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INTRODUCTION

Dear Customer,

PIAGGIO wants to congratulate you for choosing this original accessory. We ask that you read this manual carefully. It has been prepared to help you become familiar with your new alarm system and use it in the best way. As you read it, you will appreciate how this device has been designed and built based on your needs as a motorcyclist.

Enjoy the reading then, and... "Buon viaggio!"

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INTRODUCTION

Piaggio congratulates you for choosing an original accessory and invites you to read the contents of this instruction manual carefully.

WARNING:

- ! The manual contains precious advice that will help you install this alarm in the best possible way. Please take time to read all of the instructions thoroughly.
- ! Remember that in order to obtain good results, every step of the installation of this alarm is very important. Therefore be careful to not skip any detail of the operation.
- ! The information in this handbook refers exclusively to the technical characteristics of the PIAGGIO Alarm System.
- ! Original PIAGGIO accessories have been designed for this alarm system and tested with it. As the manufacturer is not in a position to control all the available products on the market, the installer or the user of the vehicle will be personally responsible for the operating choices.
- ! All the information and characteristics reported in this manual are current at the moment of printing. PIAGGIO reserves the right to make alterations at any time without prior notification
- ! In this manual you will find the instructions applicable to all three PIAGGIO Alarm versions. The instructions may vary depending on the alarm model you are installing. At the beginning of each chapter, you will find indications on the alarm models that the instructions apply to.

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DESCRIPTION OF THE ALARM SYSTEM CONTROL DEVICES

Remote control, electronic key and PIN-CODE

This alarm operates following commands received from the user. You can give the commands with the following devices:

- ✓ **A two-button remote control unit:** that enables you to turn on and off all the alarm system functions,
- ✓ **An electronic key:** allows you to activate part of the alarm functions and turn the alarm off in emergency conditions,
- ✓ **PIN-CODE:** also allows you to turn the alarm system off in system emergency situations.

REMOTE CONTROL (for all alarm models)

The remote control unit is the most frequently used "interface" between the alarm system and the user. We advised you to become familiar with it as soon as possible.

The remote control has two buttons, one has a dotted surface and one is smooth. These buttons switch various functions on and off.

Button 1 (dotted):

- ✓ Switches the alarm on and off.

Button 2 (smooth):

- ✓ Switches the panic alarm on and off.
- ✓ Allows you to exclude the siren in alarm conditions ("mute" function).

ELECTRONIC KEY (for models 602687M, 602688M, 602820M)

The electronic key is a device you can use as a simplified remote control or to switch the alarm off in an emergency.

As a simplified remote control:

- ✓ Insert the key into its receptacle to turn the alarm on and off in sequence.

As an emergency switch off:

- ✓ If an emergency condition should arise (for example you lose the remote control), insert the key into its receptacle and you will immediately turn off the alarm system.

PIN-CODE (for all alarm models)

The PIN-CODE is a procedure that will allow you to switch the alarm off in emergency conditions (for example, if you lose both the remote control and the electronic key).

As an emergency switch off:

- ✓ To activate the PIN-CODE procedure, using the vehicle's ignition key, you have to confirm the exact numerical sequence of a four-number code.
- ✓ The code is read and confirmed from the LED installed on board the vehicle.

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POSITIONING THE ALARM

602687M, 602688M, 602689M

Position the alarm on the vehicle following the instructions shown below.

- ! The alarm control unit must be positioned so that:
 - ✓ It is protected against adverse weather conditions.
 - ✓ The siren is free from any obstacles that might attenuate the alarm warning.
 - ✓ The rubber protective wire hood is always pointing downwards to prevent the infiltration of water.
- ! The alarm components must be positioned far from:
 - ✓ Moving mechanical organs.
 - ✓ Electric or electronic devices that might create electromagnetic interference.
 - ✓ Any engine parts that might reach high temperatures during vehicle operation.
- ! The alarm control box must never be fastened directly to the vehicle frame, as this could cause engine malfunctions at high rpm's, and create safety risks.

ATTENTION:

If the vehicle is washed with a high-pressure spraying device, be careful to:

- ✓ protect the alarm control box from high pressure water jets
- ✓ do not spray water directly towards the alarm control box.

If the alarm system is damaged by water infiltration caused by the incorrect use of high-pressure washing devices, by the incorrect positioning of the alarm control unit, by the use of parts and accessories that are not original or not explicitly authorised by the Manufacturer, etc., PIAGGIO declines all responsibility for malfunctions and the alarm warranty will be considered null and void.

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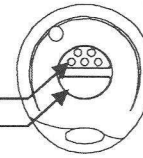
TWO-BUTTON REMOTE CONTROL

Button 1 (dotted):

- ✓ Switches the alarm on and off.

Button 2 (smooth):

- ✓ Switches the panic alarm on and off.
- ✓ Enables you to exclude the siren in alarm conditions (mute function).



NOTE:

The two remote control buttons have different surfaces so they can be easily distinguished, preventing the user from activating the panic alarm accidentally - in the dark, for example, or if you have the control unit in your pocket.

ELECTRONIC KEY

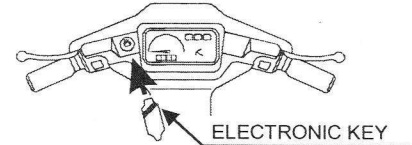
You can use this as a simplified remote control, or also to switch off the alarm in emergency situations.

Simplified remote control:

- ✓ Inserting the key into its receptacle, you switch the alarm on and off in sequence.

Emergency turn-off device:

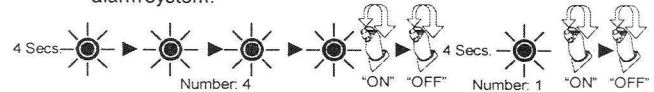
- ✓ When the alarm is enabled, inserting the electronic key into its receptacle will switch off the alarm system.



PIN-CODE

This procedure enables you to switch off the alarm system when the alarm is enabled and when it is impossible to use the remote controls or electronic keys (for example, if these are lost):

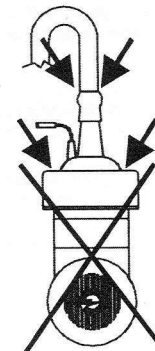
- ✓ Activating the PIN-CODE in emergency conditions: using the LED installed on the vehicle together with the vehicle's ignition key, you can confirm a secret series of numbers and switch off the entire alarm system.



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INCORRECT ALARM POSITION

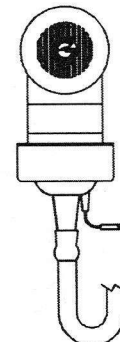
If the alarm is positioned with the rubber wire protection hood turned upwards, water can infiltrate at the points indicated by the arrows; therefore this position is to be avoided.



NO !

CORRECT ALARM POSITION

With the rubber hood turned downwards, the alarm can be considered watertight against the infiltration of water into the system.



OK !

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ALARM OPERATION IN ITS BASIC CONFIGURATION

In this chapter we will describe the operation of the alarm in its basic configuration. You can then personalize it following the instructions given in chapter "PERSONALIZING THE SYSTEM".

Switching on

Press button 1 (the dotted button) of the remote control (for all models) or insert the electronic key into its receptacle (only for models 602687M, 602820M and 602688M), the alarm will switch on. As this happens the turn signals flash, you will hear a high-pitched acoustic signal (BEEP) and the LED installed on the vehicle will come on with a steady light.

Excluding the siren (mute function)

When the alarm-enabled signals have finished, you can exclude the siren from the alarm mode (mute function): to do this simply press button 2 (the smooth button) on the remote control.

Neutral time

After the alarm has entered the enabled condition, it enters "neutral time", shown by the vehicle LED that comes on with a steady light. In this condition the alarm cannot signal vehicle theft attempts but the engine lock is enabled (only for 602688M and 602689M models).

Neutral time lasts for approximately 20 seconds.

Alert

At the end of the neutral time, the alarm passes into alert status, and the LED begins to flash. From this point on, the alarm is ready to signal any attempts at theft or mishandling of the vehicle.

Alarm

If, during the alert period, any attempts are made to steal the vehicle, the alarm will signal it by sounding the high-volume siren (if it has not been excluded beforehand) and repeatedly flashing the turn signals; this will last for about 30 seconds. During this alarm condition, if you want, you can switch off the system simply by pressing button 2 (smooth) of the remote control.

The alarm is triggered by the following:

- ✓ Any blow to the vehicle (if the movement sensor is enabled).
- ✓ Any attempt to switch on the ignition.
- ✓ If the saddle is opened (only model 602687M).
- ✓ If the power input wires are cut (only model 602688M).
- ✓ Only for model 602820: the starting key switch on attempt will be signalled after a delay of 2 seconds.
- ✓ If the panic alarm (if enabled) function is triggered.

When the alarm signal ends, the system will take about 5 seconds to restore the Alert condition. During this time the LED on the vehicle will remain on with a steady light.

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POSITIONING THE ACCESSORIES 602687M, 602688M, 602689M

The accessories play a role of fundamental importance to have an alarm system that is really effective.

Take, for example the LED indicator; it is the first device that will advise a would-be thief that the vehicle is equipped with an alarm system.

Below you will find a list of all the alarm accessories and a description of how to position them correctly.

Led holder (602689M):

- ✓ The light should be located so that it is clearly visible also at some distance from the vehicle.

Electronic Key Receptacle with integrated LED (602687M-602688M):

- ✓ This should be positioned so that it is clearly visible and easily accessible to the user.
The electronic key, in fact, is a revolutionary device that enables you to use the alarm in emergency conditions (e.g. if you lose the remote control).

Notes on the position of the electronic key receptacle and of the LED holder.

- ✓ Before you make holes in the plastic parts of the vehicle, check the position of the handlebar when it is in the locked position. This is to avoid positioning the key or led in a place that would be hidden by the handlebar when the vehicle is parked and locked.
- ✓ Be careful when drilling holes in the vehicle's plastic parts to avoid damage to other elements.
- ✓ Respect the hole diameters to avoid useless damage to the plastic parts.

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Limiting the siren alarms

The alarm triggered when the vehicle is moved or when the saddle is opened (only for model 602687M) will set off the siren alarm for only five consecutive times. From the sixth time on, the siren will be automatically excluded. This procedure has been adopted for a number of reasons which are listed below:

- ✓ If the siren sounds five times and no one checks the condition of the vehicle, it is useless to continue sounding the alarm,
- ✓ The absorbed current is limited preventing the battery from being discharged.
- ✓ The system complies with regulations in force aimed at limiting loud noises produced by vehicle alarms systems.
- ✓ PIAGGIO has always been sensitive to environmental ecology; with this procedure it provides a valid contribution to the reduction of acoustic pollution.

Turning off the alarm system without the alarm memory

When the alarm is on, if you press button 1 (dotted) of the remote control or insert the electronic key into its receptacle (only for 602687M, 602688M and 602820M models), you immediately switch the alarm system off. This will be confirmed by the emission of three high-pitched acoustic signals (BEEPs), three flashes of the turn signals, and the LED on the vehicle will go off.

Turning off the alarm system with the alarm memory

If someone tries to steal the vehicle when the alarm is on, when you switch the alarm off, it will inform you, flashing the turn signals two times and sounding two low-pitched acoustic signals (BOOP); it will also report the type of violation, according to the list below:

Alarm due to movement: the turn signals will flash once; the LED will blink once and you will hear one high-pitched acoustic signal (BEEP).

Alarm due to attempted engine start-up: The turn signals will flash twice; the LED will blink twice and there will be two high-pitched acoustic signals (BEEPs).

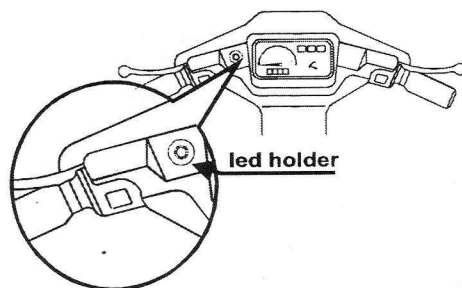
Alarm due to attempted opening saddle (only model 602687M): the turn signals will flash three times; the LED will blink three times and you will hear three high-pitched acoustic signals (BEEPs).

Alarm due to cut wires (only model 602688M): the turn signals will flash four times; the LED will blink four times and you will hear four high-pitched acoustic signals (BEEPs).

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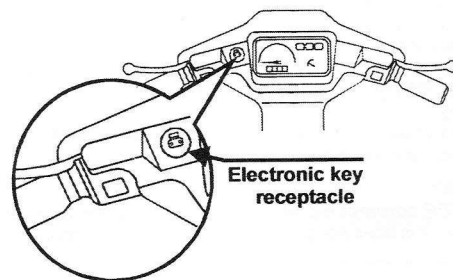
POSITIONING THE LED HOLDER (602689M)

- ✓ Position the LED so that the light is clearly visible also at some distance from the vehicle.
- ✓ The hole diameter where you insert the LED receptacle is 10 mm.



POSITIONING THE ELECTRONIC KEY RECEPTACLE (602688M, 602687M)

- ✓ Position the electronic key receptacle so that it is clearly visible and easily accessible to the user.
- ✓ The hole diameter where you insert the electronic key receptacle is 13 mm.



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USING THE ALARM IN EMERGENCY CONDITIONS

In this chapter we will describe how to turn off the alarm system in emergency conditions, that is, for example, if you lose the remote control and the alarm is on and therefore you cannot use the vehicle.

Emergency alarm turn off with the electronic key (model 602687M, 602688M, 602820M)

Insert the electronic key in its receptacle; the alarm will immediately switch off signaling the operation with the indications described in the paragraphs above: "Turning off the system" and "Turning off the system with alarm memory".

Emergency alarm turn off with PIN-CODE (all models)

If you have neither the remote control nor the electronic key and the alarm is on, you will have to turn it off (unlock it) using the PIN-CODE procedure. To perform this procedure correctly, follow the instructions shown below, along with the pictures on the next page.

- ✓ Trigger an alarm condition by switching the ignition system on then off.
- ✓ At the end of the alarm signal, the LED installed on the vehicle will come on with a steady light for about 5 seconds.
- ✓ While the LED on the vehicle is on with the steady light, turn on then turn off the ignition.

NOTE:

If in this phase, you leave the ignition on for more than 5 seconds, the system will interpret the operation as a theft attempt, setting off a new alarm condition.

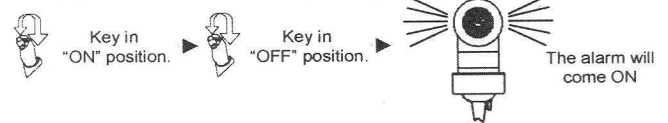
- ✓ The LED on the vehicle will go off indicating the start of the unlock procedure.
- ✓ Four seconds after the LED goes off, it will begin to emit a series of 9 blinks. When the number of blinks reaches the value of the first number of your private PIN-CODE, turn the ignition on and then off, confirming in this way the first number of your code.
- ✓ After 4 seconds the LED will begin a new series of nine blinks. When the number of blinks reaches the value of the second number of your PIN-CODE turn the ignition on and off again, confirming the second number of your code.
- ✓ Repeat the operation described above to confirm your last two PIN-CODE numbers.
- ✓ When you have confirmed the last code number, the alarm will switch off; it will signal the condition with the sequence described in the paragraphs above: "Turning off the system" and "Turning off the system with alarm memory".

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EXAMPLE OF HOW TO SWITCH OFF THE ALARM USING THE PIN-CODE

Suppose we want to turn off or unlock the alarm using our personalized PIN-CODE with the numbers: **2-3-4-1**.

Set up an alarm-on condition by turning the vehicle ignition on then off:

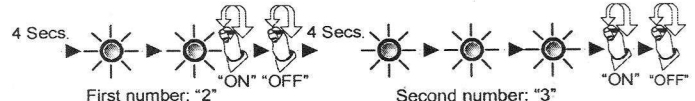


When the alarm on signal is complete, the vehicle LED will come on steady for about 5 seconds.

While the LED is on, turn the ignition on then off, the LED will go off indicating the start of the unlock procedure using the PIN-CODE.



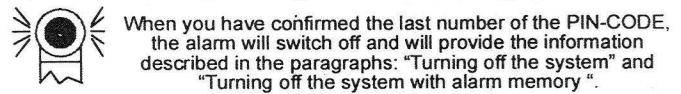
Four seconds after the LED goes off, it will begin a series of nine blinks; when the number of blinks reaches the value of the first number of your PIN-CODE (2 in this example), turn the ignition on then off. After a lapse time of four more seconds the LED will begin to blink again. When the number of blinks reaches the value of the second number of your PIN-CODE (in this example 3) switch the ignition on then off again.



After a four second wait, the system will start the count for the remaining code numbers (in this example 4 and 1).



When you have confirmed the fourth number of your PIN-CODE, the system will switch off, indicating the last cause that triggered the alarm.



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ELECTRIC CONNECTIONS (602687M, 602688M, 602689M)

After you have finished fastening the control box and the accessories to the vehicle according to the instructions on the previous pages, you will need to make the electrical connections between the alarm wiring and the vehicle's electric system.

These connections will vary depending on the alarm model you are installing.

602687M (for pre-equipped vehicles):

- ✓ On the vehicle locate the alarm connector terminal provided by the manufacturer.
- ✓ Insert the alarm wiring interface into this connector.

602688M, 602689M (for vehicles not pre-equipped):

- ✓ On the vehicle locate the ignition key connector.
- ✓ Unplug the ignition key connector from the vehicle's electric system connector.
- ✓ At this point, plug the two connectors of the alarm wiring into the respective connectors of the ignition key and of the electric system.

NOTE:

The connectors are polarised, so it is not possible to connect them incorrectly.

Now complete the electric connections of the alarm system.

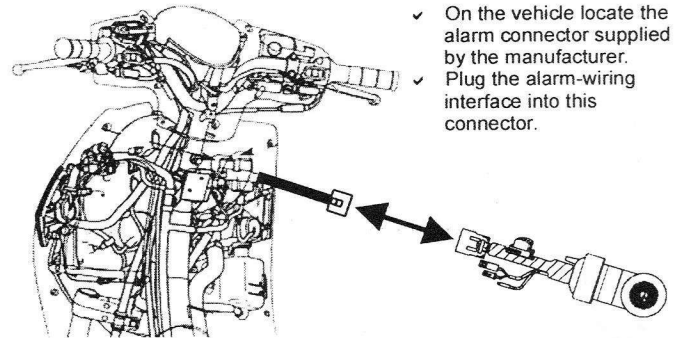
- ✓ Connect the vehicle system wires that supply the positive to the vehicle's turn signal lights to the wires with the same colour of the alarm wiring (ROSE wire of the vehicle to the ROSE wire of the alarm, WHITE AND BLUE wire of the vehicle to the WHITE AND BLUE wire of the alarm).
- ✓ Where provided (generally only in vehicles over 50 cc that have an interrupt-type engine block), connect the BLACK wire of the alarm wiring to one of the BLACK wires that feed the negative to the turn signal lights.
- ✓ Connect the electronic key receptacle connectors (only for 602687M and 602688M) to the respective terminals of the alarm wiring.
- ✓ Connect the LED holder terminal (only for 602689M) the respective connector of the alarm wiring.

NOTE:

NEVER connect the BLACK wire of the alarm wiring to the vehicle frame; this does not guarantee a good earthing connection.

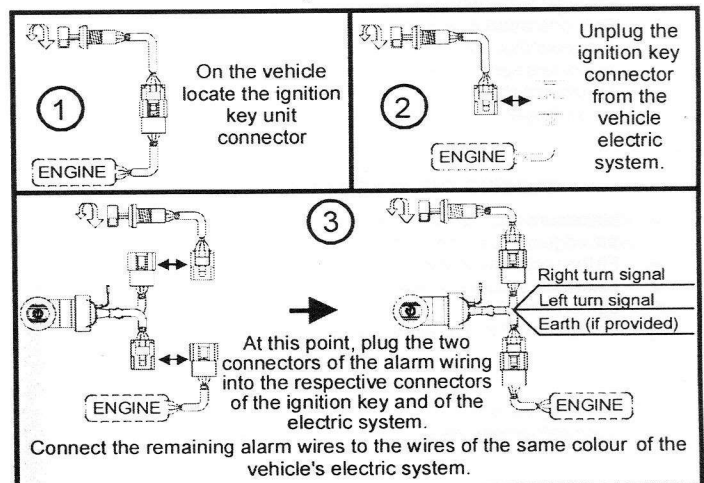
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ELECTRIC CONNECTIONS IN PRE-EQUIPPED VEHICLE (602687M)



- ✓ On the vehicle locate the alarm connector supplied by the manufacturer.
- ✓ Plug the alarm-wiring interface into this connector.

ELECTRIC CONNECTIONS FOR NOT PRE-EQUIPPED VEHICLES (602688M, 602689M)



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PERSONALIZING THE ALARM SYSTEM

You can configure the alarm system to operate in various ways as you prefer, enabling or disabling the following functions:

- ✓ Acoustic signals when switching the system on or off (CHIRP).
- ✓ Panic alarm.
- ✓ Movement sensor.

The alarm is supplied from the factory with these functions enabled, if you decide to personalize their operation, follow the instructions below along with the example shown on the next page:

- ✓ Make sure the alarm system is turned off.
- ✓ Turn on the ignition; the LED installed on the vehicle will light up for 0.5 seconds.
- ✓ While the LED is on, press both remote control buttons at the same time.
- ✓ The alarm will enter programming mode. The LED will come on steady and you will hear two acoustic signals: one low-pitched (BOOP) and one high-pitched (BEEP).
- ✓ At this point you can enable or disable the first of the three programmed functions (CHIRP).

-To enable this function, press button 1 (dotted) on the remote control. The alarm will confirm the activation emitting a high-pitched acoustic signal (BEEP).

-If you want to disable this function, press remote control button 2 (smooth).

The alarm will confirm the exclusion emitting a low-pitched sound (BOOP).

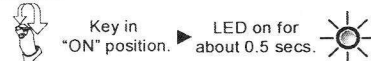
- ✓ When you have finished programming the first function, the alarm automatically passes to the next one (panic alarm). Again, if you want to enable the function, press button 1 (dotted) on the remote control.
- ✓ If you wish to exclude the function, press remote control button 2 (smooth).
- ✓ The alarm will now automatically pass to the last of the three functions.
- ✓ When you have finished programming the third and last function, the alarm system will automatically exit the personalizing procedure; it will signal this operation by emitting two low-pitched acoustic signals (BOOP), one high-pitched signal (BEEP) and the LED installed on the vehicle will go off.

PAG.10

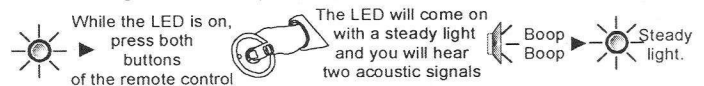
EXAMPLE OF PROGRAMMING

In this example we will illustrate how to configure the alarm system with the chirp function enabled (on), the panic alarm function disabled (off) and the movement sensor function enabled (on).

- ✓ Make sure that the alarm system is off, if it is not, switch it off
- ✓ Switch on the ignition; the LED installed on the vehicle will come on for about 0.5 seconds.



While the LED is on, press both buttons on the remote control unit contemporaneously. The alarm will confirm the start of the procedure lighting the LED on the vehicle with a steady light and sounding two acoustic signals, one low-pitched (BOOP) and one high-pitched (BEEP).



Now you can configure the system as you want.

To enable the CHIRP function, press button 1 (dotted) of the remote control. The alarm will confirm the activation of the function emitting a high-pitched sound (BEEP).



Now the system will pass automatically to the second function (panic), which in this example we want to disable by pressing button 2 (smooth) on the remote control. The alarm will confirm the exclusion of the panic function sounding a low-pitched signal (BOOP).



At this point the alarm system will pass on to the third and last function that can be programmed (movement sensor); in this example it is to be enabled, so we press remote control button 2 (dotted) again. The alarm will confirm the successful programming emitting a high-pitched acoustic signal (BEEP). Immediately after, the system will exit the programming procedure, emitting two low-pitched acoustic signals (BOOP), one high-pitched signal (BEEP) and turning off the LED on the vehicle.



After programming the last function the alarm will automatically exit the procedure signaling the exit with three different acoustic signals and turning off the LED installed on the vehicle.

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FINAL OPERATIONS (602687M, 602688M, 602689M)

To complete the installation job, now you have to regulate the movement sensor, close the control box and secure the alarm.

REGULATING THE MOVEMENT SENSOR

- ✓ In the alarm control box you will find the movement sensor trimmer, shown in the picture on the opposite page.
- ✓ Set the trimmer at its mid point.
- ✓ Turn on the alarm. Wait until the neutral time ends (indicated by a flashing LED signal).
- ✓ Strike the vehicle with some force, being careful not to damage the plastic body parts.
- ✓ If the alarm does not detect the blow, increase the sensor sensitivity rotating the trimmer in a clockwise direction; then perform the test again.
- ✓ If the movement sensor seems to be oversensitive, rotate the trimmer in a counter-clockwise direction and perform the test again.

NOTE:

Be very careful when you calibrate the movement sensor.

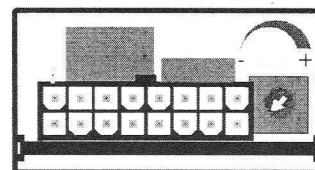
This operation has to be done trying always to find a sensitivity threshold that will set off the alarm when required, but that will not trigger false and useless alarms.

To achieve this, the calibration must be carried out very scrupulously.

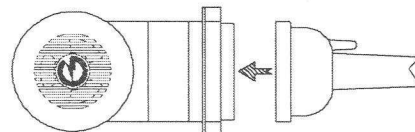
CLOSING THE ALARM CONTROL UNIT

- ✓ Make sure that the rubber wiring hood fits securely around and seals the edge of the alarm control box.
- ✓ Fit the rectangular plastic flange against the hood.
- ✓ Insert the closure screws (supplied in the kit) into the holes and tighten them firmly. Be careful not to over-tighten the screws and damage the threads.

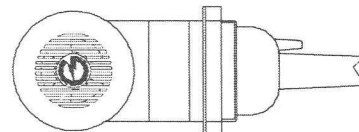
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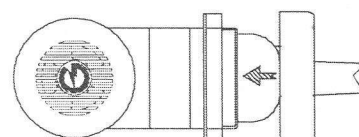
- ✓ To regulate the sensitivity of the movement sensor:
 - ✓ Rotate the trimmer (shown by the arrow in the figure) in a clockwise direction to increase sensitivity.
 - ✓ Rotate the trimmer in a counter-clockwise direction to decrease sensitivity.



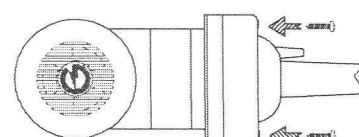
- ✓ Place the protective rubber hood against the alarm control box.



- ✓ Fit the rubber hood around the box edge making sure that it seals the box perfectly.



- ✓ Fit the rectangular plastic flange against the rubber hood.



- ✓ Insert the flange screws in their seats and tighten securely.

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UTILITY FUNCTIONS

This system's alarm devices, though they use less current than others of the same category, include some "utility" functions that will help you to further reduce the current consumption that weighs on the vehicle battery.

The utilities can be activated in three different ways:

- ✓ Manual activation handled completely by the user (for models 602687M and 602688M).
- ✓ Automatic activation 72 hours after turning on the system.
- ✓ Automatic activation when the system has not been used for a period of 2 months.

Manual Utility Function with Alarm OFF (models 602687M and 602688M)

If you are not planning to use the vehicle for some time (e.g. during the winter season), you can place the alarm system in standby. With this procedure you can simulate disconnection of the alarm system from the vehicle's electric circuit eliminating all current absorption.

To activate this function follow the instructions below:

- ✓ Make sure the alarm system is turned off, if not, turn it off.
- ✓ Switch on the vehicle ignition switch.
- ✓ The LED installed on the vehicle will come on for about 0.5 seconds. Wait until it goes off and within the following 5 seconds; insert the electronic key into its receptacle.
- ✓ The alarm will immediately go into standby, signaling this with a high-pitched acoustic signal.
- ✓ Turn off the vehicle ignition system.

NOTE:

In this condition the alarm will not work until the ignition is turned on again.

To restore normal alarm operation, you only need to turn the vehicle ignition on and then off.

Automatic Utility Function with Alarm OFF (all models)

If the vehicle and the alarm are not used for a period of about two months, the alarm system will automatically activate the utility function, going into standby without any intervention by the user.

Also in this case to restore normal alarm operation, you need only turn on and then off the vehicle's ignition system.

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USEFUL INFORMATION FOR THE INSTALLER

ADDING NEW REMOTE CONTROLS OR ELECTRONIC KEYS TO THE ALARM SYSTEM (602687M, 602688M)

With these two versions, the alarm is supplied with an electronic key and a remote control unit.

If the client desires, a new electronic key or a new remote control unit can be added to the system. To carry out this operation correctly, follow the instructions below.

PROGRAMMING A NEW REMOTE CONTROL OR ELECTRONIC KEY USING AN OPERATING ELECTRONIC KEY

- ✓ Turn off the alarm system.
- ✓ Turn on the ignition, the LED installed on the vehicle will light up for 0.5 sec., within this period of time insert the operating electronic key into the receptacle.
- ✓ The alarm will signal the start of the memorisation process emitting a long low-pitched acoustic signal (BOOP), a long high-pitched acoustic signal (BEEP), at the same time the turn signals will flash two times.
- ✓ Press a button of the remote control that you want to programme, or insert the electronic key that you want to programme into its receptacle.
- ✓ The alarm will confirm the completed programming cycle of the new remote control or the new electronic key, emitting a short high-pitched signal (BEEP) and one short flash of the LED installed on the vehicle.
- ✓ To complete the programming procedure, turn off the ignition panel, the alarm will signal the end of the procedure emitting a low-pitched acoustic signal (BOOP), and, at the same time, one flash of the turn signals.

PROGRAMMING A NEW REMOTE CONTROL OR ELECTRONIC KEY USING AN OPERATING REMOTE CONTROL

- ✓ Turn off the alarm system.
- ✓ Turn on the ignition; the LED installed on the vehicle will light up for 0.5 sec., in this period of time, FIRST press the dotted button of the operating remote control. IMMEDIATELY AFTER, press the smooth button on the operating remote control.
- ✓ The alarm will signal the start of the programming process emitting a long, low-pitched acoustic signal (BOOP), a long high-pitched acoustic signal (BEEP) together with two flashes of the turn signals.

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Automatic Utility Function with Alarm ON (all models)

With this function, the alarm excludes only part of the components from its functions, thus consuming very little current and still protecting the vehicle.

When the alarm system has been on for 72 hours and there have been no alarm conditions, it will automatically exclude the radio receiver.

In this condition to turn the alarm off, you will have to proceed according to the instructions given below:

602689M

- ✓ Turn on the vehicle ignition and leave it on for about 1 second.

NOTE:

if you leave the ignition on for more than 3 seconds, the system will interpret this operation as a theft attempt and immediately trigger the alarm.

- ✓ Turn the vehicle ignition off.
- ✓ Press button 1 (dotted) of the remote control.

The alarm will switch off confirming the operation with the optical and acoustic signals described in the paragraphs above: "Turning off the Alarm" and "Turning off the Alarm with Alarm Memory".

602687M, 602688M

- ✓ Insert the electronic key into its receptacle.

The alarm will switch off signaling the operation with the optical and acoustic signals described in the paragraphs above: "Turning off the Alarm" and "Turning off the Alarm with Alarm Memory".

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- ✓ Press a button of the remote control that you want to programme or insert the electronic key you want to programme into its receptacle.
- ✓ The alarm will confirm the completed programming cycle of the new remote control or the new electronic key emitting a short high-pitched signal (BEEP) and one short flash of the LED installed on the vehicle.
- ✓ To complete the programming procedure, turn off the ignition panel, the alarm will signal the end of the procedure emitting a low-pitch acoustic signal (BOOP), and at the same time, the turn signals will flash once.

ADDING NEW REMOTE CONTROLS TO THE SYSTEM (602689M)

In this version the alarm is supplied with a remote control.

If the client desires, a new remote control unit can be added to the system. To carry out this operation correctly, follow the instructions below.

PROGRAMMING PROCEDURE FOR NEW REMOTE CONTROL UNITS USING AN OPERATING REMOTE CONTROL

- ✓ Turn off the alarm system.
- ✓ Turn on the ignition. The LED installed on the vehicle will light up for 0.5 sec., within this period of time, FIRST press the dotted button on the operating remote control, IMMEDIATELY AFTER, press the smooth button on the operating remote control unit.
- ✓ The alarm will signal the start of the programming process emitting a long, low-pitched acoustic signal (BOOP), a long, high-pitched acoustic signal (BEEP), contemporaneously, the turn signals will flash two times.
- ✓ Press a button of the remote control that you want to programme or insert the key to be programmed into its receptacle.
- ✓ The alarm will confirm the completed programming cycle of the new remote control emitting a short, high-pitched signal (BEEP) accompanied by one short flash of the LED installed on the vehicle.
- ✓ To complete the programming procedure, turn off the ignition.
- ✓ The alarm will signal the end of the procedure emitting a low-pitch acoustic signal (BOOP), and at the same time, one flash of the turn signals.

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SUPPORT FUNCTIONS AND MAINTENANCE

ADDING NEW REMOTE CONTROLS AND ELECTRONIC KEYS TO THE ALARM SYSTEM (602687M, 602688M and 602820M)

With these two versions, the alarm is supplied with an electronic key and a remote control unit.

If you wish, you can add new electronic keys or new remote control units to the system. To carry out this operation correctly, follow the instructions below.

PROGRAMMING NEW REMOTE CONTROLS OR ELECTRONIC KEYS USING A FUNCTIONING ELECTRONIC KEY

- ✓ Switch off the alarm system.
- ✓ Switch on the vehicle ignition; the LED installed on the vehicle will light up for 0.5 sec.. Within this period of time insert the electronic key into the receptacle.
- ✓ The alarm will signal the start of the memorization process emitting a long low-pitched acoustic signal (BOOP), a long high-pitched acoustic signal (BEEP), at the same time the turn signals will flash two times.
- ✓ Press a button of the remote control that you want to programme, or insert the electronic key that you want to programme into the receptacle.
- ✓ The alarm will confirm the completed programming cycle of the new remote control or the new electronic key, emitting a short high-pitched signal (BEEP), and the LED installed on the vehicle will blink one short time.
- ✓ To complete the programming procedure, switch off the vehicle ignition.
- ✓ The alarm will signal the end of the procedure emitting a low-pitched acoustic signal (BOOP), and, at the same time, one flash of the turn signals.

PROGRAMMING NEW REMOTE CONTROLS OR ELECTRONIC KEYS USING A FUNCTIONING REMOTE CONTROL

- ✓ Switch off the alarm system.
- ✓ Switch on the vehicle ignition; the LED installed on the vehicle will light up for 0.5 sec., in this period of time, FIRST press the dotted button of the operating remote control. IMMEDIATELY AFTER, press the smooth button on the operating remote control.
- ✓ The alarm will signal the start of the programming procedure emitting a long, low-pitched acoustic signal (BOOP), a long high-pitched acoustic signal (BEEP) together with two flashes of the turn signals.

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REPLACING REMOTE CONTROLS OR ELECTRONIC KEYS IN THE ALARM SYSTEMS

The procedure described below is different from the previous ones and it is used in cases where the user of the vehicle has lost both the remote control and the electronic key that operate the alarm, so that the system is impossible to use.

NOTE:

This procedure can be performed only with the alarm turned off.

PROGRAMMING PROCESS OF NEW REMOTE CONTROLS AND ELECTRONIC KEYS.

Make sure that the alarm system is turned off, if necessary turn it off using your PIN CODE.

- ✓ Connect the WHITE AND VIOLET wire of the alarm wiring to earth.
- ✓ Turn on the ignition, by turning the ignition key to the ON position.
- ✓ The alarm will signal the start of the programming procedure emitting a long low-pitched acoustic signal (BOOP), a long high-pitched sound (BEEP), at the same time the turn signals will flash two times.
- ✓ Insert the electronic key to be memorised (only for models 602687M and 602688M), or press one of the buttons on the remote control to be memorised (for all alarm models).
- ✓ The alarm will confirm the completed memorization cycle of the new remote control or the new electronic key emitting a short high-pitched signal (BEEP) with one short flash of the LED installed on the vehicle.
- ✓ To complete the programming procedure, disconnect the WHITE AND VIOLET wire from the earth (for models 602688M and 602689M), and turn OFF the ignition.
- ✓ The alarm will signal the end of the procedure emitting a low-pitched acoustic signal (BOOP), at the same time the turn signals will flash one time.

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- ✓ Press a button of the remote control that you want to programme or insert the electronic key you want to programme into its receptacle.
- ✓ The alarm will confirm the completed programming cycle of the new remote control or the new electronic key emitting a short high-pitched signal (BEEP) and one short flash of the LED installed on the vehicle.
- ✓ To complete the programming procedure, turn off the ignition panel.
- ✓ The alarm will signal the end of the procedure emitting a low-pitch acoustic signal (BOOP), and at the same time, the turn signals will flash once

ADDING NEW REMOTE CONTROLS TO THE SYSTEM (602689M)

In this version the alarm is supplied with a remote control. If you wish, you can add a new remote control unit to the system.

To complete this operation correctly, follow the instructions below.

PROGRAMMING NEW REMOTE CONTROLS AND ELECTRONIC KEYS USING A FUNCTIONING REMOTE CONTROL

- ✓ Switch off the alarm system.
- ✓ Switch on the vehicle ignition; the LED installed on the vehicle will light up for 0.5 sec.. within this period of time, FIRST press the dotted button on the operating remote control, IMMEDIATELY AFTER, press the smooth button on the operating remote control unit.
- ✓ The alarm will signal the start of the programming process emitting a long, low-pitched acoustic signal (BOOP), a long, high-pitched acoustic signal (BEEP), contemporaneously the turn signals will flash two times.
- ✓ Press a button of the remote control that you want to programme or insert the electronic key to be programmed into its receptacle.
- ✓ The alarm will confirm the completed programming cycle of the new remote control or the new electronic key emitting a short, high-pitched signal (BEEP) accompanied by one short blink of the LED installed on the vehicle.
- ✓ To complete the programming procedure, switch off the ignition key. The alarm will signal the end of the procedure emitting a low-pitch acoustic signal (BOOP), and at the same time, one flash of the turn signals.

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PERSONALISATION OF THE PIN CODE

PIAGGIO alarm systems are provided with an emergency procedure to turn off the alarm; it can be used in cases when it is impossible to use the remote control or the electronic key.

This procedure consists in activating a numerical code (PIN CODE) made up of four numbers from 1 to 9.

The manufacturer sets this code with the following numbers: 1-1-1-1.

For obvious security reasons, after you have installed the alarm system you are advised to substitute the factory code with a personal code of your own. To set your personal code, follow the instructions below:

- ✓ Make sure the alarm system is turned off: you can turn it off with the remote control or with the electronic key (if provided).
- ✓ Turn on the ignition, the LED installed on the vehicle will light up for about 0.5 seconds; in this period of time, press both buttons of the remote control at the same time. The alarm will confirm the start of the programming procedure lighting up the LED installed on the vehicle, and emitting two acoustic signals, one low-pitched sound (BOOP) and one high-pitched sound (BEEP).
- ✓ Only for alarm model 602687M simply open the vehicle saddle. For alarm models 602688M and 602689M connect the BLACK AND BLUE wire to positive. The LED installed on the vehicle must remain on with a fixed light.
- ✓ Press both remote control buttons at the same time.
- ✓ Turn off the ignition. At this point the LED will go off, indicating the beginning of the memorisation procedure of the new PIN CODE.
- ✓ After about 4 seconds, the led installed on the vehicle will begin a series of 9 flashes; as soon as the number of flashes reaches the value of the first number you want to use in the PIN CODE, turn the ignition on for about 1 second, then turn it off.
- ✓ Again after 4 seconds, the LED installed on the vehicle will begin a new series of 9 flashes. As soon as the number of LED flashes reaches the value of the second number that you want to use in the PIN CODE, again turn on the vehicle ignition for about 1 second, then off.
- ✓ Repeat the operations described above to insert the other two numbers.
- ✓ When you have finished setting the fourth number, the alarm system will automatically exit the PIN CODE personalisation procedure.
- ✓ It will signal the end of the memorisation procedure emitting two low-pitched acoustic signals (BOOP) and one high-pitched signal (BEEP).

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PERSONALIZING THE PIN-CODE

As we described above, the PIN-CODE procedure allows you to switch off the alarm system in emergency conditions, that is, when for any reason it is not possible to use the remote control or the electronic key. To switch off the alarm system, you have to "communicate" a numerical code of four numbers to the alarm; the code has been factory set at 1-1-1-1. For obvious security reasons, after you have installed the alarm system, we advised you to substitute the factory code with a personal code of your own. To set your personal code, follow the instructions below.

NOTE: To perform this operation we advise that you consult the PIAGGIO assistance service.

- ✓ Make sure the alarm system is turned off: you can turn it off with the remote control or with the electronic key (if provided).
- ✓ Turn on the ignition; the LED installed on the vehicle will light up for about 0.5 seconds. In this period of time, press both buttons of the remote control at the same time.
- ✓ The alarm will confirm the start of the programming procedure lighting up the LED installed on the vehicle, and emitting two acoustic signals, one low-pitched signal (BOOP) and one high-pitched sound (BEEP).
- ✓ Only for alarm model 602687M, simply open the vehicle saddle. For alarm models 602688M, 602689M and 602820M connect the BLACK AND BLUE wire to positive. The LED installed on the vehicle must remain on with a steady light.
- ✓ Press both remote control buttons at the same time.
- ✓ Switch off the ignition. At this point the LED will go off, indicating the beginning of the memorization procedure of the new PIN CODE.
- ✓ After about 4 seconds, the led installed on the vehicle will begin a series of 9 blinks; as soon as the number of blinks reaches the value of the first number you want to use in the PIN CODE, turn the ignition on for about 1 second, then turn it off
- ✓ Again after 4 seconds, the LED installed on the vehicle will begin a new series of 9 blinks
- ✓ As soon as the number of LED blinks reaches the value of the second number that you want to use in the PIN CODE, again turn on the vehicle ignition for about 1 second, then off.
- ✓ Repeat the operations described above to insert the last two numbers.
- ✓ When you have finished inserting the fourth number, the alarm system will automatically exit the PIN CODE personalization procedure: It will signal the end of the memorization procedure emitting two low-pitched acoustic signals (BOOP) and one high-pitched signal (BEEP).

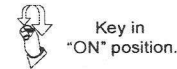
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EXAMPLE OF PIN-CODE PERSONALIZATION

Suppose you want to set the following emergency unblocking code into the system: **2-3-4-1**.

Switch off the alarm system

Switch on the ignition by turning the ignition key to the "ON" position



The LED installed on the dash will light up for 0.5 seconds. During this time period, press both buttons on the remote control at the same time.

The alarm will emit two acoustic signals and then it will light the LED installed on the dash with a fixed light.



Connect the BLACK AND BLUE wire to positive (602688M, 602689M, 602820M) Open the vehicle saddle (602687M)



The LED will remain steady on.



Press both remote control buttons at the same time.



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EXAMPLE OF PIN-CODE PERSONALISATION

Suppose you want to set the following emergency unblocking code into the system: **2-3-4-1**.

Turn off the alarm system

Turn on the ignition by turning the ignition key to the ON position



The LED installed on the dash will light up for 0.5 seconds. During this time period, press both buttons on the remote control at the same time. The alarm will emit two acoustic signals and then it will light the LED installed on the dash with a fixed light.



Connect the BLACK AND BLUE wire to positive (602688M, 602689M) Open the vehicle saddle (602689M)

BLACK AND BLUE wire

POSITIVE +

The LED will remain fixed on.



Press both remote control buttons at the same time.



PAG.16

Turn off the ignition, turning the ignition key to the OFF position; the LED will go off indicating the start of the personalisation procedure of the PIN

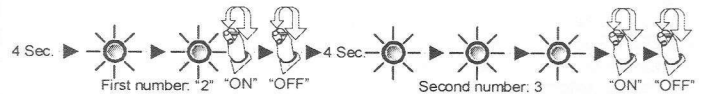


After four seconds have passed, the LED will begin a series of nine flashes.

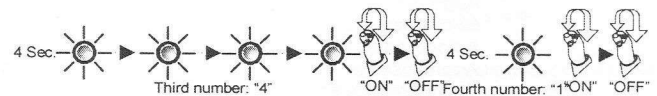
When the number of flashes reaches the desired number, turn on the ignition again, turning the ignition key to the ON position.

Leave it on for about one second and then turn it off, turning the key to the OFF position. In this example the first number to set is "2". After you have set the first number, the system waits 4 seconds.

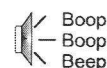
Then it will repeat the counting procedure to let you set the second number, which in this example is "3".



After four more seconds, the system will start the count-up and you can set the remaining two numbers.



When you have finished inserting the fourth number of the pin-code, the alarm will automatically exit the procedure. It will confirm the successful termination with two low-pitched acoustic signals (BOOP) and one high-pitched signal (BEEP).



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Switch off the vehicle ignition, turning the ignition key to the OFF position. The LED will go off indicating the start of the PIN CODE personalization procedure.



After four seconds have passed, the LED will begin a series of nine blinks.

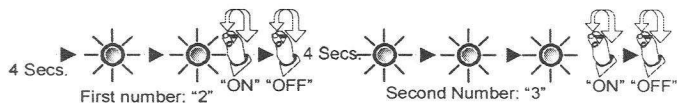
When the number of blinks reaches the desired number, switch on the ignition again turning the ignition key to the "ON" position.

Leave it on for about one second and then switch it off, turning the key to the "OFF" position.

In this example the first number to set is "2".

After you have set the first number, the system waits 4 seconds.

Then it will repeat the counting procedure to let you set the second number, which in this example is "3".



After four more seconds, the system will start the count-up again and you can set the remaining two numbers.



When you have finished inserting the fourth number of the pin-code, the alarm will automatically exit the procedure.

It will confirm the successful termination with two low-pitched acoustic signals (BOOP) and one high-pitched signal (BEEP).



REPLACING THE REMOTE CONTROL BATTERIES

The remote control operates using alkaline batteries.

Under normal use conditions of the remote control these will gradually lose their charge.

The more you use the remote control, the sooner the batteries will become discharged. To prevent problems with the remote control; it has been provided with a device that will signal the charge condition of the batteries inside.

During normal use of the remote control, when you press a command button the green transmission LED will light up with a steady light.

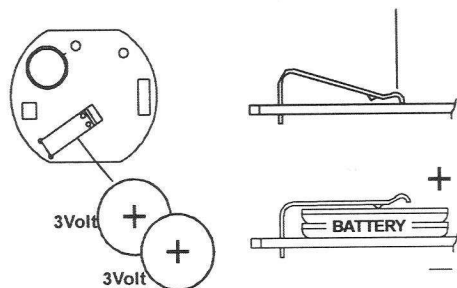
If the battery charge drops below the level needed to assure correct operation of the remote control, when you press a command button the green transmission LED will blink, advising you that it is time to replace the batteries.

WARNING:

Use only type CR1616 batteries. Using batteries different from those advised can seriously damage the remote control unit.

- Do not discard used batteries in the environment; they should be disposed of in appropriate containers.

Substituting the batteries in the remote control



Battery type: Cr1616