

1 - DIAGNOSTICS BY THE END CUSTOMER

The power system features an indicator LED which remains unlit during normal usage. The LED lights to indicate a functional fault, which is identifiable by the colour of the LED itself.

Since, in some situations, the LED on the power unit may light because of a temporary malfunction, the operations in the following pages are suggested for the end customer.

If the LED turns back on after these procedures have been followed, the customer should contact an Authorised Service Centre.



IMPORTANT

The green LED flashes to indicate that the EPS drivetrain is switched ON when the magnet is removed from its lodging (Fig. 1).

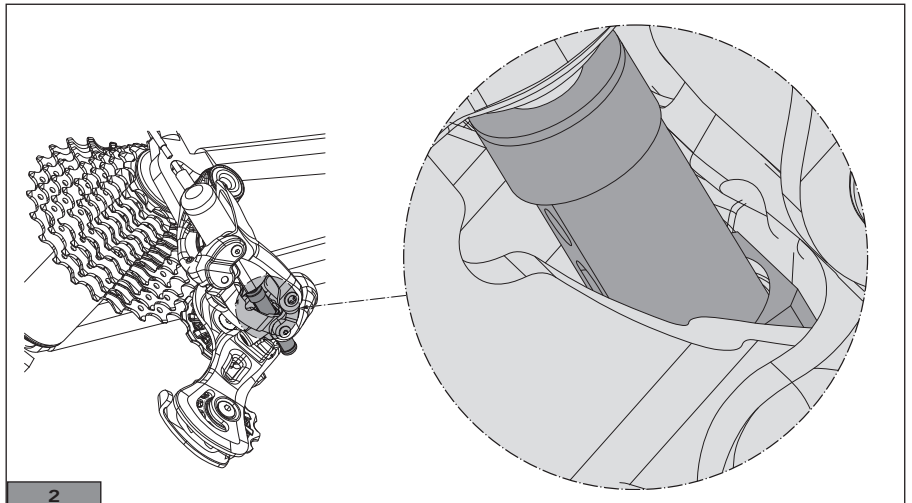
LED	PROBLEM	WHAT TO DO
<div></div> <div>WHITE LIGHT + prolonged buzzer tone</div>	Power system fault	Press one of the two mode buttons on the controls briefly to switch the LED off. The white LED turns off automatically after about 1 minute and, in the case of a malfunction, turns back on the first time the command is given. Contact the support service if the problem persists.
<div></div> <div>YELLOW LIGHT + prolonged buzzer tone</div>	Front derailleur fault	Press one of the two mode buttons on the controls briefly to switch the LED off. The yellow LED turns off automatically after about 1 minute and, in the case of a malfunction, turns back on the first time the command is given. Contact the support service if the problem persists.
<div></div> <div>GREEN LIGHT + prolonged buzzer tone</div>	Rear derailleur fault	Briefly press the mode button on the rear derailleur command to turn the LED off. The green LED turns off automatically after about 1 minute and, in the case of a malfunction, turns back on the first time the command is given. Contact the support service if the problem persists.
<div></div> <div>PURPLE LIGHT + prolonged buzzer tone</div>	Rear derailleur control lever (right) fault	This can even turn on only because one of the levers was pressed for more than 9 seconds. Briefly press the mode button on the rear derailleur command to turn the LED off. The violet LED turns off automatically after about 1 minute and, in the case of a malfunction, turns back on the first time the command is given. Contact the support service if the problem persists.
<div></div> <div>BLUE LIGHT + prolonged buzzer tone</div>	Front derailleur control lever (left) fault	This can even turn on only because one of the levers was pressed for more than 9 seconds. Briefly press the mode button on the front derailleur command to turn the LED off. The blue LED turns off automatically after about 1 minute and, in the case of a malfunction, turns back on the first time the command is given. Contact the support service if the problem persists.
<div></div> <div>RED LIGHT + prolonged buzzer tone</div>	Interface system fault	The LED turns off by itself after about 10 seconds. Insert the power-off magnet to turn the LED off and contact the support service. Contact the support service.

Important: the buzzer also sounds when the minimum battery charge level is reached.

1.1 - THE "UNHOOK" MECHANISM

In case of falling or accidental blows to the rear derailleur, the "unhook" mechanism could be triggered which frees the rear derailleur parallelogram from its diagonal (in order to avoid damaging it). You will notice this because the rear derailleur will not go below the 2nd or 1st sprocket.

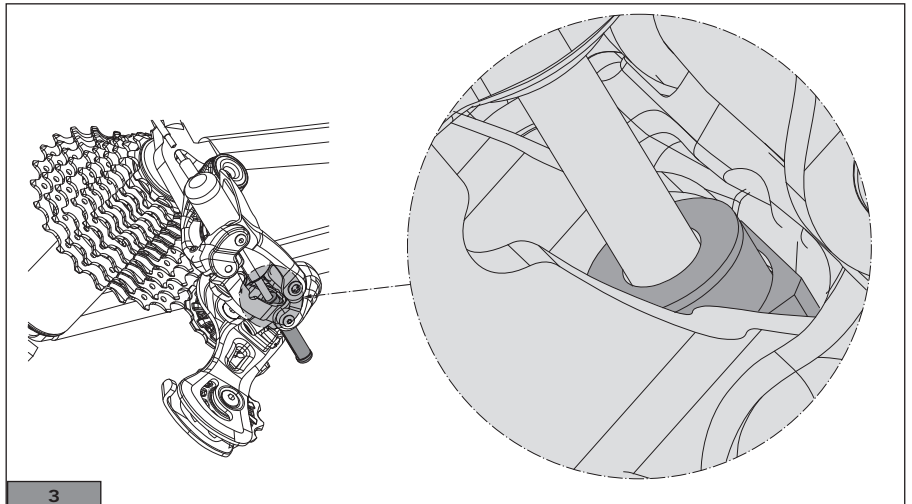
We recommend to take the rear derailleur to the smallest reachable sprocket, stop pedalling and act repeatedly on lever 2. In order to verify whether the rear derailleur is hooked again, drop down to the 1st sprocket: If this has not occurred "manually force" the rear derailleur (Fig. 5).



After successful rehooking, check the alignment of the drop-out/rear derailleur mount and proper operation of the rear derailleur.

In normal operation, the rear derailleur works by the motor driving the female screw. The female screw is locked by a transverse screw that pushes a ballbearing into a depression.

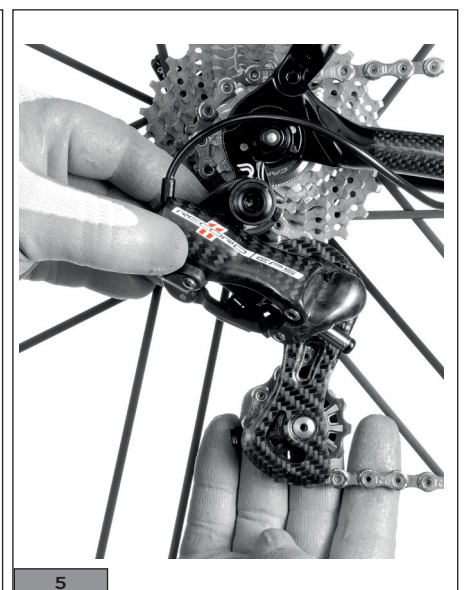
When the rear derailleur is disengaged, the sphere runs into the external channel on the female screw and so, independently from the motor activation, permits the user to change the position of the rear gear.



1.2 - RIDE BACK HOME» FUNCTION

If the battery goes flat «on the road», it is possible to use the "unhook" feature of the rear derailleur (Fig. 4) in order to be able to move the rear derailleur position onto the required sprocket.

Once back home remember to hook the rear derailleur back (Fig. 5) and to charge the battery.



2 - DIAGNOSTICS BY TECHNICAL SUPPORT SERVICE

LED	PROBLEM	WHAT TO DO
 WHITE LIGHT + prolonged buzzer tone	Malfunction of power unit electronics	The component must be replaced. Once the new component is installed, since the memory of the rear and front derailleur positions were stored in the original unit, the rear and front derailleur reset procedure must be carried out again.
 YELLOW LIGHT + prolonged buzzer tone		
 GREEN LIGHT + prolonged buzzer tone	Malfunction of the front derailleur (connector disconnected, damaged cabling (cable or terminal) and / or malfunctioning electric motor)	Visually check that the connector is properly connected, disconnect it, check to see whether there are traces of water, dirt, oxidation or abnormalities in the pins and reconnect the connector, after eliminating any abnormalities found. If necessary, use antioxidizing products. If this does not work and the LED remains on, check the entire cable that goes from the front derailleur to the power unit to ensure that there are no cuts, crushed sections or other abnormalities. If an abnormality has been detected with the power system cable, replace the power unit. If an abnormality has been detected with the front derailleur cable or if no abnormality is detected, replace the front derailleur. Once the new component is installed, the front derailleur reset procedure must be carried out again.
 PURPLE LIGHT + prolonged buzzer tone		
 BLUE LIGHT + prolonged buzzer tone	Malfunction of the rear derailleur (RH) control lever (one or more of the 3 circuits remain constantly closed - pressed buttons mechanically 'stuck', dome deformed, short circuit in cabling, water causing a short circuit).	Check that the control hoods do not press on the lever in an abnormal way or foul levers 2 and 3. Visually check that the connector is properly connected, disconnect it, check to see whether there are traces of water, dirt, oxidation or abnormalities in the pins and reconnect the connector, after eliminating any abnormalities found. If necessary use antioxidizing products. If it operates correctly, turn the LED off by short-pressing the MODE button. If an abnormality with the interface system cable has been detected replace the interface system. If an abnormality has been detected to the control cable or if no abnormality was detected replace the control. Once the new component is installed the error must be cancelled by short-pressing the MODE button.
 RED LIGHT + prolonged buzzer tone (the LED turns on only when the magnet is initially removed and the system turns on)		
 RED LIGHT + prolonged buzzer tone (the LED turns on only when the magnet is initially removed and the system turns on)	Malfunction of interface system (cable or connector or internal electronics)	Visually check that the connector is properly connected, disconnect it, check to see whether there are traces of water, dirt, oxidation or abnormalities in the pins and reconnect the connector once any abnormality is corrected. Position the magnet in the housing on the power unit, wait about 10 seconds and remove the magnet: if the LED turns back on, check the entire cable which goes from the interface to the power unit, ensuring that there are no cuts, crushed sections or other abnormalities. If an abnormality is found with the power unit cable replace the power unit. If an abnormality has been detected with the interface system cable, or if no abnormality is detected, replace the power unit. Once the new component is installed the error must be cancelled.

2.1 - MALFUNCTIONS WITHOUT THE LEDS TURNING ON

In some cases, EPS malfunctions occur without the LEDs on the power unit turning on:

1) one or more circuits of the rear and front derailleur are interrupted

In this case, when the lever of the defective circuit is engaged, the system does not actuate the control. The system is not able to signal this type of malfunction.

Check the entire cable that goes from the interface to the rear derailleur or front derailleur control, making sure that there are no cuts, crushing, or other anomalies. Visually check that the connector is correctly connected, then disconnect it and make sure there are no traces of dirt, oxidation, or anomalies in the pins, and reconnect the connector.

If the system is switched on, the battery is charged, and you cannot find an anomaly on the cables, replace the control.

2) battery is completely flat

The system does not have sufficient energy to indicate the excessively low charge level of the battery.