

## TROUBLESHOOTING



**CAUTION: BEFORE MAKING ANY REPAIRS OR ADJUSTMENTS, MAKE SURE THE THROWING ARM IS IN THE SAFE POSITION AND THE LAUNCHER IS DISCONNECTED FROM THE POWER SOURCE.**

### 1. The motor does not work:

- Power is not supplied. Connect the thrower to power source.
- Fuses have blown. Remove the electrical box cover and check the fuses. If the fuses continue to blow, check the wiring and power source to determine the cause before continuing.
- Power source is insufficient (check with a voltmeter) to see if the battery is weak (for 12V version).
- Electrical connections are dirty or loose.
- Electrical connections are incorrect (see Start-up Instructions).
- Electrical box is damaged.
- Main spring motor is damaged.

### 2. The motor runs but throwing arm does not move:

- The power source is insufficient (check with a voltmeter).
- The throwing arm is blocked, e.g. by fragments of a clay. Remove the obstacles (**PROCEED WITH EXTREME CAUTION!**).
- The drive transmission mechanism does not work (the engine turns, but the gear axle does not rotate).
- The pin on the gear clamp or the pin on the main axle clamp is damaged. It must be replaced.
- The main axle is damaged. It must be replaced.
- In special cases, when the power goes out while the spring is being tensioned, it may happen that the motor will not have the power to continue operating after the power is restored (mainly applies to 230V motors). To fix the error, push the arm in the direction of the arm movement with the power on until the engine is ready to work automatically. Hold your hand on the outside of the throwing arm. **PROCEED WITH EXTREME CAUTION!**

### 3. The throwing arm is in armed position but does not throw clays:

- The power source is insufficient. Check.
- The main spring is damaged. It must be replaced.
- The START button on the cable control or wireless remote control does not work. Try starting the throwing arm with the switch located on the thrower.
- The throwing arm is blocked by a clay or debris. Unblock. **PROCEED WITH EXTREME CAUTION.**
- The throwing arm is bent and catches on other parts of the thrower. Be sure to replace the throwing arm.

### 4. Throwing arm does not stop and continuously throw clays:

- The main spring is too loose. Tension the spring.
- The limit switch is incorrectly set or damaged. Adjust the limit switch and if this does not help, replace it.
- The relay in the electrical box is damaged, "stuck". Disconnect the thrower from the power source or replace the relay.
- The START button on the cable control or wireless remote control is mechanically pressed or the wire is damaged. Check by disconnecting the wire or radio receiver from the controller.
- The electrical circuit may be damaged.

### 5. Abnormal noises:

- Tighten all screws.
- The main spring is not tensioned enough and the coils touch each other. Tension the main spring. It is essential that the spring coils do not touch each other at minimum tension.
- The throwing arm is bent and catches on other parts.
- The clay carousel is assembled incorrectly.
- The carousel axle is not lubricated.
- The one-way bearing in the main axle is damaged. The bearing assembly must be replaced.

### 6. The clays are being broken immediately after throw:



**IMPORTANT:** Very often the cause of clay pigeons breaking is not the thrower, but the quality of the clay pigeons. First of all, check the quality of the clay pigeons for damage or cracks, for example by "knocking" them. If possible, use a clay from another delivery. Also remember that once used, the clays cannot be reused in automatic throwing machines.

- The separating knives need adjustment. Adjust the knives according to the instructions.
- The clays are damaged before they are loaded into the carousel.
- The clays are damaged when loaded into the carousel.
- Check that there are no obstacles in the path of the moving clay.
- The rubber on the throwing arm is worn or damaged. Replace it with a new one.
- The throwing arm is bent. Replace it.
- The sliding plate is not adjusted. Perform the adjustment as described in this manual
- The throwing arm has no contact with clay when the machine is ready to throw. **The throwing arm should have contact with the clay when the machine is armed.** Adjust the limit switch.

### 7. Clays don't fall from the carousel onto the sliding plate:

- Different clays were used (different diameter, thickness).
- The clay carousel rods are damaged and prevent the clays from falling freely.
- The carousel base is damaged.
- The carousel does not rotate. The plastic pusher does not move the carousel, e.g. its spring is damaged or not properly installed.
- Check the plastic pusher and its lubrication.