

It Clicks But Will Not Turn

One mechanical check first, then three electrical ones. The click itself tells you more than most people realise.

BEFORE ANY OF THIS

Bridging a solenoid draws a very large current and will spark. Do it with the machine secure and stable, with no fuel leaking anywhere near, using insulated tools, and with your face away from the terminal. If you are not comfortable with that, this is the right point to hand it to somebody who is.

1 Does the engine turn freely on the kickstart, or by turning the rear wheel with the machine off the ground?

YES The engine is free. The fault is electrical — go on.

NO STOP. The engine cannot turn, and the starter is not the problem. A seized engine, a hydraulicked cylinder or a jammed starter drive will all do this. Pressing the button again risks damaging the starter or the ring gear.

↓ still not solved — go on

2 At the moment of the click, do the lights collapse or dim heavily?

YES The supply is being pulled down. That is a battery, a cable or a connection — not the starter motor. Go to the battery and earth checks.

NO The lights hold up. The heavy current path is not collapsing, so the fault is further along. Go on.

↓ still not solved — go on

3 Are the battery terminals and the engine-to-frame earth strap clean, bright and tight?

YES Connections look sound. Note that you checked both — the earth strap is the one people skip and the one that usually fails.

NO Clean them back to bright metal and retest before going further. A corroded earth produces exactly this symptom and costs nothing to fix.

↓ still not solved — go on

4 Bridging the solenoid's two large terminals with a heavy insulated conductor, does the starter spin?

YES The starter and its heavy cabling are fine. The fault is the solenoid itself or the small trigger circuit feeding it.

NO Still nothing. The fault is between the solenoid and the starter, or in the starter itself. Go on.

↓ still not solved — go on

5 Feeding the starter's terminal directly from the battery positive, does it spin?

YES The starter is alive. The fault is in the cabling or the solenoid between the battery and it.

NO The starter does not respond to a direct feed with a good earth. That is the point at which the starter itself is genuinely a candidate — and the first time on this sheet that it has been.

RECORD WHAT YOU FOUND

STEP	WHAT YOU OBSERVED	RESULT

BATTERY RESTED VOLTAGE

V

VOLTAGE WHILE PRESSING THE
BUTTON

V

ENGINE TURNS BY HAND?

ABOUT JUMP-STARTING

Owners who do this successfully specify jumping from a car with its engine NOT running. A running car's charging system produces far more than a small scooter's electrics are built for, and the regulator, the lights and the battery can all suffer. If you jump it, jump it from a static battery.

WHAT YOU CHANGED, AND WHAT HAPPENED

Need to work out what you actually own?

The Scooter Parts Registry is a free public record of the Chinese factories behind US-market scooters, ATVs and go-karts — brand, engine family, VIN prefix, factory and related machines. No account, no email.

thescooterparts.com/identify