



OWNER'S MANUAL

Instructions

JUGS SMALL-BALL[®] PITCHING MACHINE

Part No. Z7750



SAVE THIS MANUAL

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ATTENTION, Coaches and operators of this pitching machine:

This manual must be kept with the pitching machine at all times. Each coach and/or operator must read and understand this manual before using the JUGS SMALL-BALL® Pitching Machine. Call 1-800-547-6843 or 503-692-1635 for additional copies if needed.

Introduction

Your new JUGS® pitching machine has been checked for quality and craftsmanship. Its innovative design is backed by three decades of research, development and manufacturing experience. It has many features designed to make your practices more efficient and enjoyable. Safety, performance and dependability have been given top priority in the design of all JUGS® pitching machines, making them easy to operate and maintain. With proper care, your JUGS® pitching machine will give you many years of enjoyable service.

At JUGS®, we are committed to providing our customers with safe, dependable products. Your comments are always welcome and they help us to continue to be the #1 producer of ball-throwing machines in the world. Call or write to JUGS®, and let us know what you think.



Parts Inventory

The following parts come standard with your JUGS SMALL-BALL® Pitching Machine. If you have any questions regarding any of these parts, please call JUGS, Inc., toll free: 1-800-547-6843.



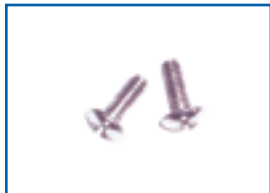
(1) JUGS SMALL-BALL® Pitching Machine



(1) Plexi Feed-Chute Extension



(1) Feed-Chute Bracket



(2) 1/2" Feed-Chute-Bracket Screws



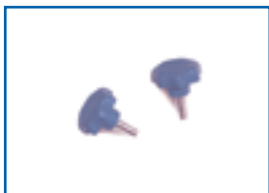
(1) Plexi Feed Chute



(2) 7/8" Plexi Feed-Chute Screws



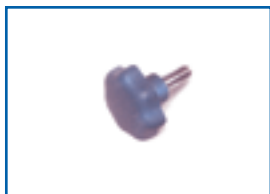
(1) Machine-Mount Bracket



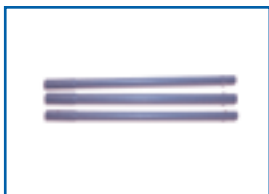
(2) Machine-Mount Knobs



(1) Base



(1) Vertical-Adjustment Knob



(3) Baseball Leg Extensions



(3) Short Softball Legs with Crutch Tips



(3) SMALL-BALL® Practice Balls






(1) Drill Book

To assemble the JUGS SMALL-BALL® Pitching Machine, you will need a Phillips screwdriver.

Product Safety Signs & Labels

Safety-Alert Symbols

Safety-Alert Symbols indicate **DANGER**, **WARNING** or **CAUTION**. These symbols may be used in conjunction with other symbols or pictographs. Failure to obey a safety warning will result in serious injury to yourself or to others. Always follow the safety precautions to reduce the risk of electric shock and personal injury.

-  **DANGER:** Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury. This signal word is limited to the most extreme situations.
-  **WARNING:** Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
-  **CAUTION:** Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

Product Safety Signs and Labels

The purpose of product safety signs and labels is to draw your attention to possible dangers. The safety symbols, signal words, and the explanations with them, deserve your careful attention and understanding. The safety warnings do not by themselves eliminate any danger. The instructions or warnings they give are not substitutes for proper accident-prevention measures.

Rules For Safe Operation

- ⚠ WARNING:** JUGS pitching machines are intended for use by operators who are at least 18 years of age and who have been instructed in their use.
- ⚠ WARNING:** Do not attempt to operate this machine until you have read thoroughly—and understand completely—all instructions, safety rules, machine labels, etc., contained in this manual. Failure to comply can result in accidents involving electric shock or serious personal injury. Save this Owners Manual and review frequently for continuing safe operation and for instructing others who may use this machine.
- ⚠ WARNING:** Do not connect your pitching machine to a power source until you have assembled and adjusted the machine as described in this manual and have read and understood all precautions and operating instructions in the manual and printed on the machine.

READ THIS MANUAL:

- **Know Your Pitching Machine.** Read the Owner's Manual carefully. Learn the machine's capabilities, features and limitations as well as the specific potential hazards related to this machine.
- **Guard against electrical shock.** Avoid body contact with grounded surfaces—for example, radiators, pipes, fences, or other enclosures.
- **Keep the operator's area free of clutter.** Pick up all loose balls around the machine and keep ball supply in a pail, bucket or other suitable container. Cluttered operating areas invite accidents.
- **Do not allow children to operate the pitching machine. You must be at least 18 years of age or older** and instructed in the proper operation, maintenance, care, and storage of this machine before operating it. Close supervision is necessary when this machine is used near children.

- **Use the right ball.** Use only JUGS SMALL-BALL®. **DO NOT USE REAL BASEBALLS OR SOFTBALLS.**



- **Inspect extension cords periodically.** Replace them if damaged.
- **Use the proper extension cord.** Make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your machine will draw. An undersized cord will cause a drop in line voltage, resulting in loss of power and overheating. A wire gauge size (A.W.G.) of at least 16 is recommended for an extension cord 25 feet or less in length. If in doubt, use the next heavier gauge. The smaller the gauge number, the heavier the cord.
- **Do not abuse the cord.** Never yank the cord to disconnect it from a receptacle. Keep cord away from heat, oil, and sharp edges. Stay constantly aware of the cord's location, and keep it well away from the rotating tire.
- **Dress properly.** Do not wear loose clothing, gloves, neckties, rings, bracelets, or other jewelry. They can get caught and draw you into the moving parts. Long hair should be tied up and tucked under hats and helmets. Severe physical harm may result if loose clothing, jewelry or hair is caught in the rotating tires.
- **Always wear safety glasses and batting helmets while the wheels are rotating.** Debris on the tires can fly off and cause physical harm. Everyday eyeglasses have only one-impact-resistant lenses; they are NOT safety glasses.
- **Never touch rotating tires.** Do not put hands or fingers into the Plexi Feed Chute. Hands and fingers should only go to the edge of the chute.
- **Inspect the machine before every use.** If damaged, have it repaired by a qualified JUGS service technician.
- **Inspect the tires before every use.** Be sure tires are free of grit and debris before turning on the machine.
- **Do not use the machine if the ON/OFF switch does not work.** In the unlikely event that the switch becomes defective, have it replaced by a qualified JUGS service technician.

- **Keep the machine clean, and free of grit and dirt.** With the machine unplugged, use only a clean damp cloth for cleaning. Never use brake fluids, gasoline, petroleum-based products, or any solvents to clean the machine.
- **Tighten Vertical Adjustment Knob securely after adjusting trajectory.**
- **Protect the operator.** Place a pitcher's screen in front of the pitching machine.
- **Operate and store this pitching machine only in a clean, dry location.** Do not use outdoors if it is raining. If the machine becomes wet, do not use it. A potential shock hazard exists if this machine is used while or after it has become exposed to water. Hand-dry surface water from the machine with a clean cloth and allow the machine to completely air-dry before its next use.
- **Avoid awkward operations and hand positions** where a sudden slip could cause your hand to move into the rotating tires. **ALWAYS** make sure you have good footing and balance.
- **Use only JUGS replacement parts when servicing.** All repairs, whether electrical or mechanical, should be made by a qualified JUGS service technician.
- **Do not operate this machine under the influence of drugs, alcohol, or any medication.**
- **Stay alert and exercise control.** Watch what you are doing and use common sense. Do not operate this machine when you are tired. Do not rush.
- **Avoid accidental starting when reconnecting to a power supply.** Always turn off the feeder and machine before disconnecting it from a power source. Never leave the machine running unattended. Turn the feeder off. Turn the power off. Do not leave the machine until the tires have come to a complete stop.

⚠ WARNING: Do not allow your familiarity with the machine to cause you to become careless. Remember that a careless fraction of a second is enough time to inflict severe injury to yourself or others.

SAVE THIS MANUAL. Refer to it often and use it to instruct other users. Do not loan your pitching machine to anyone who has not been instructed in its use. If you do loan your machine, be sure this manual goes with it.

Electrical

Grounding Instructions

This product must be grounded. If it should malfunction or break down, grounding provides a path of least resistance for the electric current—to reduce the risk of electrical shock. This product is equipped with a cord having an equipment-grounding plug. The plug must be connected to an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.

Do not modify the plug provided. If it will not fit the outlet, have the proper outlet installed by a qualified electrician. Improper connection of the equipment-grounding conductor can result in a risk of electric shock. The conductor with insulation having an outer surface that is green—with or without yellow stripes—is the equipment-grounding conductor. If repair or replacement of the electric cord or plug is necessary, do not connect the equipment-grounding conductor to a live terminal.

Check with a qualified electrician or service personnel if you do not completely understand the grounding instructions, or if you are in doubt as to whether the pitching machine is properly grounded.

Extension Cords

Use only 3-wire 16 AWG (or larger) grounding-type extension cords that have 3-prong grounding plugs and 3-pole receptacles that accept the machine's plug. When using the machine at a considerable distance from a power source, use an extension cord heavy enough to carry the current that

the machine will draw. An undersized extension cord will cause a drop in line voltage, resulting in a loss of power and causing the motor to overheat. Only round-jacketed cords listed by Underwriter's Laboratories (UL) should be used.

When working with the machine outdoors, use an extension cord designed for outside use. This is indicated by the letters WA on the cord's jacket. Before using the extension cord, inspect it for loose or exposed wires and cut or worn insulation.

⚠ WARNING: Keep the cord away from the rotating-tires area. Repair or replace a damaged or worn cord immediately.

Electrical Connection

Your JUGS pitching machine is powered by two motors. Do not operate this machine on direct current (DC). A substantial voltage drop will cause a loss of power, and the motor will overheat. If the machine does not operate when plugged into an outlet, double check the power supply. Your pitching machine will operate from a standard 110-voltage AC outlet.

This machine is intended for use on a circuit that has an outlet like the one shown in figure 1. It also has a grounding pin like the one shown.

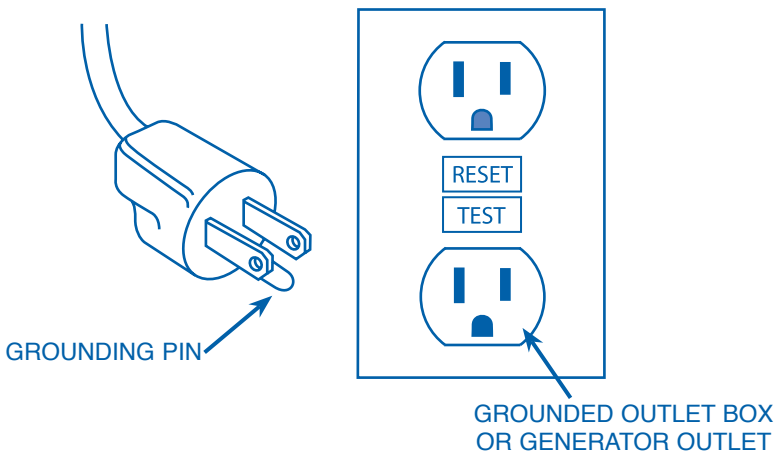


Figure 1

Terminology

SMALL-BALL® Pitching Machine Diagram

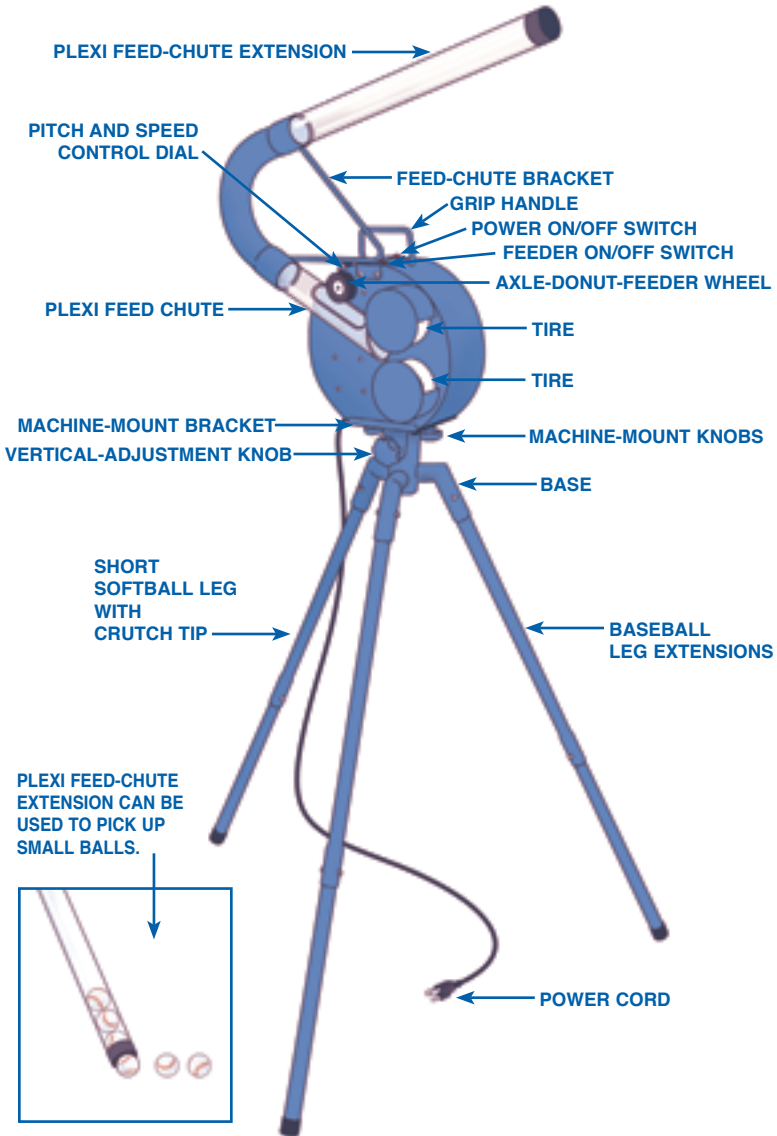


Figure 2

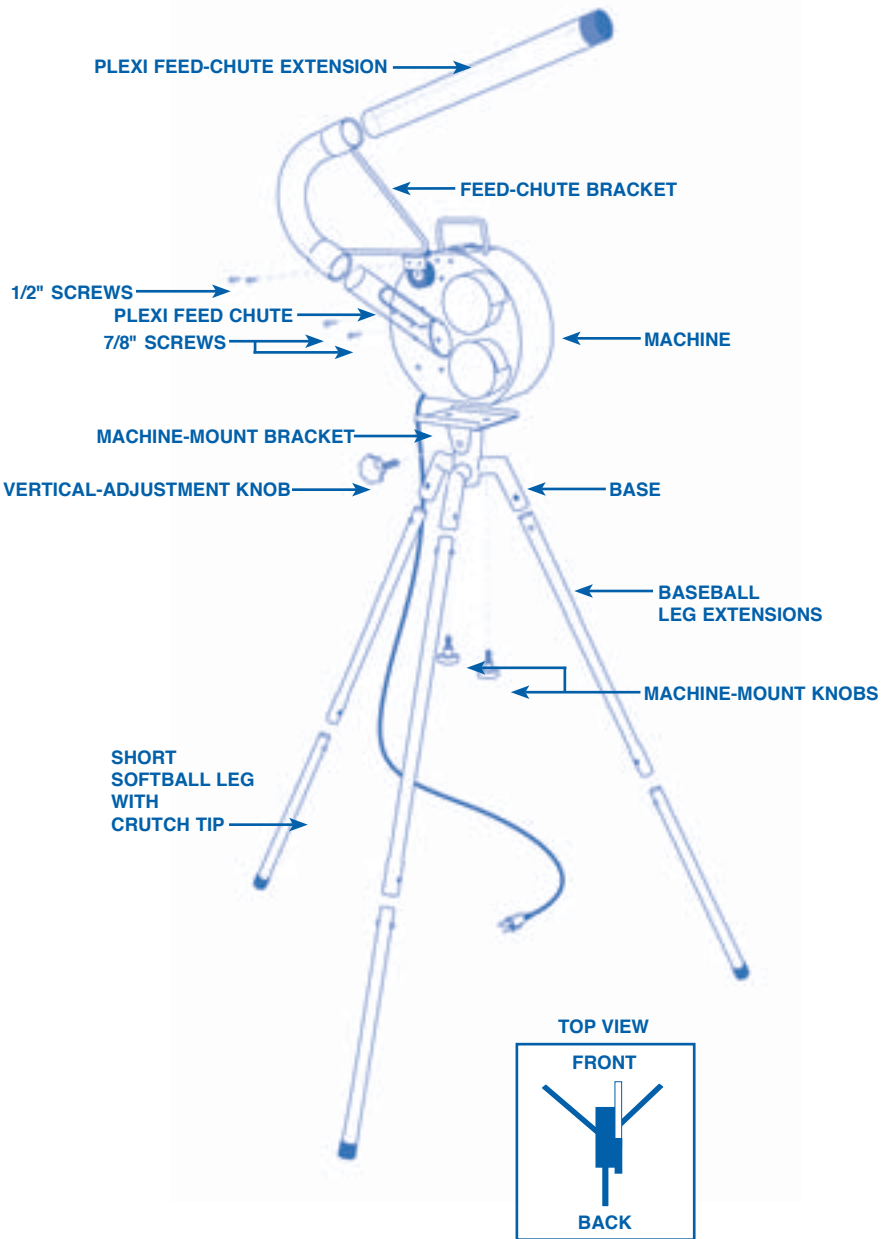
Unpacking

⚠ WARNING: To prevent accidental starting, or electrical shock that could cause possible serious injury, assemble all parts to your machine before connecting it to the power supply. The pitching machine should never be connected to a power supply when you are assembling parts, making adjustments, cleaning, servicing, or when you are not using it.

- Make sure you have all the parts (see Parts Inventory, page 4). If any parts are missing, do not operate the machine until the missing parts are replaced. Failure to do so could result in possible serious personal injury.
- Do not discard the packing materials until you have carefully inspected the machine, identified all the parts, and satisfactorily operated the machine.

NOTE: If any parts are damaged or missing, call the JUGS® Service Department at 1-800-547-6843 and ask for Don or Matt. Do not attempt to plug in the power cord and turn on the switch until the damaged or missing parts are obtained and are correctly installed.

Assembly: Exploded View



RECOMMENDED ASSEMBLY STEPS



1. If setting up the machine for baseball use, connect **Baseball Leg Extensions** to the **Short Softball Legs**, by squeezing QUICK-SNAP® buttons and sliding the pieces together. Be sure the QUICK-SNAP® buttons spring back up securely inside the lock holes. (If setting up for softball use, skip this step and move to step 2.)



2. Insert all three legs into **Base** using the QUICK-SNAP® buttons. Be sure the QUICK-SNAP® buttons spring back up securely inside the lock holes.



3. Standing behind the machine (2 legs in front, 1 leg in back), attach the **Machine-Mount Bracket** to the **Base** by threading the the **Vertical-Adjustment Knob** through the right side and into the nut on the left side. With the **Base** level, tighten the **Vertical-Adjustment Knob**.



4. Place the **Machine** on the **Machine-Mount Bracket** with control panel facing rear leg. Thread the **Machine-Mount Knobs** through the **Machine-Mount Bracket** holes and tighten.



5. Attach the **Plexi Feed Chute** to the **Machine** using two **7/8" screws**. Tighten the screws with a Phillips screwdriver.



6. Slide the **Feed-Chute Bracket** onto the **Plexi Feed Chute** and align the bracket with the two holes on top of the **Machine**. Insert and tighten both **1/2" Screws** with a Phillips screwdriver.



7. Slide the **Plexi Feed-Chute Extension** into the **Feed-Chute Bracket**.

Operation: Manual Feed

1. Operators of JUGS® Pitching Machines must wear safety glasses and batting helmets at all times.
2. Check and make sure the POWER switch is in the OFF position.
3. Plug a heavy-duty, No.16-gauge, three-prong extension cord into a 110-volt AC outlet and connect it to the power cord on the pitching machine. Place the pitcher's screen in front of the pitching machine to protect the operator and the pitching machine from batted balls.
4. Position the machine to aim at the desired target. While grasping the grip handle on top of the machine, loosen the vertical adjustment knob on the right side of the machine and adjust the trajectory as desired. Tighten the vertical adjustment knob securely. (You will have to practice this targeting so you will know how to set the machine for each pitch.)
5. Turn the pitch-control dial on your control panel to the pitch selection you desire.
6. **Make sure the FEEDER Switch is in the off position and the feeder is empty.**
7. Place the POWER switch to the ON position.
8. Have all batters and observers stand well clear of the target as you throw practice balls to adjust the trajectory. Tighten the vertical adjustment knob securely. (It is normal to throw five or six balls before arriving at the setting you desire.) Always have the batter and others stand clear while adjusting your JUGS pitching machine.
9. At the beginning of practice, or after any change in speed, curve, or trajectory, have the batter stand well clear while at least one test ball is thrown to make sure the ball is thrown at the desired target. If you move the machine for any reason, repeat this process.

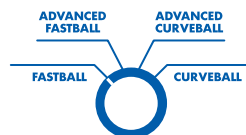


Operation: Manual Feed

10. **When throwing fastballs, throw balls at speeds the batter can learn to hit.** As the batter's skills increase, you can adjust your machine to throw with the advanced settings.
11. The optimal pitching distance for the SMALL-BALL® Pitching Machine is 20 feet. **COACHING TIP:** If you find the JUGS SMALL-BALL® Machine throwing too fast at its lowest speed, simply move the SMALL-BALL® Machine back a few feet (up to 25 feet away).
12. When you increase the speed of pitches, you must lower the elevation of the aim. When you decrease speed, you must increase the aim elevation.
13. Space all pitches approximately six seconds apart. Try to get the batter to regard each pitch as a “separate” pitch—and not to be an “automatic” swinger.
14. Always “show” the ball to the batter. When you are certain the batter has acknowledged that he or she is ready, set the ball in the feed chute and release it.
15. Do not permit more than one or two persons around the pitching machine during its operation.
16. Always turn the POWER switch to the OFF position when the machine is not in use.

⚠ WARNING: A pitching screen must be used to protect the operator and the machine from batted balls.

NOTE: We suggest that each operator spend a couple of hours experimenting with the JUGS® pitching machine. Try all four pitch settings.



IMPORTANT: If the machine becomes wet during practice, turn it off immediately and transport it to a clean, dry location. Wipe off surface water with a soft, clean cloth and permit the machine to air dry completely before its next use.

Operation: Automatic Feed

1. Operators of JUGS® Pitching Machines must wear safety glasses and batting helmets at all times.
2. Make sure the POWER switch and the FEEDER switch are in the OFF position.
3. Plug a heavy-duty, No.16-gauge three-prong, extension cord into a 110-volt AC outlet and connect it to the power cord on the pitching machine. Place the pitcher's screen in front of the pitching machine to protect the pitching machine from batted balls.
4. Fill the SMALL-BALL® Machine Feeder with as many balls as you desire—up to 25 balls. **Make sure POWER switch and FEEDER switch are in the OFF position when loading the feeder.**
5. Position the machine to aim at the target. While grasping the grip handle on top of the machine, loosen the vertical adjustment knob on the right side of the machine and adjust the trajectory as desired. Tighten the vertical adjustment knob securely. (You will have to practice this targeting so you will know how to set the machine for each pitch.)
6. Turn the pitch-control dial on your control panel to the pitch selection you desire.
7. Place the POWER switch and FEEDER switch to the ON position.
8. Have all batters and observers stand well clear of the target as you throw practice balls to adjust the trajectory. Tighten the vertical adjustment knob securely. (It is normal to throw five or six balls before arriving at the setting you desire.) Always have the batter and others stand clear while adjusting your JUGS® pitching machine.
9. **The 25-ball feeder will automatically release a ball every 5 seconds.**
10. At the beginning of practice, or after any change in speed, curve, or trajectory, have the batter stand well clear while at least one test ball is thrown to make sure the ball is thrown at the desired target. If you move the machine for any reason, repeat this process.

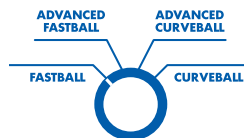


Operation: Automatic Feed

11. **When throwing fastballs, throw balls at speeds the batter can learn to hit.** As the batter's skills increase, you can adjust your machine to throw with the advanced settings.
12. The optimal pitching distance for the SMALL-BALL® Pitching Machine is 20 feet. **COACHING TIP:** If you find the JUGS SMALL-BALL® Machine throwing too fast at its lowest speed, simply move the SMALL-BALL® Machine back a few feet (up to 25 feet away).
13. When you increase the speed of pitches, you must lower the elevation of the aim. When you decrease speed, you must increase the aim elevation.
14. Do not permit more than one or two persons around the pitching machine during its operation.
15. Always turn the POWER switch and FEEDER switch to the OFF position when machine is not in use.

⚠ WARNING: A pitching screen must be used to protect the machine from batted balls.

NOTE: We suggest spending a couple of hours experimenting with the JUGS® pitching machine. Try all four pitch settings.



IMPORTANT: If the machine becomes wet during practice, turn it off immediately and transport it to a clean, dry location. Wipe off surface water with a soft, clean cloth and permit the machine to air dry completely before its next use.

⚠ WARNING: It is possible for this feeder to inadvertently release a ball even when the power to the feeder is turned off.

To avoid possible injury, at no time should the batter or anyone else place themselves in front of the SMALL-BALL® Machine or anywhere close to the line of flight of the pitch while the machine is plugged in or the feeder contains balls.

Baseball to Softball

Instructions for Changing Machine from Baseball to Softball

The JUGS SMALL-BALL® Pitching Machine is designed with adjustable legs for realistic delivery height for both baseball and softball.

- Remove the Plexi Feed-Chute Extension.
- Carefully tip the machine over on the SMALL-BALL® logo side of machine. Machine should be lying on the ground.
- Unsnap and remove all three legs by pressing the Quick-Snap® buttons where the legs meet the base.
- Separate the legs by pressing the Quick-Snap® buttons near the middle of the legs.
- Insert Short Softball Legs (legs with Crutch Tips) back into the base by pressing the Quick-Snap® buttons and sliding them in.
- Tip your machine back to the upright position and replace the Plexi Feed-Chute Extension.



Fielding Practice

An additional feature of your JUGS SMALL-BALL® Pitching Machine is its use for fielding practice.

IMPORTANT: When using the JUGS SMALL-BALL® Pitching Machine for fielding practice (fly balls and ground balls), it must be in the manual position.

Fly Balls

- Loosen the Vertical-Adjustment Knob, adjust the trajectory of the machine upward to the desired position, and then tighten the Vertical-Adjustment Knob. The greater the upward angle, the steeper the angle the fly ball or the pop-up will have. This machine will throw fly balls up to 50 feet.

Grounders

- Loosen the Vertical-Adjustment Knob, adjust the trajectory of the machine downward to the desired position, and then tighten the Vertical-Adjustment Knob securely. The greater the downward angle, the bigger the hop will be on the ground ball.



⚠ WARNING: Keep hands and fingers away from the tire and tire-side edges of the ball chute. When throwing pop-ups, the operator must wear a batting helmet and protective eye wear.

Maintenance

Review the following instructions carefully to maintain maximum accuracy of your JUGS® Pitching Machine.

Cleaning

- Keep the machine clean and free of grit and dirt. Always use a clean, damp cloth when cleaning. Never use brake fluids, gasoline, petroleum-based products, or any other solvents to clean the machine.

JUGS SMALL-BALL® Pitching Machine Product Specifications:

Frame Specifications:

Legs	steel tubing
Machine, Machine-Mount Bracket and Base	steel
Feed-Chute Bracket	steel
Overall Height—Baseball	70 in.
Overall Height—Softball	51 in.
Overall Width—Baseball	40 in.
Overall Width—Softball	22 in.
Overall Weight—Baseball	23 lbs.
Overall Weight—Softball	19 lbs.

IMPORTANT: Servicing requires extreme care and knowledge of the machine and should be performed only by JUGS®. For service, we suggest you return the machine to JUGS® for repair. We always use original factory replacement parts when servicing.

Warranty

JUGS Sports guarantees that the JUGS® Pitching Machines are well made; of good materials, and workmanship; and agrees that if, within one year after shipment thereof, any part so guaranteed should fail because of defective material or workmanship in its manufacture, the Company will repair or replace such part, free of charge F.O.B. its factory in Tualatin, Oregon; provided, however, that upon request, the Buyer shall return the allegedly defective part to the Company's factory with transportation charges thereon prepaid. Commercial use of JUGS® products automatically limits this warranty to 30 days after date of shipment.

This warranty shall not be effective if the equipment has been subject to misuse, negligence or accident, nor if the equipment has been repaired or altered outside of our Tualatin factory in any respect which, in our judgment, affects its condition or operation.

JUGS Sports
P.O. Box 3126
Tualatin, Oregon 97062

Model: _____
Serial No: _____
Date Delivered: _____

JUGS SMALL-BALL® INSTANT PROTECTIVE SCREEN



- Weighs less than 5 lbs.
- 6' x 4' Screen folds down to a 27" Circle
- Fits in the trunk of any car
- No assembly required
- Great for short-toss or soft-toss
- Comes with own carrying case
- Frame is made out of tough fiberglass tubing.

THE
LOWEST-PRICED
PROTECTIVE
SCREEN JUGS
OFFERS

IMPORTANT: JUGS **SMALL-BALL®** Instant Protective Screen can ONLY be used with JUGS *Lite-Flite®*, JUGS **BULLDOG®** Polyball and JUGS **SMALL-BALL®**.

If you need more information about this product or any other JUGS product or service, please contact the manufacturer:



In the USA and Canada, call toll-free: 1-800-547-6843.

For International Orders, call collect: 0-503-692-1635.

Our fax number: 1-503-691-1100. Our website: www.jugssports.com.

Se habla español.