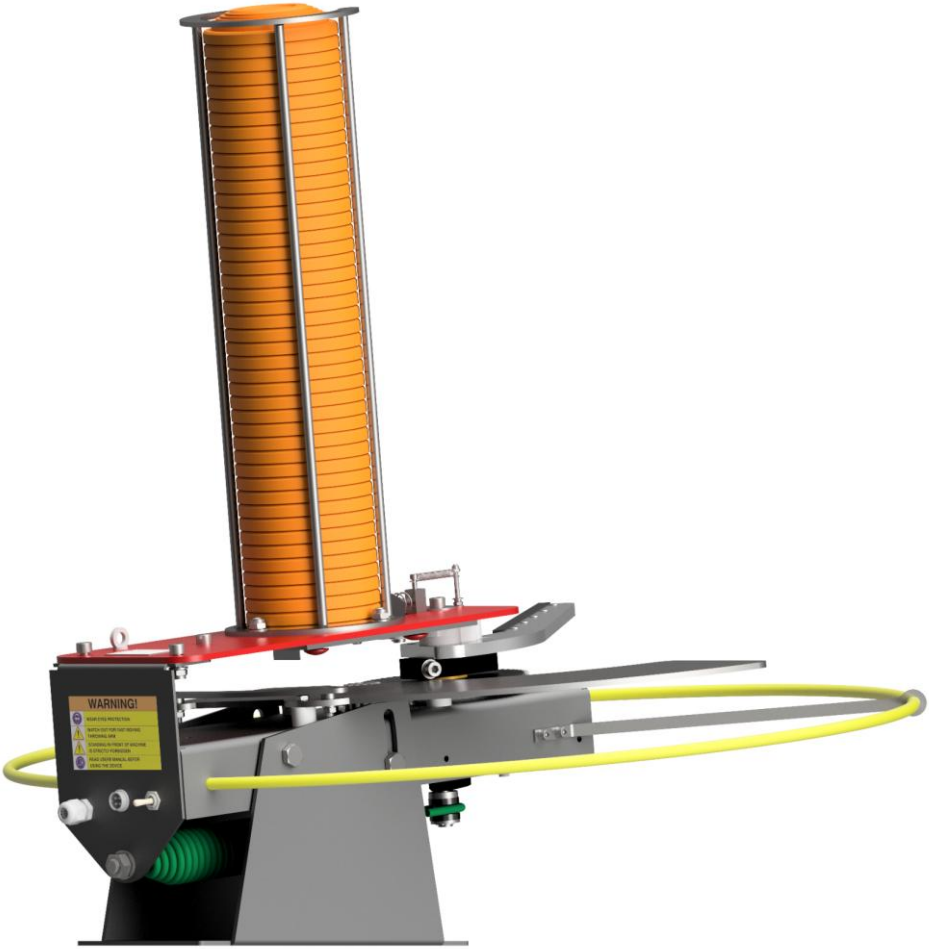
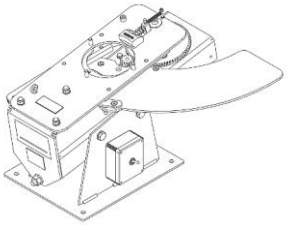
WASPA Cwerg S30

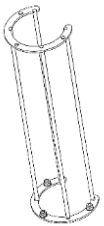
User Manual



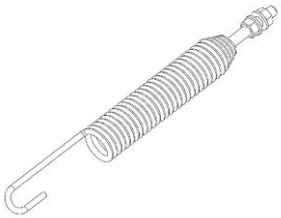
CONTENT



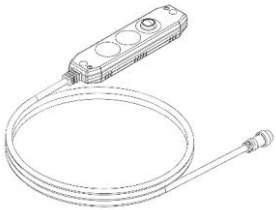
Clay target machine



Clay target magazine

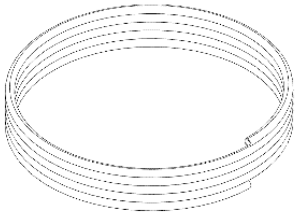


Main spring



Cable control

Cover tube mounting bracket



Throwing arm cover tube

GENERAL INFORMATION

This manual contains all necessary information to allow correct and safe use of the machine and its maintenance. All information, specification and technical notes are the best of our knowledge and experience.

The data and descriptions contained in this release do not constitute the basis for future claims.

SAFETY INFORMATION

This symbol alarms the user about important information regarding safety during the use or maintenance of the machine.

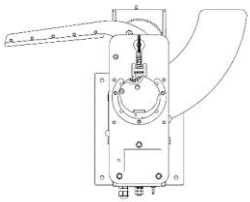
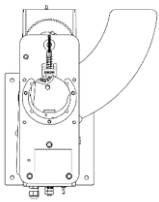
Such information should be read with particular care to avoid any negative consequences.

This symbol warns the user about the risk of electric shock under certain circumstances.

Therefore, follow the guides in order to avoid it.

The highest noise level emitted by this device is 60 dB.

NOTE: The phrase „arm in safety position" used in this manual refers to the positions of the throwing arm. The throwing arm is in safe (released) position when looking from behind of the thrower, it is on the left.

	
Throwing arm in safe position (released)	Throwing arm in unsafe position (armed)

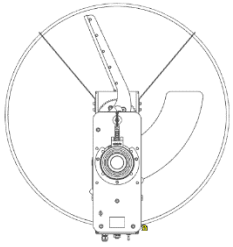
Installation

- The thrower must be fixed to a firm basis, to prevent from its displacement during use.
- Install the throwing arm cover tube before use as it indicates the dangerous area of fast-moving throwing arm.
- Keep the battery far enough so it won't be hit by moving parts of the thrower.

Safe use

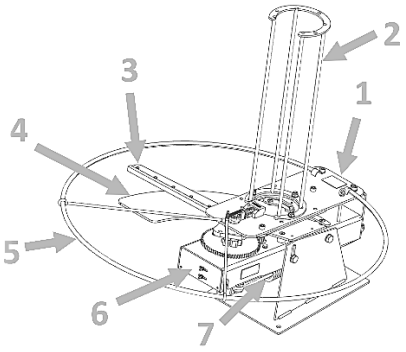
- Only one person can operate the thrower when in use. It is recommended to build protective walls around the thrower to reduce risk of injury from flying shards of clays.
- While the thrower is running, never put any of your body parts into the dangerous area of fast-moving throwing arm indicated by cover tube.
- To reduce risk of injury from flying shards of broken clays, the user should always stand behind the thrower, when throwing arm is armed.
- Anyone staying near the thrower must wear protective glasses.
- Always keep children and animals away from the thrower.
- Make sure that there's nobody in the danger zone when the throwing arm is armed. The danger zone is a field in front of the thrower, towards the direction of flying clays, at a distance of 10m greater than the maximum throwing range.
- Do not leave the throwing arm in unsafe position when thrower is not in use.
- Do not lift or move the thrower by holding the throwing arm, sliding plate or clay magazine. Do not put any weight on the thrower.
- Before activating any switch, go behind the thrower and make sure there's nobody in front of it. Flying debris from broken clays may be found outside normal flight zone.

This thrower is equipped with throwing arm cover tube, that must be properly installed always when the throwing machine is in use. It indicates the dangerous area of the fast-moving throwing arm in which no object or body part may be present.

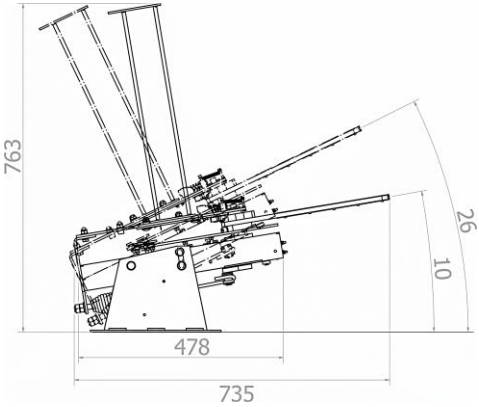


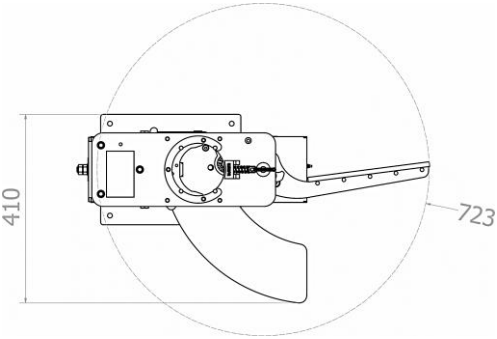
DEVICE DESCRIPTION

Model	**Cwerg S30**
Voltage	12V DC
Maximum capacity of the clay magazine	50 clays
Suitable clay type	standard, 110mm, 105g
Weight (without clays)	18 kg
Maximum throwing range	up to 55m
Recocking time	approx. 4 sek

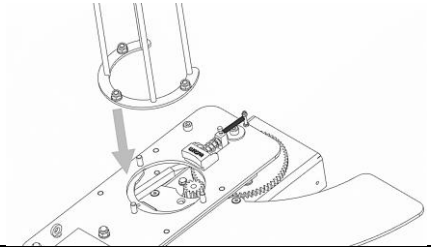
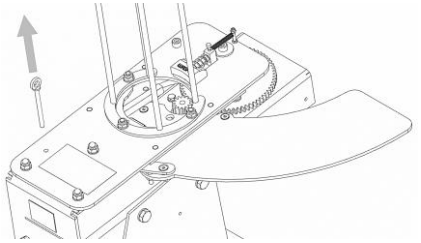


1. Thrower
2. Clay magazine
3. Throwing arm
4. Sliding plate
5. Throwing arm cover tube
6. Limit switch
7. Main spring

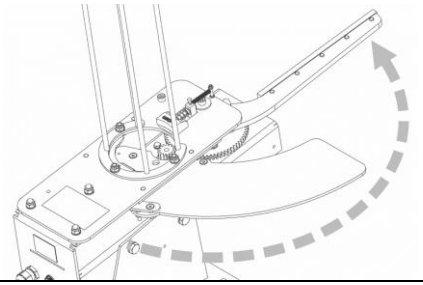




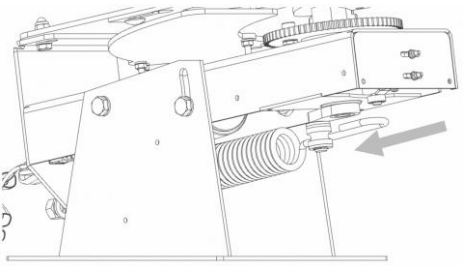
ASSEMBLY GUIDE

1. Fix the clay target magazine onto the top of thrower	2. Remove safety pin
	

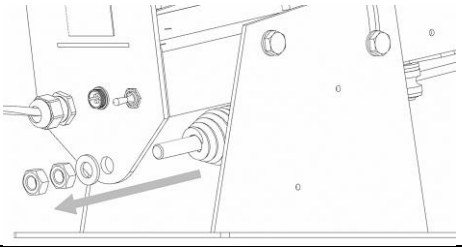
3. Move the throwing arm to the front of the machine



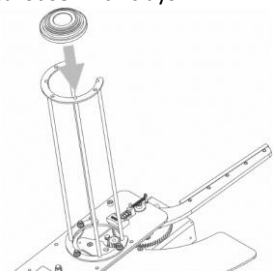
4. Put the main spring on the sleeve



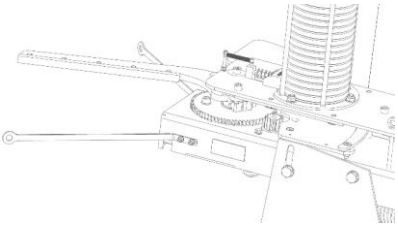
5. Tighten the main spring with two nuts

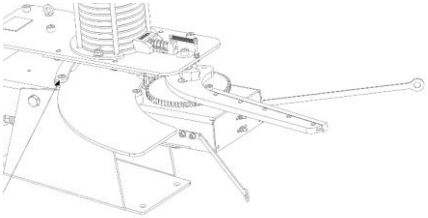


6. Fill the carousel with clays

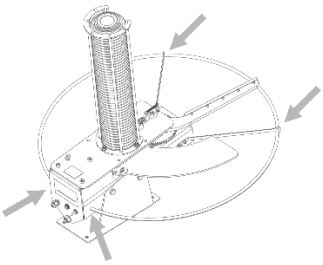


7. Fix two cover tube mounting brackets in place on both sides of the thrower

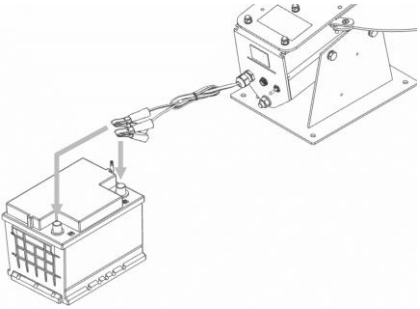


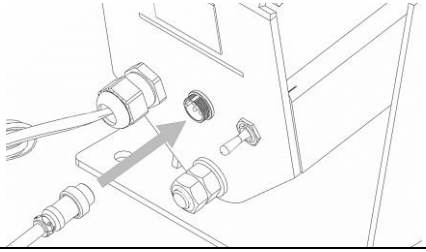
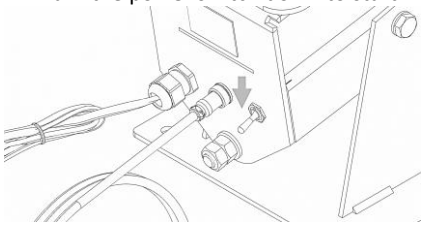


8. Place the cover tube into the mounting brackets and fix it at the back of thrower



9. Connect power cord to battery



10. Connect control wire to socket	11. Turn the power switch down to start
	

USE OF POWER SWITCH

The 3-position power switch is used both to turn the thrower on/off and to release the throwing arm.

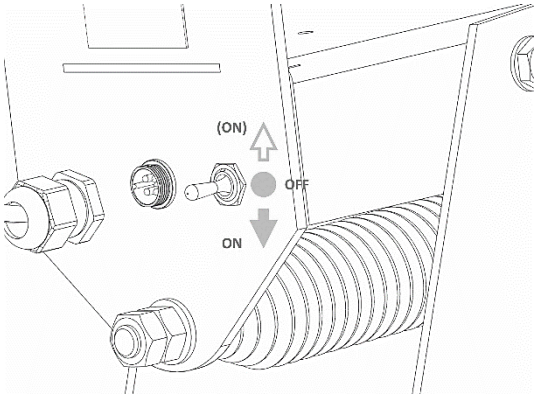
ATTENTION: Moving the switch up or down will immediately start the motor running the throwing arm. Take extreme care as the armed throwing arm may be set into motion with great force at any time. Make sure that there's nobody in the danger zone.

Upper position ON – thrower turned on

It turns the thrower on and sets the throwing arm into armed (ready to throw) position.

Bottom position (ON) – release of the throwing arm

It immediately starts the motor running the throwing arm as long as the switch is held in this position. Pay extra attention as the throwing arm will not be stopped by limit switch in this function.



Middle position OFF – thrower turned off

Set the power switch in this position:

- When the thrower isn't used.
- When repairs, adjustments or maintenance are performed.
- To fill the clay magazine up.

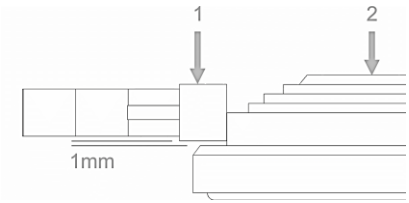
ATTENTION: Before turning the thrower off always disarm the throwing arm.

ATTENTION: After turning the thrower off, always disconnect the power cord from battery.

SLIDING PLATE ADJUSTMENT

The aim of adjusting the sliding plate is to achieve proper gap between throwing arm and sliding plate at all positions. It is essential to ensure proper operation of the thrower.

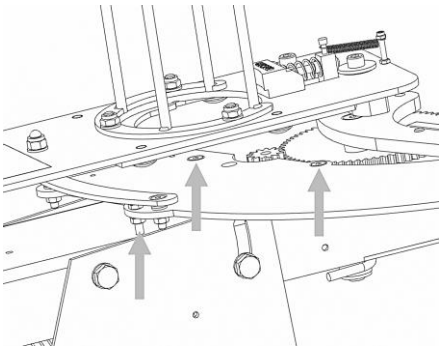
Due to natural wear, the throwing arm may reduce the distance to the sliding plate, which may result in breaking the clays. Therefore, it is necessary to periodically check the gap between the throwing arm (1) and the target (2) placed on the sliding plate, and if necessary, adjust it so the gap at all positions is approx. 1mm.



<u>ATTENTION:</u> BEFORE MAKING ANY ADJUSTMENTS MAKE SURE THE THROWING ARM IS IN SAFE POSITION AND THE THROWER IS DISCONNECTED FROM POWER SUPPLY.

Check that the throwing arm is not bent and remove the main spring.

1. Use the adjusting bolts to raise or lower the sliding plate to adjust the gap between the target and the throwing arm.
2. Rotate the throwing arm around (the motor will need to be started briefly to allow this movement) to check that the gap is constant along the entire surface of the sliding plate.

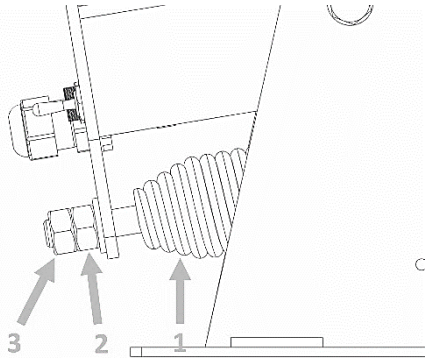


SPRING ADJUSTMENT

The throwing distance can be adjusted by tightening or loosening the main spring (1). Adjust the spring tension that is appropriate for your needs, remembering that the more the spring is stretched, the greater the speed of the clay and its flying distance.

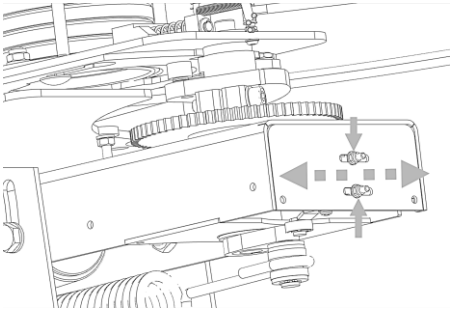
To set desired spring tension, loosen the jam nut (3), then tighten or loosen the nut (2) and lock with jam nut (3).

NOTE: It is necessary that with minimal spring tension, the coils should not touch each other at all times. Failure to do so may damage the throwing machine.

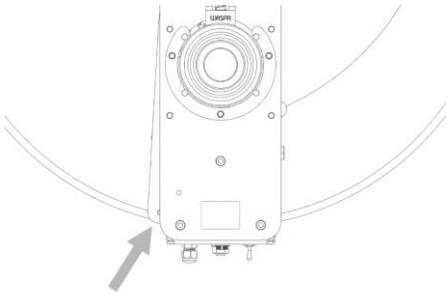


LIMIT SWITCH ADJUSTMENT

Due to the adjustments of the spring tension to your needs or the use of a battery with a different state of charge, you may be forced to adjust the limit switch setting, which corresponds into the stopping the throwing arm in the right place. For the mentioned reasons such adjustment may be necessary even when the thrower is started for the first time, despite our best efforts to adjust it properly.



To adjust the limit switch properly, loosen two nuts and move the limit switch so that the throwing arm stops at the place shown in the drawing. Remember that moving the limit switch to the left will stop the throwing arm earlier, and moving the limit switch to the right will stop the throwing arm later.



IMPORTANT: Moving the limit switch too far left may prevent the clay from falling onto the sliding plate in time and causing it to break. Moving the limit switch too far right may cause the throwing arm to not stop and the motor to run continuously.

TROUBLESHOOTING

<u>ATTENTION:</u> BEFORE MAKING ANY ADJUSTMENTS MAKE SURE THE THROWING ARM IS IN SAFE POSITION AND THE THROWER IS UNPLUGED FROM POWER SUPPLY.

1. **Motor isn't working:**

- Thrower is not connected to power supply. Connect it to battery.
- Power switch is broken or wrongly connected.
- The fuse has blown. Check and replace fuse. If the fuse won't stop to blow out, check cable and power source, to find the cause before continue.
- Power source is insufficient. Check voltage or replace for new one.
- Electrical connections are dirty, too loose or wrongly connected.
- The motor is damaged.

2. **Motor is running but it does not move the throwing arm:**

- Power source is insufficient. Check voltage or replace for new one.
- Throwing arm is blocked i.e. by clay debris. Unblock it. **(PROCEED WITH EXTREME CAUTION!)**.
- Gear drive mechanism does not work (the motor turns but the gear axle does not rotate).
- Main axle is broken. Replace it.

3. **Throwing arm is armed but it does not throw clays:**

- Power source is insufficient. Check voltage or replace for new one.
- Main spring is broken.
- The START button on cable control or radio control system does not work. Try to release the throwing arm with the switch located on the thrower.
- Throwing arm is blocked by clays or debris **(ATTENTION: Proceed with extreme caution!)**
- Throwing arm is bent and interferes with other parts. Throwing arm must be replaced.

4. **Throwing arm does not stop, throws clays non-stop:**

- Main spring is too loose. Adjust the main spring up.
- Limit switch is incorrectly set or broken. Adjust the limit switch, and if it doesn't solve the problem, replace it.
- The START button on cable control or radio control system is mechanically pressed or the cable is damaged.
- Another radio transmitter can be set on the same frequency as receiver and controls the thrower. Check by disconnecting the receiver from the thrower (applies to radio control only).
- Electrical circuit may be damaged.

5. **Abnormal noises:**

- Tighten all screws.
- The main spring is not tensioned enough and coils are touching each other. Tighten the main spring up.
- Throwing arm is bent and hits other parts.
- Clay magazine is not fixed.

6. Clays are being broken directly after the throw:

<u>VERY IMPORTANT:</u> Very often the cause of breaking the clays is not the thrower but the quality of clays. First of all, check the quality of the clays for damage or cracks for example by "tapping" them. If possible, use clays from another delivery. Remember also that once used clays cannot be used again in automatic throwing machines.

- Clays were broken before loading.
- Clays has been broken during loading.
- The throwing arm rubber is worn or damaged. Replace for new one.
- Throwing arm is bent. Replace it.
- Verify that the throwing arm keeps the same gap from sliding plate at all positions. If needed perform adjustment as described in this manual.
- Sliding plate is loose.
- Verify that there's nothing on the way of moving clay.

7. Two or more clays fell of and crash onto the sliding plate:

- Clays were broken before loading.
- Clays has been broken during loading.
- Clay holding mechanism is loose or damaged.
- Clays are stuck together. Separate the before loading into the clay magazine.

8. Clays does not fall from clay magazine:

- Different types of clays in use (different diameters, thickness).
- Clay magazine rods are damaged and prevents clays from free falling.
- Clay magazine base plate is damaged.

DECLARATION OF CONFORMITY

We declare that the following throwing machine:

WASPA Cwerg S30

complies with:
Machinery directive: 2006/42/WE
EMC: 2004/108/WE, EN 55022:2010, EN 55024:2010
GPS: 2001/95/WE, EN 60950-1:200

CE

Place and date: ……

Stamp and signature: