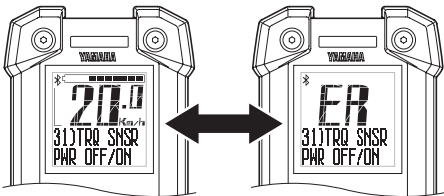





Troubleshooting

E-Bike Systems

Symptom	Check point/method	Possible cause/ check	Part replacement/ action
The pedal feels heavy.	Is the air pressure in the tires normal?	Check for appropriate air pressure. Check for punctures.	Repair puncture, replace tube.
	Is the gear-shifting working smoothly?	Check the gear shifting system.	Replace the gear shifting system.
	Is it being driven up a long slope in the summer, or carrying a heavy load?	This is due to the temperature rising in the battery pack or the Drive Unit assembly, and is not a malfunction.	The assist power is restored once the temperature of the battery pack or the Drive Unit assembly drops.
	Is the ambient temperature low (around 10°C or below)?	Check the ambient temperature.	During the winter, store the battery pack indoors before use.
The e-bike systems activates and cuts off during driving.	Is the battery pack securely locked?	Check the battery pack lock.	Check if the battery pack is securely locked. Inspect the battery pack terminals and wiring for loose connection.
The cruising distance is short.	Has the battery pack been sufficiently charged?		Charge until full.
	Is it being used in a low-temperature environment?	Check the ambient temperature.	This will be restored when the ambient temperature warms up.
	Is the battery pack degrading?	Check the battery pack's Total number of battery charging cycles , actual capacity.	Replace the battery pack.

Symptom	Check point/method	Possible cause/ check	Part replacement/ action
<p>The assist mode lamp lights up in red, the main riding display and “ER” are displayed alternately, and an error description is indicated in the function display.</p>  <p>Displays alternately</p>  <p>Error displays</p>	<p>Check the error log according to the display on the display unit when the error occurred. (See Chapter 2 “Diagnosis function”).</p>	<p>Drive Unit assembly error. Check “List of error codes and corresponding assist operation”.</p>	<p>Replace parts according to “List of error codes and corresponding assist operation”.</p>
<p>An assist mode lamp lights up in red and an error description is indicated in the function display.</p>   <p>Error displays</p>	<p>Speed sensor set. (See Chapter 2 “Diagnosis function”).</p>	<p>A state persists where the speed sensor unit cannot detect the signal correctly.</p>	<p>Inspect the speed sensor set lead wires, pick up, and magnet sensor spoke type.</p>
<p>The display unit shuts down immediately (approx. 4 seconds later) after switching the power on.</p>	<p>Battery pack signal lead wires. (See Chapter 2 “Diagnosis function”).</p>	<p>Disconnection of signal lead wires in the battery pack.</p>	<p>Replace the lead wires for the DC plug or the power supply.</p>

Battery pack and charger

Symptom	Check point/method	Possible cause/check	Part replacement/action
Charged the battery pack, but the residual battery capacity display lamp on the display does not show [100%].	Was the charging started immediately after driving, or when the battery pack temperature was high?		Recharge the battery in a location where the temperature is suitable for charging (0 to 45°C).
All four residual residual battery capacity display lamp on the battery pack are slow flashing simultaneously while charging the battery pack.	This is not a malfunction.	On standby for charging.	The charging will start once the internal temperature of the battery pack is within the 0 to 45°C range.
When pressing the battery capacity indicator button on the battery pack, all four battery capacity indicator lamps flash slowly at the same time.	This is not a malfunction.	See "Temperature protection function".	The battery pack automatically recovers when the battery pack's internal temperature returns to the allowable temperature for charging.
When pressing the battery capacity indicator button on the battery pack, lamps [1]/[3] and [2]/[4] or [1]/[2] and [3]/[4] turn on alternately.	Hold down the battery capacity indicator button on the battery pack for 10 seconds. (See "Recoverable errors of battery pack or battery charger".)	(See "List of battery pack/battery charger diagnosis items".)	Replace the parts according to "List of battery pack/battery charger diagnosis items".
The battery capacity indicator lamps [1] and [4] on the battery pack flash simultaneously.	Hold down the battery capacity indicator button on the battery pack for 10 seconds. (See "Non-recoverable errors of battery pack".)	(See "List of battery pack/battery charger diagnosis items".)	Replace the battery pack.
After disconnecting the charging plug on the battery charger from the battery pack, the battery capacity indicator lamps continue to light.	Charging connector on the battery pack.	Charging connector and charging plug are wet.	Clean the charging connector and charging plug, and dry them.
Abnormal sound is produced from the Drive Unit assembly.	Assist driving	Abnormal sound is produced during assist driving.	Check for sprocket wear or stretched chain.
		Abnormal sound is produced when the motor is operating.	Disassemble the Drive Unit. Inspect the driven gear. Replace the motor assembly.
	Turn the crank.	Turning the crank produces periodic abnormal sound.	Inspect the housing bearing. Inspect the bearing.
	Turn off the power for manual pedalling.	Stepping on the pedal produces abnormal sound and vibration (clicking).	Check the joints. If further tightening does not improve the problem, replace parts.