Contents [hide]

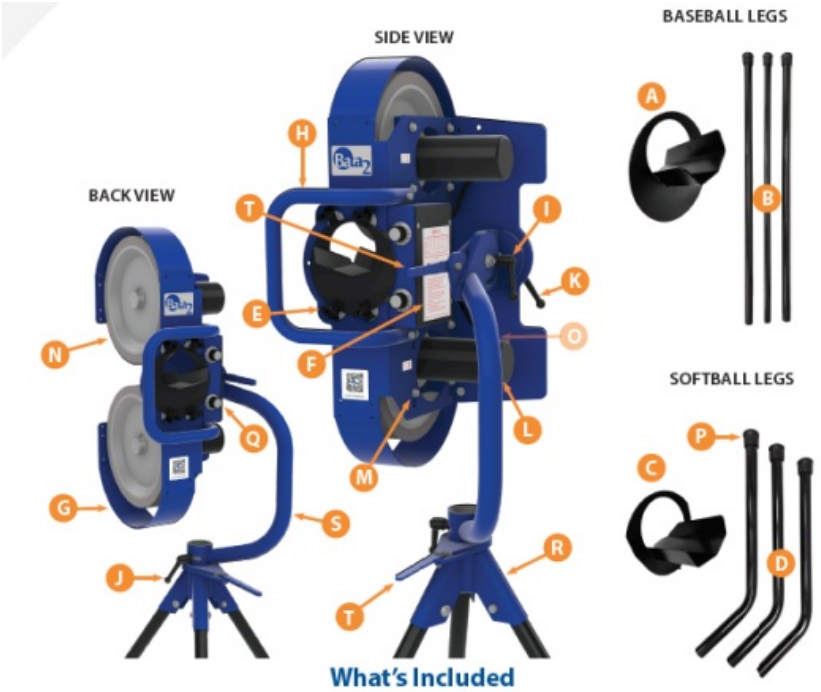
BATA 2 PRO Pitching Machine

ABOUT THE BATA 2 PRO

Our economical BATA 2 Pro Pitching Machine throws fastballs, curveballs, sliders, knuckleballs, pop flies, grounders & more up to 100 mph with pinpoint accuracy. This machine also gives you the ability to change the spin on straight pitches. This machine is equipped with micro-adjustment handles so you can make precise changes in pitch position. Ideal for batting or field baseball/softball practice. It is made in the USA and has a 10-year limited warranty!

BEFORE YOU BEGIN

Read these instructions fully before starting the assembly process or using the machine. Please make sure you have all of your parts and pieces. If not, contact our customer service.



What's Included

(A) Baseball Chute (If purchased)
(B) Baseball Legs x3 (If purchased)
(C) Softball Chute (If purchased)
(D) Softball Legs x3 (If purchased)
(E) Feed Chute Adjustment Knobs
(F) Speed Control Box
(G) Fender
(H) Handle
(I) Height Adjustment Handle
(J) Lateral Adjustment Handle
(K) Tilt Lock Adjustment Handle
(L) Motor
(M) Motor Mount Bolts
(N) Pitching Machine Wheel
(O) Power Cord (Behind Neck)
(P) Rubber Leg Tips x3
(Q) Speed Control Dial Knob
(R) Tripod Base
(S) Neck
(T) Micro Adjustment Handle

GUIDELINES FOR THE SAFE

ENJOYMENT OF YOUR PITCHING MACHINE

Hitting with a pitching machine involves a degree of risk; here are our suggestions to minimize that risk:

1. Never use this machine in wet or moist conditions.
2. DO NOT use the machine in temperatures less than 40°F or more than 100°F
3. Never stand or walk in front of the machine while it is running. Children should be supervised by an adult at ALL TIMES while using the machine.
4. Wear eye protection while manually feeding.
5. Keep your hands away from all moving parts.
6. Wear a batting helmet when batting.
7. DO NOT attempt to stop the wheel from rotating or touch anything on the wheels, even after turning off the machine.
8. Place a protective screen in front of the machine to protect the machine and operator. The warranty does not cover damage from batted balls.
9. If any unusual or loud noises occur with the machine, disconnect the power immediately and discontinue use until the cause can be resolved. Contact

Bata customer service: 800-762-2282.

10. Turn the machine OFF and wait for the wheel to stop rotating before making adjustments to the machine (other than speed and location).
    1. **WARNING:**

       This machine is NOT guaranteed to be 100% accurate. Although each machine is thoroughly inspected and tested before leaving the factory, occasional errant pitches may occur (and should be expected). This can be due to balls in poor condition, moisture or debris, careless/negligent use, improper settings, improper maintenance, mechanical failure, or other factors.

       Expect to have to react to errant pitches in the same way you would if you were batting off a real pitcher. It is important to make sure that all safety precautions are taken, and to instruct all participants on proper operating procedures and rules prior to. It is your responsibility to make sure that your machine is maintained in proper operating condition.

UNBOXING THE PITCHING MACHINE

How to unbox and set up your pitching machine for the first time.

1. Remove the machine from the box. Lift the machine out of the box and set it to rest on the front guard of the machine that is connected to the fender.
2. If you ordered the Quick Release Leg Lock Kit with the machine, it has been factory-installed. Slide each of the straight baseball legs or bent softball legs into the tripod base and secure them with the nuts and bolts provided with the Quick Release Leg Lock Kit. Hold each leg with your hand as you tighten the nut. Tighten the nut or QRL handle until the leg will not rotate.
3. The transport wheel kit may be installed now (page 7).
4. If you ordered a baseball-only machine, it is factory set for baseball. If you ordered a softball-only machine, it is factory set for softball. If you ordered a combo (baseball & softball) machine, it is factory set for baseball unless otherwise specified.

OPERATING INSTRUCTIONS

Before using your machine, perform the following routine checks to ensure

optimal performance.

1. Is the machine set to the right GAP?
2. Is the proper feed chute installed?
3. Are the wheels in the proper position on the motor shaft?
4. Are the motor cords connected properly at the plug connection?
5. Are there any loose nuts and bolts?
6. Are the balls dry and in good condition?
7. Do you have the proper power source? (see specifications)
8. Are you using a surge protector?

NOTE:
There is a break-in period for the wheels. You need to pitch 100 balls or more before the rubber is adequately scuffed up. Do not pitch to batters or expect the machine to pitch accurately until the wheels are broken in.

OPERATING INSTRUCTIONS

How to use the Bata 2 Pro pitching machine.

1. Place the machine in the pitching area. Visually aim it in the direction of home plate.
2. Choose the power source. Before plugging the machine into the power source, make sure that the speed control dial knobs are in the OFF position. Plug a surge protector into the power source.
3. Start the machine by turning the speed control dial knobs clockwise and setting them at the chosen speed. Allow the wheel to get up to speed before pitching the first ball.
4. Do not allow anyone to stand near home plate yet.
5. Feed one ball into the feed chute.
6. Adjust the location up, down, inside, or outside as needed.
    - To adjust the height, loosen the height adjustment lock handle about 1/4 turn and rotate the head of the machine up or down to change the location. To precisely change the location, move the vertical micro adjustment handle left or right. Lock the handle.

- To adjust the inside/outside location, loosen the lateral adjustment lock handle about 1/4 turn and rotate the head of the machine side to side to change the location. To precisely change the location, move the horizontal micro adjustment handle left or right. Lock the handle.
- To adjust the delivery angle, loosen the Tilt lock handle about ¼ turn, and tilt the head of the machine to your desired position (see page 7).

7. After setting the location, pitch at least 10 balls to check the location before allowing batters to step in.
    - NOTE:
      There will be some variation from pitch to pitch due to the balls themselves. Do not adjust the location pitch to pitch unless it is off by a significant amount.

BASEBALL TO SOFTBALL CONVERSION

How to change your machine from baseball to softball.

1. Lower the machine to the ground or lift off the head of the machine from the tripod and set it n the ground.
2. Remove the baseball legs from the machine by using a wrench or quick-release handles (sold separately).
3. Attach the softball legs and stand the machine back up.
4. Remove the feed chute from the machine by loosening the knobs.
5. Replace the feed chute with the larger softball version.
6. Using a 1/2” wrench or impact, loosen the top left and bottom right motor mount bolts around the top motor. Remove the top right and bottom left bolts. You will feel the motor drop.
7. Lift the motor and replace the bolts in the upper hole (see page 13). The upper holes have a very small adjustment range. The top of the hole is for leather softballs, and the bottom of the hole is for dimpled softballs. Tighten the bolts where you needto based on the type of softball you are going to use.
8. Loosen the four motor mount bolts around the lower motor. You will feel the motor drop. While the motor is all the way down, tighten the bolts. Now the

gap between the wheels is set for softball.

9. After setting the speed and location, pitch at least 10 balls to check the speed and location before allowing batters to step in.

GAP Measurement (Approximate):

Check the distance of the GAP to make sure it is correct before pitching:

- Dimpled Baseball: 2-1/8”
- Leather Baseball: 2-5/16”
- Dimpled Softball: 3”
- Leather Softball: 3-3/16”

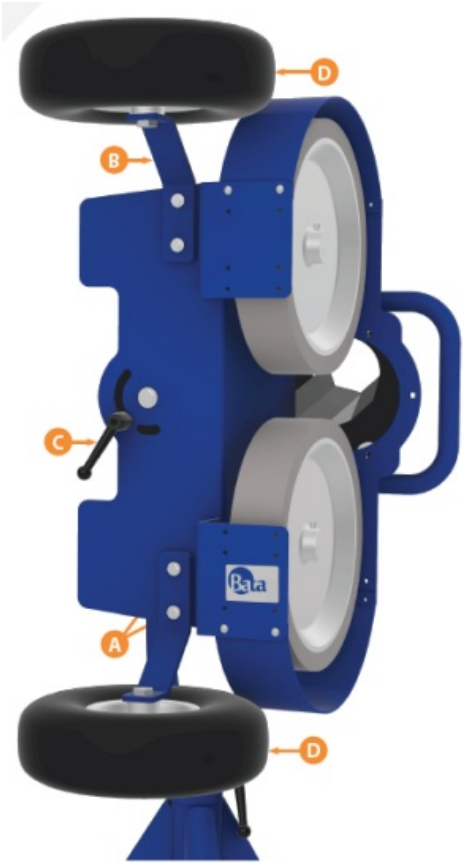
NOTE:

If the balls are coming out of the machine slowly and/or pitching inconsistently, that usually means the wheels are not set at the correct GAP. As you use the machine, your wheels will wear down, making the gap wider. You will need to make adjustments to your machine over time.

HOW TO INSTALL THE TRANSPORT WHEELS

How to install and use the transport wheels on the Bata 2 Pro pitching machine.

1. Insert each of the four 5/16 x 1” hex bolts through the frame of the machine with the heads of the bolts on the back side of the plate and the threaded ends shown on the front of the machine.
2. Place the transport wheel brackets on the bolts. Use the flat washers, lock washers, and hex nuts to secure the wheels to the frame. Tighten the nuts.
3. To transport the machine, remove the tilt adjustment lock handle on the front of the machine.
4. Tilt the head of the machine to a horizontal position so the transport wheels horizontal to each other.
5. Reinstall and tighten the lock handle.
6. Lower the head of the machine onto the ground onto the transport wheels. Use the legs as handles to roll the machine.



SPEED CONTROL

How to control the speed of your pitching machine.

- The speed of the pitch will be approximately the average of the values of the two dials. Using the assumption that each number on the dial represents 10 miles per hour, the maximum speed, with both dials at 10, will be about 100 mph. (Do not set both dials at 10. This will produce a 100 mph knuckle-ball that could be very dangerous. Realistically, the maximum fastball that you can expect (with proper back-spin) is about 90 mph.

SPEED FORMULAS

Fastballs

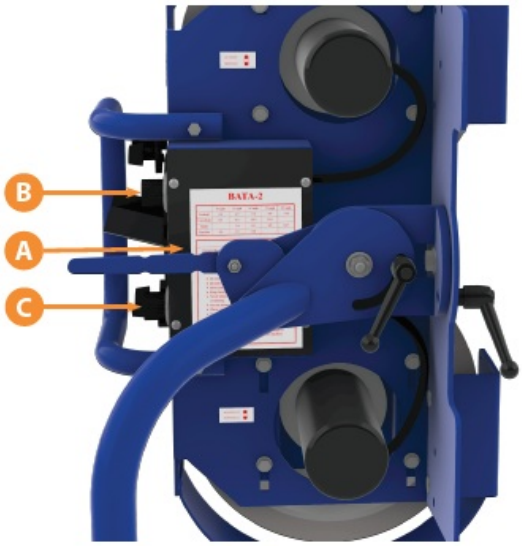
- Less sinking: 1:2. Example: Upper dial 50 / lower dial 100 (75 mph)
- More sinking: 2:3. Example: Upper dial 60 / lower dial 90 (75 mph)

Curveballs

- Less break: 3:1 Example: Upper dial 90 / lower dial 30 (60 mph)
- More break: 5:1 Example: Upper dial 100 / lower dial 20 (60 mph)

Sliders

- Less break: 4:3 Example: Upper dial 80 / lower dial 60 (70 mph)
- More break: 3:2 Example: Upper dial 84 / lower dial 56 (70 mph)
- Knuckleballs: 1:1 Example: Upper dial 55 / lower dial 55. (55 mph)



(A) Pitch Formula Chart
(B) Upper Speed Dial
(C) Lower Speed Dial

MICRO ADJUSTING PITCH POSITIONS

How to change the pitch position with the micro adjustment handles.

MICRO ADJUSTING PITCHES

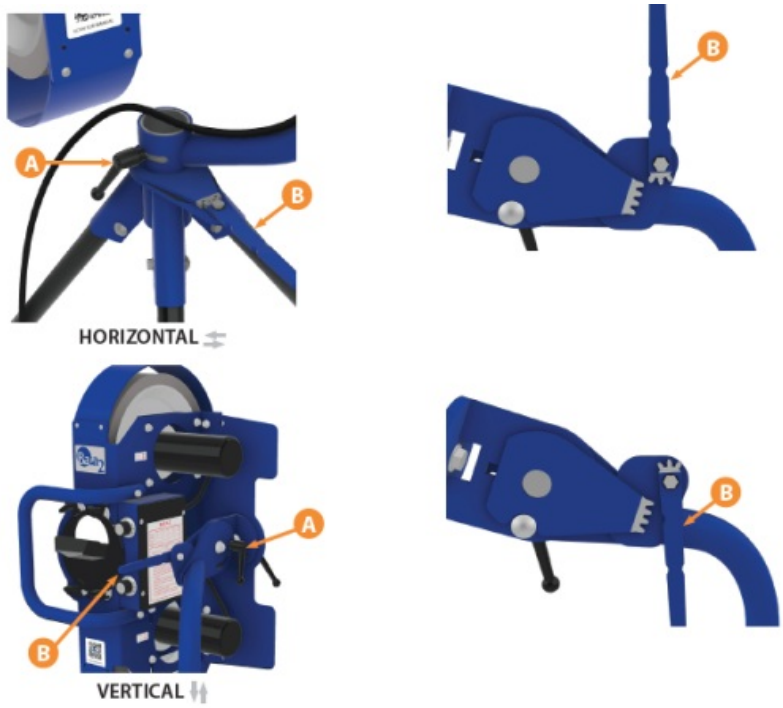
1. Loosen the height or lateral lock handle of your choice. A
2. Adjust the vertical or horizontal micro adjustment handle .B
3. Tighten the height or lateral adjustment lock handle .A

DISENGAGE MICRO ADJUST HANDLES FOR LARGE CHANGES IN PITCH POSITION

1. Loosen the height or lateral lock handle of your choice
2. Disengage the vertical or horizontal micro adjustment handle by bringing

the handle all the way up or to one side.

3. Move the handle all the way down and out of the way to make your large adjustment.
4. Move the machine to the ideal position
5. Tighten the height or lateral adjustment lock handle .

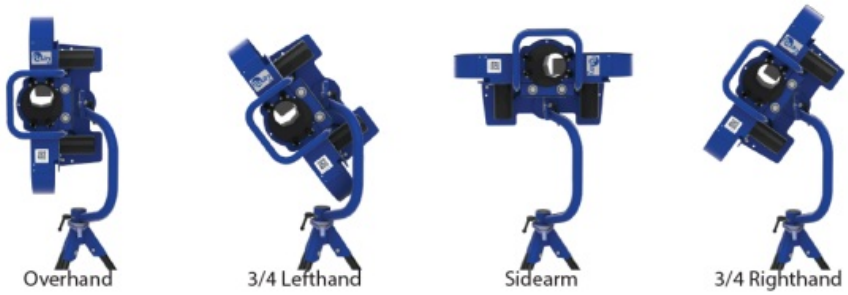


DELIVERY ANGLES

Guide for the different delivery angles this machine can achieve.

BASEBALL DELIVERY ANGLES

After tilting the head to the desired delivery angle, loosen the four knobs that hold the feed chute in place. Rotate the feed chute to ensure you have a level feed. Tighten the knobs.



- Overhand: The standard Fastball angle. With the head in this position, the

spin will be straight.

- Fastball: Set the top motor speed slower than the bottom motor speed. (2:3 – 1:2)
- Curveball: Set the top motor speed a lot faster than he bottom motor speed. (10:1 – 2:1)
- Slider: Set the top motor speed a little faster than the bottom motor speed. (3:2 – 2:1)
- Knuckleball: Set both motor speeds at the same setting. 6 on each dial should be the maximum speed on knuckleballs.
- Split-finger: Set the top motor speed just slightly faster or slightly slower than the bottom motor speed, depending on how much “sink” you want. (6:5 – 5:6)
- 3/4 Lefthand: Use this angle to throw tailing fastballs, sliders, and 3/4 curves from a lefthanded pitcher.
- Sidearm: Use this angle to throw pitches that have a lot of side break. Set the motor speeds so that the ball breaks to the slower wheel. For example, if you have the right motor speed at 9 and the left motor speed at 5, the ball will break to the left (the side with the slower motor speed).
- 3/4 Righthand: Use this angle to throw tailing fastballs, sliders, and 3/4 curves from a righthanded pitcher.

MAINTENANCE

How to maintain your Bata pitching machine.

1. DO NOT use the machine in temperatures less than 40°F or more than 100°F. Extreme temperatures will affect the rubber tread on the pitching wheels and the motors.
2. Store the machine in a clean, dry place. If you choose to leave your machine outside in your batting cage, just make sure that it is covered well enough to keep it dry.
3. Keep the pitching wheels clean, dry, and free of debris. Residue from balls does not need to be re-removed, unless it is affecting the pitching. If you do need to clean the rubber surface of the wheels, do not use any chemicals. Instead, use 60-grit sandpaper at a diagonal direction. DO NOT sand while

the machine is running.

4. After a prolonged period of non-use, the rubber on the pitching wheels will become oxidized, making the rubber slick. This will affect the wheel's ability to grip the ball and pitch it properly. You may need to scuff the rubber to get it back to a fresh rubber surface. Once the rubber is scuffed, regular use will prevent oxidation.
5. Check the GAP between the pitching wheels. The GAP must be adjusted properly for each type of ball (See GAP SELECTION).

SPECIFICATIONS

Information about your Bata pitching machine.

Power Sources

- Standard Outlet: 110 – 120 volt AC
- Generator: 110 – 120 volt AC output, 400 watts per motor minimum
- Extension Cords:

Length (ft)	Gage (minimum)
25′ or less	16
50′	14
100′	12
150′	10
200′	8

GAP SELECTION

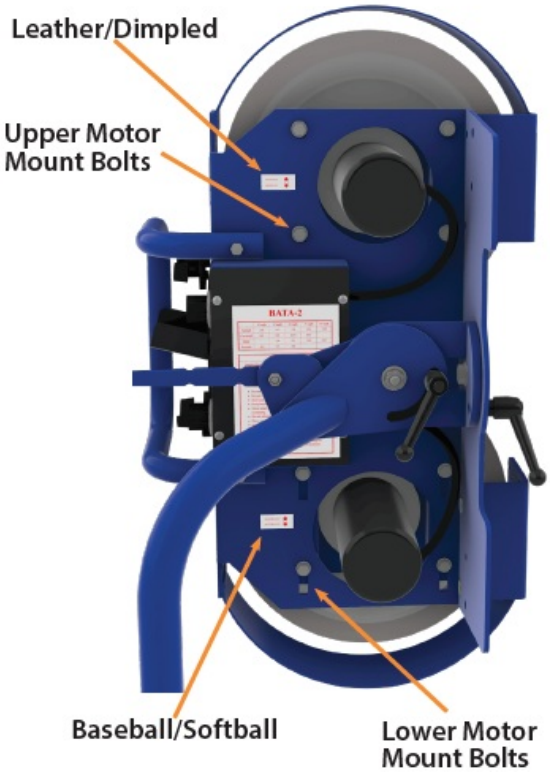
Important information about the gap between the wheels.

- The term "GAP" refers to the space between the pitching wheels. This machine will throw different types and sizes of balls. However, a different GAP is required for each. For example, a softball requires a larger GAP than a baseball. It is not necessary to change the GAP very often, if at all, unless you plan to use different types of balls.
- For example, if you are going to pitch only leather baseballs, you can leave

the GAP at the factory setting. If you are going to pitch baseballs and softballs, you will need to change the GAP accordingly for each type of ball.

Tools Required:

- 1/2” Socket OR Box End Wrench
- The upper motor mount bolt slots are elongated to allow a 2/10” of adjustment. As indicated, the upper end of the motor mount slots the machine to leather mode. The lower end of the thslots sets it to dimpled mode. To change ball types loosen all four upper motor mount bolts, move them up (leather) or down (dimpled), tightenthe bolts.
- The lower motor mount bolt slots are elongated to allow an inch of adjustment. As indicated, the upper end of the motor mount sets the machine to baseball mode. The lower end of the slots sets it to softball mode. To change ball types, loosen all four lower motor mount bolts, move them up (baseball) or down (softball), and tighten the bolts.
- When pitching at a faster speed or when using softer balls, adjustment may be required.



NOTE: The upper mount MUST be set in the LEATHER position when pitching real leather balls, for either baseball or softball. Pitching leather balls with it in

the DIMPLED position will damage the machine.

- To change the motor mount setting, using a wrench, loosen all four motor mount nuts just enough to allow the motor mount to slide, and position it as needed. Tighten the nuts to secure it.
- Keep your operating manual for future reference. If, at some point, the pitching wheels have worn significantly, , you may experience inconsistent or errant pitching. The following information may help you troubleshoot.

GAP Size

- If the GAP is too large, the wheels will not grip the ball tightly enough to pitch it accurately and consistently. This results in pitches that sometimes fall short of the plate and/or miss the strike zone. We recommend closing the GAP about 1/16” at a time until you get consistent pitching. Once you have determined the ideal GAP to match your dimpled balls, make a note of it. When the wheels wear, you may need to re-adjust the GAP.
- If the GAP is too small, it will cause erratic pitching. There are many different brands of dimpled balls on the market, and they are NOT all the same. Our machines are designed and calibrated to pitch dimpled balls and regulation leather balls. The gap can be adjusted to accommodate other varieties of balls, but we cannot guarantee that our machines will pitch them properly. Your best bet is to use balls that are proven to provide quality results. Dimpled balls and low seam balls pitch consistently in BATA machines. Double-check your settings.

GAP Measurement (Approximate):

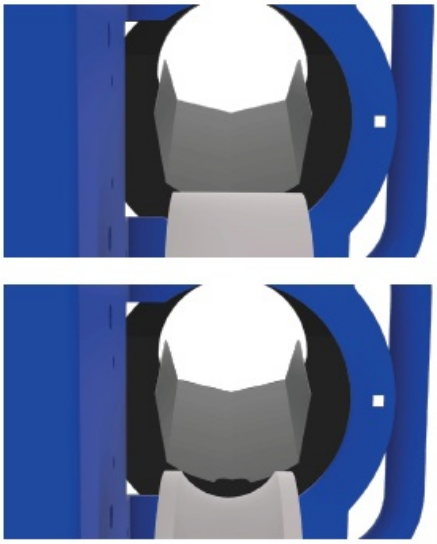
- Dimpled Baseball: 2-1/8”
- Leather Baseball: 2-5/16”
- Dimpled Softball: 3”
- Leather Softball: 3-3/16”
- You may also pitch 11” softballs in your machine. You can pitch 11” softballs at the 12” softball setting up to about 40 mph. If you want to pitch 11” softballs faster than 40 mph, you may need to reduce the

- GAP using the DIMPLED SOFTBALL setting. DO NOT PITCH 12” SOFTBALLS WITH THE GAP AT THIS WIDTH. It will damage the motors.
- NOTE: The feed chute and legs must also be changed if switching from baseball to softball or vice versa.
- WARNING: Failure to set the gap properly may damage the machine.

MEASURING THE GAP WITH WORN WHEELS

Important information about the gap between the wheel and the friction pad when the wheels are worn.

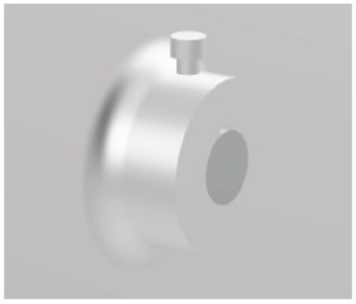
- After a lot of use, you will notice a “concave dip” being worn into the rubber on the wheel. This is normal wear and tear. As the dip becomes deeper, the GAP becomes larger. There may come a time when you will need to make adjustments to the machine to shorten the GAP. How much can the wheel wear before you have to adjust the GAP? That depends on how fast you’re pitching the ball. At lower speeds, a wider GAP will still work. At higher speeds, too large a GAP will allow inconsistent pitching.
- To measure the GAP, take a ruler or tape measure and measure from the edge of the wheel to the compression pad at the closest point. When the wheel is new, this measurement will be about 2-5/16” (with the GAP at the factory baseball setting), or 3-3/16” (at the factory softball setting). When the wheel is worn, you must do a calculation to determine the ideal GAP. The ideal GAP will be the average between the measurement at the edge of the wheel and the bottom of the concave dip.
- For example, if the wheel has 3/8” of wear, divide the total wear (3/8”) by 2, which gives you 3/16“. So, you would need to reduce the GAP by a total of 3/16”.



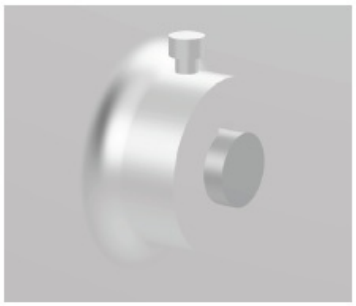
WHEEL POSITION

Important information about the position of the wheel on the motor shaft.

- Occasionally,y ou will need to check the position of the wheels on the motor shaft. This is very important for two reasons. First, the wheel must be positioned properly so that it is centered in the feed chute. Second, if the wheel is not properly positioned, the hub of the wheel may rub against the motor bolts, which can cause damage to the machine.
- To correct it, using a 3/16” Allen wrench, loosen (do not remove) the set screw about 1/2 turn. Slide the wheelback to the proper position with about 1/32” – 1/16” of the end of the motor shaft sticking out past the outside of the wheel hub and tighten the set screw. It threads aluminum-num, so be careful not to over-tighten or strip the threads.



Correct Position



Incorrect Position

TROUBLESHOOTING

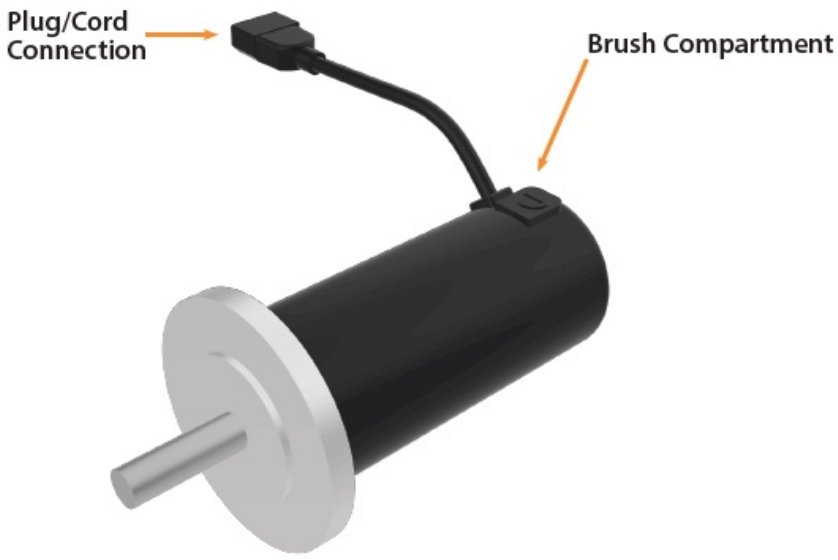
Having an issue with your machine? Read through these questions and answers. If the machine is still not fixed, please contact Bata 800-762-2282 or sales@batabaseball.com.

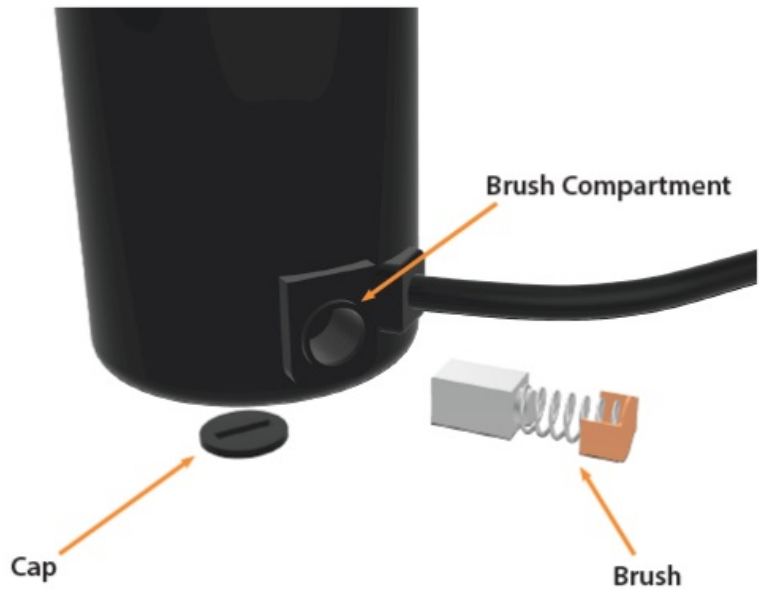
- PROBLEM 1: The Motor will not turn on.
- SOLUTION 1: Check to make sure the plug connection (2010 machines and later) between the motor and speed control box is properly connected.
- SOLUTION 2: Check the motor brushes.
    - The brushes are not actually brushes at all. They are an assembly consisting of a small metal tab, connected to a small rectangular piece of carbon via a spring and thin cable. The spring is supposed to feed the carbon “brush” into the part of the motor that is turning inside. This gives anlelectricalcal connection. If the carbon block does not feed easily into the armature, the circuit is interrupted. This may be caused by the carbon block hanging up in the socket, which may be caused by friction.
    - To check the brushes, first unscrew the small cap that has the screwdriver slot. The first thing you will see is the metal tab. Using a very small screwdriver, lift the metal tab until you can get it to pop up enough to get your fingers on it. Pull the brush assembly out of the socket by the metal tab.

      The assembly should slide in and out of the socket easily. If there is any

friction, this would cause the carbon block to not feed in properly. In this case, the easiest solution is to very lightly sand the side of the carbon block with very fine sandpaper (400 grit).

- Lay the sandpaper down on a flat surface and lightly drag the carbon block over it once. Check the fit. Repeat if necessary.
- When the brush assembly is out, check to make sure the spring and cable are not broken. If they are, the brush needs to be replaced.
- Replace the brush assembly. Slide it into the sock-et, push down on the metal tab, compressing the spring, until the metal tab sits down into the socket. Install the cap. Be careful when tightening the cap. It is thin and fragile.





- SOLUTION 3: Remove the cover of the speed control box and check the connections.
  Gently tug on each wire connection to make sure that there are no loose wires. Gently wiggle each connection on the circuit board to see if any of the soldered connectors have broken loose from the circuit board. If so, the circuit board needs to be replaced.
- SOLUTION 4: Check the HP resistor.
  For machines (2023 and newer) ,check to make sure the solder points are intact. If they are not intact, you will need a new circuit box. The HP resistor actually plugs into the circuit board into two tiny sockets. Sometimes the resistor can get knocked loose or out of the sockets completely. If it is out of the sockets, push it back in. Get it started with your fingers and push down on each end of the resistor where the wires are soldered. Do a little on each end at a time until it is all the way in. Check very closely to see if the small wires that come out of each end of theresistorr are intact or broken. If they are broken or if the block is broken, the HP resistor needs to be replaced.
- SOLUTION 5: Check for burned areas on the circuit board assembly.
  If thereares any burned areas, your speed controller was likely damaged by a power surge. In this case, the control box needs to be replaced.
- NOTE: You can avoid power surge damage by using a Surge Protector.
- SOLUTION 6: Check for water damage.
  If your machine got wet, it may be that your circuit has water damage. Sometimes you can blow the moisture out with an air hose, and it will dry out enough to work again, sometimes not. If there is water damage, it probably means that you will need to replace the control box.
- PROBLEM 2: Motor speed fluctuates or runs full speed all the time
- SOLUTION 1: Most likely a circuit board malfunction.
- PROBLEM 3: Wheel stopped rotating or is making a grinding noise.
- SOLUTION 1: Check the position of the wheel on the motor shaft (see page 9)

800-762-2282

sales@batabaseball.com

FAQs

Q: Can I use the pitching machine in wet conditions?

A: It is advised not to use the machine in wet or moist conditions to ensure safe operation and longevity of the equipment.

Q: How do I adjust the spin on straight pitches?

A: You can adjust the spin on straight pitches using the machine's Spin Adjustment feature. Refer to the operating manual for detailed instructions on how to make this adjustment.

Documents / Resources

	Bata BATA 2 PRO Pitching Machine [pdf] Instruction Manual BATA 2 PRO, BATA 2 PRO Pitching Machine, Pitching Machine, Machine

References

- User Manual

Bata, BATA 2 Pro, BATA 2 Pro Pitching Machine, Machine, Pitching

Bata Machine

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