PROTECTIVE WAX ON THE SADDLE AS IT MAY BECOME SLIPPERY.**

After washing lubricate the following components:

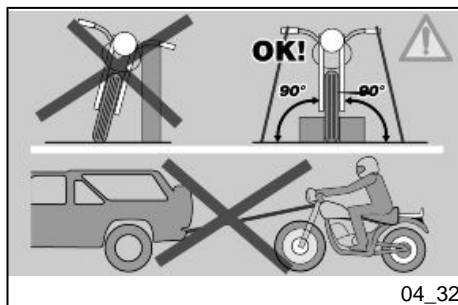
- drive chain;
- lever controls;
- pedal controls;
- clutch cable;
- start-up block.

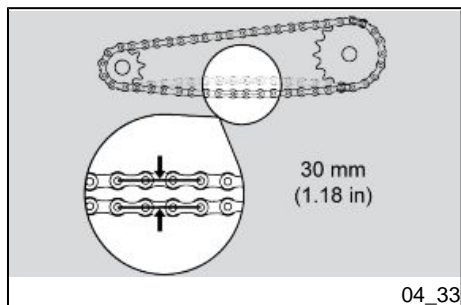
**Transport (04\_32)****NOTE**

**BEFORE TRANSPORTING THE VEHICLE, IT IS NECESSARY TO EMPTY THE FUEL TANK AND THE CARBURETTOR ADEQUATELY, CHECKING THAT THEY ARE DRY.**

**DURING TRANSPORT, THE VEHICLE SHOULD BE UPRIGHT AND SECURELY ANCHORED AND SHOULD HAVE THE FIRST GEAR ENGAGED SO AS TO AVOID POSSIBLE FUEL, OIL OR COOLANT LEAKS.**

**IN CASE OF FAILURE, DO NOT TOW THE VEHICLE BUT CONTACT A ROAD ASSISTANCE SERVICE INSTEAD TO HAVE THE INFLAMMABLE FLUIDS DRAINED .**





## Chain backlash check (04\_33)

### To check the clearance:

- Shut off the engine.
- Rest the vehicle on its stand.
- Engage neutral gear.
- Check that vertical oscillation at a point between the pinion and the sprocket on the lower branch of the chain is around **30 mm (1.18 in)**.
- Move the vehicle forward so as to check the chain vertical oscillation in other positions too. clearance should remain constant at all wheel rotation phases.

Adjust clearance if it is uniform but higher or lower than **30 mm (1.18 in)**.

### CAUTION

**IF CLEARANCE IS GREATER IN SOME POSITIONS, THIS MEANS THAT SOME ELEMENTS OF THE CHAIN ARE CRUSHED OR SEIZED. IN THIS CASE, THE TRANSMISSION CHAIN MUST BE REPLACED.**

**TO AVOID RISK OF SEIZURE, LUBRICATE THE CHAIN ON A REGULAR BASIS.**

## Chain backlash adjustment



**FOR ANY KIND OF OPERATION TO BE PERFORMED ON THE DRIVE CHAIN, CONTACT AN Official Aprilia Dealer.**

## Checking wear of chain, front and rear sprockets

Also check the following parts and make sure that the chain, pinion and sprocket do not have:

- Damaged rollers.
- Loosened pins.
- Dry, rusty, flattened or jammed chain links.
- Excessive wear.
- Missing sealing rings.
- Excessively worn or damaged pinion or sprocket teeth.

**CAUTION**

**IF THE CHAIN ROLLERS ARE DAMAGED, THE PINS ARE LOOSENED AND/OR THE SEAL RINGS ARE MISSING OR DAMAGED, THE WHOLE CHAIN APPARATUS (PINION, SPROCKET AND CHAIN) SHOULD BE REPLACED.**

**CAUTION**

**LUBRICATE THE CHAIN ON A REGULAR BASIS, PARTICULARLY IF YOU FIND DRY OR RUSTY PARTS. FLATTENED OR JAMMED CHAIN LINKS SHOULD BE LUBRICATED AND GOOD OPERATING CONDITIONS RESTORED. IF REPAIR IS NOT POSSIBLE, CONTACT AN Official Aprilia Dealer TO HAVE IT REPLACED.**

## Chain lubrication and cleaning

Never wash the chain with high pressure air/water jets or steam jets or highly flammable solvents.

- Wash the chain with fuel oil or kerosene. Maintenance operations should be more frequent if there are signs of quick rust.

Lubricate the chain whenever necessary.

- After washing and drying the chain, lubricate it with spray grease for sealed chains.



**THE TRANSMISSION CHAIN HAS RUBBER O-RINGS BETWEEN THE SIDE PLATES OF THE CHAIN ITSELF THAT ARE USED TO HOLD THE GREASE. UT-**

**MOST ATTENTION IS REQUIRED WHEN ADJUSTING, LUBRICATING, WASHING OR REPLACING THE CHAIN.**

**CHAIN LUBRICANTS AVAILABLE ON THE MARKET CAN CONTAIN SUBSTANCES THAT DAMAGE THE CHAIN'S RUBBER O-RINGS.**

**NEVER USE THE VEHICLE JUST AFTER LUBRICATING THE CHAIN, AS THE LUBRICANT WOULD BE SPRAYED OUTWARD AND SPREAD OUT IN THE SURROUNDING AREA.**

# Tuono V4 1100 RR/Factory

**aprilia**



**Chap. 05**  
**Technical data**

### **WEIGHT AND DIMENSIONS**

Max. length	2,065 mm (81.30 in)
Max. width	820 mm (32.28 in)
Max. height (at handlebar)	1,090 mm (42.91 in)
Saddle height	826 mm (32.52 in)
Wheelbase	1,445 mm (56.89 in)
Minimum ground clearance	125 mm (4.92 in)
Kerb weight	194 kg (428 lb)
Kerb weight	205 kg (452 lb)
Full loaded weight (rider only)	280 kg (617 lb)

### **ENGINE**

Model	V4
Type	65° longitudinal V-4, 4-stroke, 4 valves per cylinder, double overhead camshafts.
Engine capacity	1077 cm <sup>3</sup> (65.72 cu.in)
Bore / stroke	81 mm / 52.26 mm (3.19 in / 2.06 in)



Compression ratio	13 +/- 0.5: 1
Engine idle speed	1500 +/- 100 rpm
Engine revs at maximum speed	12000 +/- 100 rpm
Clutch	Multi plate wet clutch with mechanical control lever on left side of the handlebar. Anti-juddering and slipper clutch systems
Electric	Electric starter
Timing system	Morse chain on intake camshaft, cam to cam gear, bucket tappets and valve clearance adjustments with calibrated pads
Lubrication system	Wet sump with oil radiator
Oil pump	Dual trochoidal pump (lubrication + cooling)
Oil filter	With external cartridge filter
Cooling	Fluid
Cooling system	3-way thermostatic valve, cooling radiator with electric fan and expansion tank

Coolant pump	Centrifugal bearingless aspirating pump with integrated ceramic gasket
Air filter	Paper

### **CAPACITY**

Fuel tank (reserve included)	18.5 l (4.07 UK gal; 4.88 US gal)
Fuel tank reserve	4 l (0.88 UKgal; 1.06 US gal)
Engine oil	oil and filter change 4 l (0.88 UK gal)
Coolant	2.6 l (0.57 UK gal)
Seats	2
Maximum weight capacity	195 kg (429 lb)

### **GEAR RATIOS**

Primary drive ratio	44 / 73 (with gears)
1st gear ratio	15 /39 (secondary)
2nd gear ratio	16 /33 (secondary)

3rd gear ratio	20 / 34 (secondary)
4th gear ratio	22 /32 (secondary)
5th gear ratio	26 /34 (secondary)
6th gear ratio	27 /33 (secondary)
Final drive gear ratio	15 / 42

#### **DRIVE CHAIN**

Type	525 With sealed master link
Model	Regina 110 links

#### **TRACTION CONTROL**

a-PRC system	(Aprilia Performance Ride Control), which includes traction control, wheelie control, launch control and clutchless gear shift functions.
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### **FUEL SYSTEM**

Fuel	Premium unleaded petrol, minimum octane rating 95 (NORM) and 85 (NOMM)
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### **FUEL SYSTEM**

Throttle body diameter	48 mm (1.89 in)
Type	Electronic injection (multipoint), 2 throttle bodies motorised (ride by wire), 2 dynamic air intakes. Selectable multimap.

### **CHASSIS**

Type	Aluminium, dual beam chassis with pressed and cast sheet elements.
Steering rake	27°
Trail	107 mm (4.21 in)

## SUSPENSION

Front fork - Tuono V4 1100 Factory	Öhlins upside down units with adjustable hydraulic damping and 43 mm (1.69 in) diam. stanchions with Tin surface coating)
Front fork - Tuono V4 1100 RR	Adjustable upside down hydraulic fork with 43 mm (1.69 in) stanchions.
Front wheel stroke - Tuono V4 1100 Factory	112 mm (4.41 in)
Front wheel stroke - Tuono V4 1100 RR	111 mm (4.37 in)
Rear shock absorber - Tuono V4 1100 Factory	With progressive linkage with APS system. Öhlins shock absorber with adjustable spring preload piggy-back, wheelbase,compression damping and rebound damping.
Rear shock absorber - Tuono V4 1100 RR	With progressive linkage with APS system. Sachs piggy-back shock absorber adjustable with spring preloading, hydraulic brake compression and rebound damping.
Rear wheel stroke - Tuono V4 1100 Factory	124.1 mm (4.89 in)
Rear wheel stroke - Tuono V4 1100 RR	131.6 mm (5.18 in)

## **BRAKES**

Front	Double floating disc, Ø 320 mm (12.60 in), radially-mounted calliper with four Ø 32 mm (1.26 in) pistons and two calliper pads. Brake pipe in metal braid.
Rear	disc type -220 mm diam. (8.66 inches), 2-piston callipers - 32 mm diam. (1.25 inches) - pump with built-in tank and metal braid pipe.

## **WHEEL RIMS**

Front wheel rim	3.50 x 17"
Rear wheel rim	6.00 x 17"

## **TYRES**

Tyre model	Pirelli DIABLO Rosso Corsa Pirelli Diablo Super Corsa SP
Front tyre	120/70 ZR17 (58W)
Inflation pressure	1 passenger: 2.3 bar (230 kPa) (33.36 PSI)

	2 passengers: 2.5 bar (250 kPa) (36.26 PSI)
Rear tyre	190/55 ZR17 (75W) 200/55 ZR17 (78W) (*)  <b>(*) With these dimensions use only Pirelli Diablo Supercorsa SP tyres.</b>
Inflation pressure	1 passenger: 2.5 bar (250 kPa) (36.26 PSI)  2 passengers: 2.8 bar (280 kPa) (40.61 PSI)

### **ELECTRICAL SYSTEM**

Spark plugs	NGK CR9EKB
Electrode gap	0.7 - 0.8 mm (0.027 - 0.031 in)
Battery	YUASA YT12A-BS, 12 V 9.5 Ah
Coils	Stick coil
Recharging system	Flywheel with rare earth magnets
Alternator	450 W
Main fuses	30 A
Secondary fuses	5A - 7.5A - 15A

ABS fuses	15A - 30A
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### **BULBS**

Low-/ high beam light	12 V - 55 W H7
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Front daylight running lights	LED
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Turn indicators	12V - 10W (White light)
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Rear daylight running light / stop light	LED
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License plate light	12V - 5W
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### **WARNING LIGHTS**

High beam light	LED
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Turn indicators	LED
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General warning	LED
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Gear in neutral	LED
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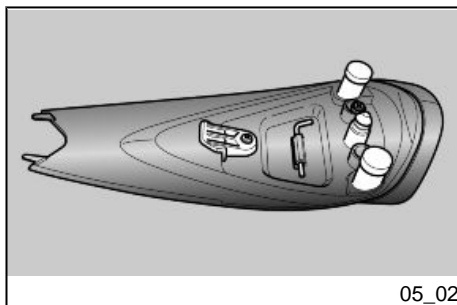
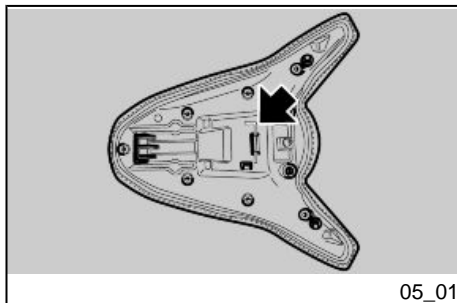
a-PRC	LED
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Fuel reserve	LED
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MI	LED
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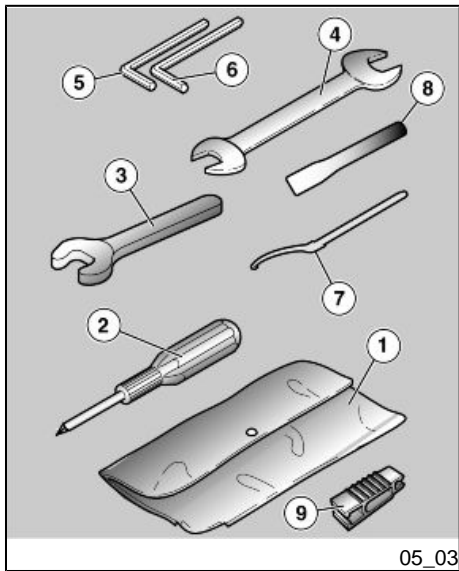
ABS	LED
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### Kit equipment (05\_01, 05\_02, 05\_03)

- An Allen key is located under the passenger saddle (Tuono V4 1100 RR) or at the passenger saddle / tail fairing (Tuono V4 1100 Factory), used to remove the saddle fastener screws in order to remove the saddle and allow access to the toolkit compartment.
- To remove the passenger seat, see the section **Vehicle / Saddle opening**.



The tools supplied are:

1. A toolkit pouch
2. Philips screwdriver with non reversible handle
3. 17 mm (0.67 in) open ended spanner
4. 8 - 10 mm (0.31 - 0.39 in) open ended spanner
5. Bent 3 mm (0.12 in) Allen key
6. Bent 5 mm (0.67 in) Allen key
7. Wrench for preload adjustment ring nut
8. Wrench extension
9. Fuse removal pincers

# Tuono V4 1100 RR/Factory

**aprilia**



**Chap. 06  
Programmed  
maintenance**

## Scheduled maintenance table

Correct maintenance is fundamental for ensuring the longevity of your vehicle and maintaining optimum function and performance.

To this end, Aprilia offers a set of checks and maintenance services (at the owner's expense), that are summarised in the table shown on the following page. Any minor faults must be reported without delay to an **Authorised Aprilia Dealer or Sub-Dealer** without waiting until the next scheduled service to solve it.

All scheduled services must be carried out at the specified intervals and mileage, as soon as the predetermined mileage is reached. Carrying out scheduled services on time is essential for the validity of your warranty. For further information regarding Warranty procedures and "Scheduled Maintenance", please refer to the "Warranty Booklet".

### NOTE

**CARRY OUT MAINTENANCE OPERATIONS AT HALF THE INTERVALS SPECIFIED IF THE VEHICLE IS USED IN PARTICULAR RAINY OR DUSTY CONDITIONS, OFF ROAD OR FOR TRACK USE.**

I: INSPECT AND CLEAN, ADJUST, LUBRICATE OR REPLACE IF NECESSARY

C: CLEAN, R: REPLACE, A: ADJUST, L: LUBRICATE

- (1) Check at each engine start
- (2) Check and clean and adjust or replace, if necessary, before every journey
- (3) Check and clean and adjust or replace, if necessary, every 1000 Km (621 mi)
- (4) Replace every 2 years
- (5) Replace every 4 years
- (6) Every 5000 Km (3107 mi) if the vehicle is used for racing
- (7) Every 10000 Km (6213 mi) if the vehicle is used for racing

(8) Check and clean every 10000 Km (6213 mi) if the vehicle is used for racing

(9) Replace when reaching the first of the following two options: 40000 km (24854 mi) or 4 years

**ROUTINE MAINTENANCE TABLE**

<b>Km x 1000</b>	<b>1</b>	<b>10</b>	<b>20</b>	<b>30</b>	<b>40</b>
Rear shock absorber (6)			I		I
Set up (6)	I	I	I	I	I
Spark plug (8)			R		R
Drive chain (3)	I - L	I - L	I - L	I - L	I - L
Clutch cable	L	L	L	L	L
Control cables and controls (6)	I	I	I	I	I
Sprocket - pinion (6)		I	I	I	I
Rear suspension bearings - linkages			I		I
Steering bearings and steering clearance (6)		I	I	I	I
Wheel bearings (6)		I	I	I	I
Control unit diagnosis		I	I	I	I
Brake discs (6)	I	I	I	I	I
Air filter (6)		I	R	I	R
Engine oil filter (6)	R	R	R	R	R
Fork			I		I
General vehicle operation (6)	I	I	I	I	I
Valve clearance (7)			A		A

<b>Km x 1000</b>	<b>1</b>	<b>10</b>	<b>20</b>	<b>30</b>	<b>40</b>
Cooling system (6)					
Brake systems (6)					
Light circuit					
Stand switch					
Safety switches					
Stop switches					
Brake fluid (4)					
Coolant (4)					
Fork oil (7)(9)					R
Engine oil (6)	R	R	R	R	R
Light aiming					
Fork oil seals (6)					
Flexible coupling					
Tyres - pressure/wear (2)					
Wheels (6)					
Tightening torques (6)					
Flexible coupling pin nuts tightening					
Tightening of clutch cover, flywheel and oil sump screws					
Fault warning light on instrument panel (1)					
Fuel lines (5)					
Clutch wear (7)					

<b>Km x 1000</b>	<b>1</b>	<b>10</b>	<b>20</b>	<b>30</b>	<b>40</b>
Brake pad wear (2)					



### Table of recommended products (06\_01)

Piaggio & C. S.p.A. prescribes **eni** products for the scheduled maintenance of its vehicles

#### RECOMMENDED PRODUCTS TABLE

<b>Product</b>	<b>Description</b>	<b>Specifications</b>
ENI i-RIDE APRILIA RACING 5W-40	Engine oil	Use branded oils with performance equivalent to or exceeding ACEA A3 - API SL - JASO MA - JASO MA2 specifications
AGIP MP GREASE	Black smooth textured lithium-calcium soap based grease containing EP (extreme pressure) additives with optimal water-repellent properties	ISO L-X-BCHB 2 - DIN 51 825 KP2K-20
AGIP PERMANENT SPECIAL	Ethylene glycol-based antifreeze fluid with organic inhibition additives. Red, ready for use	ASTM D 3306 - ASTM D 4656 - ASTM D 4985 - CUNA NC 956-16
AGIP BRAKE 4	Brake fluid	As an alternative to the recommended fluid, other fluids that meet or exceed the required

Product	Description	Specifications
		specifications may be used. SAE J1703, NHTSA 116 DOT 4, ISO 4925 Synthetic fluid
AGIP ARNICA SA 32	(Sachs) Fork oil (Tuono V4 1100 RR)	SAE 0W - ISO VG 32
OHLINS 5W	Fork oil (Tuono V4 1100 Factory)	-



# TABLE OF CONTENTS

## A

a-PRC setting buttons: 47  
ABS: 50  
Advanced functions: 35  
Air filter: 114  
Alarms: 29

## B

Battery: 14, 119–121  
Brake: 14, 116, 134

## C

Chain: 140, 141  
Clutch: 14, 89  
Clutch fluid: 14  
Clutch lever: 89  
coolant: 13, 115, 116  
Coolant: 13, 115, 116

## D

Disc brake: 134  
Display: 26

## E

Engine oil: 13, 110–112  
Engine stop: 50

## F

Fork: 81, 83, 85  
Fuel: 12  
Fuses: 123

## G

Gearbox oil: 13

## H

Headlight: 130  
Horn: 47

## I

Identification: 67  
Immobilizer: 63  
Instrument panel: 25

## M

Maintenance: 109, 155, 156  
Maintenance Table: 156  
Mirrors: 132

## O

Oil filter: 112

## R

rear-view mirrors: 132  
Recommended products:  
159

## S

Saddle: 64  
Scheduled maintenance:  
156  
Shock absorber: 87  
Shock absorbers: 75, 78, 80  
Spark plug: 114  
Stand: 15, 101  
Start-up: 50  
Stop switch: 50

## T

Technical data: 143  
Turn indicators: 132  
Tyres: 112



#### THE VALUE OF SERVICE

As a result of continuous updates and specific technical training programmes for Aprilia products, only **Aprilia** Official Network mechanics know this vehicle fully and have the specific tools necessary to carry out maintenance and repair operations correctly.

The reliability of the vehicle also depends on its mechanical conditions. Checking the vehicle before riding it, its regular maintenance and the use of **original Aprilia spare parts** only are essential factors!

For information on the nearest **Official Dealer and/or Service Centre** consult our website:

[www.aprilia.com](http://www.aprilia.com)

Only by requesting aprilia original spare parts can you be sure of purchasing products that were developed and tested during the actual vehicle design stage. All aprilia original spare parts undergo quality control procedures to guarantee reliability and durability.

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