

AXIOM SPORTS MANUFACTURING



Axiom Sports Manufacturing
A Division of Fitec International
3525 Ridge Meadow Parkway
Memphis, TN 38115
(901) 366-9144
www.axiomsports.com

Thank you for purchasing the Axiom Sports Cobra Jr. Pitching Machine. The Cobra Jr. is a high performance, precision pitching instrument designed to provide you with many years of operation.



Please pay careful attention to the maintenance section of this booklet. Used, serviced, and adjusted properly the Cobra Jr. will give you years of problem free use.



This is your assembly, operation, and practice manual. Please read all instructions before using this machine.



This machine has different settings for different types of balls. The machine is set for Axiom Sports Dimpled Baseballs (Item #83020).



Read and understand these instructions before operating the machine.

If, during the course of assembly or initial use, you have problems with your Cobra Jr., please contact Axiom Sports



SAFETY INSTRUCTIONS



- ⇒ Never use the Cobra Jr. in or near water or in a high moisture environment
- ⇒ Never place any part of your body on or near any part of the pitching wheel or in front of the machine while it is in operation and/or connected to a power source
- ⇒ Keep hands away from all moving parts
- ⇒ Batter should always wear protective head gear, preferably with a face guard
- ⇒ Turn the machine off and wait for the pitching wheel to stop rotating before changing the tilt angle of the pitching head. Do not attempt to manually stop the wheels from rotating, even after turning the power off.
- ⇒ Place a protective screen in front of the machine to protect both the machine and the operator. Axiom screens are sold separately — please see page 15
- ⇒ Before each use, check the pitching wheel for tightness. Tighten with an Allen wrench
- ⇒ Before connecting the Cobra Jr. to a power source, make certain the speed control is set to “0”



WARNING



This machine is not guaranteed to be 100% accurate. Although each and every machine is thoroughly tested for accuracy before leaving the factory, occasional errant pitches may occur due to balls in poor condition, moisture, careless or negligent use, improper maintenance, or other factors.

It is important to make certain that all safety precautions are taken and to instruct all participants on proper operating procedures before allowing them to operate the machine. **It is the owner's responsibility to make certain the machine is in good working order, properly maintained, appropriately adjusted, and all safety measures are followed before and during each use.**



CAUTION



Using excessive speeds for amusement can be very dangerous, can lead to immediate serious injury or even death, and is not recommended. For your safety, we ask that you use the Cobra Jr. only for its intended purpose. Select speeds that are equal to the batter's level of ability.

Additionally, we recommend that speeds in excess of 60 mph not be used when pitching from Little League or softball distance.

NOTE: A 60 mph pitch from 40 feet is equivalent to a 90 mph pitch from 60 feet. To calculate the equivalent of any pitch from 40 feet, multiply the actual speed by 1.5.

REMOVING YOUR COBRA JR. FROM THE PACKAGE

Carefully lift the machine from the box. Please be certain to maintain careful balance and use proper lifting techniques as the machine weighs 50 Lbs. Lift by the metal parts ONLY! Set the machine on the floor in the same position as it arrived in the box. Do not set the machine down with the control panel or with the speed adjustment knob touching the floor.

NOTE:

Check immediately to make certain there are no missing parts and there is no damage to the machine. Check all metal parts, the pitching wheel, the control box and knob, and the ball-feed chute for damage.

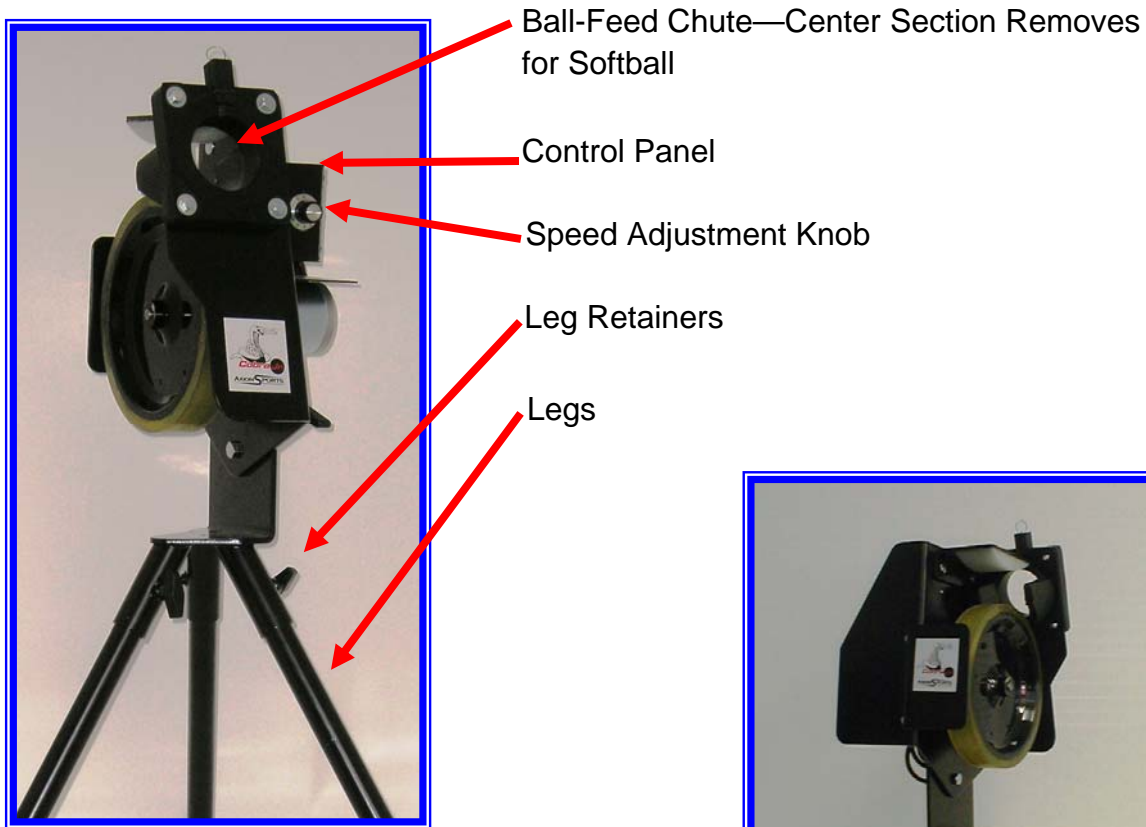
Your Cobra Jr. comes fully assembled except for the legs.

If you find any damage or missing parts, please contact Axiom Sports Manufacturing

ASSEMBLY INSTRUCTIONS

- ⇒ Remove the machine from the package and set it on the floor (see page 4)
- ⇒ Loosen the “leg retainers”
- ⇒ Install three legs as shown and tighten the “leg retainers”

Your Cobra Jr. is Ready to Use — It's that Simple!



Proper leg orientation—note that the “foot” points out and away from the machine. This will provide the machine stability during use



“GAP” SELECTION

The term “GAP” refers to the space between the pitching wheel and the pad above the wheel. The Cobra Jr. is designed to throw different types and sizes of balls (Baseball and Softball). Different balls require different “GAPS”.

It is not necessary to change the “GAP” very often (if at all — depending on your primary use of the machine), unless you plan to use different types and sizes of balls. For example, if you want to change from baseballs to softballs, the “GAP” must be widened.

TO CHANGE THE “GAP”

- ⇒ Turn the machine off and unplug the electrical cord
- ⇒ To change from baseball setting to softball setting (please remember that your Cobra Jr. arrives preset in the baseball position):
 - ⇒ Note that there are four bolt holes for the pad—two down (baseball — default orientation) and two up (softball)
 - ⇒ Remove the two bolts on the pad frame (currently in the lower holes)
 - ⇒ Slide the pad upward to the topmost bolt holes and reinsert the bolts
 - ⇒ Retighten the bolts



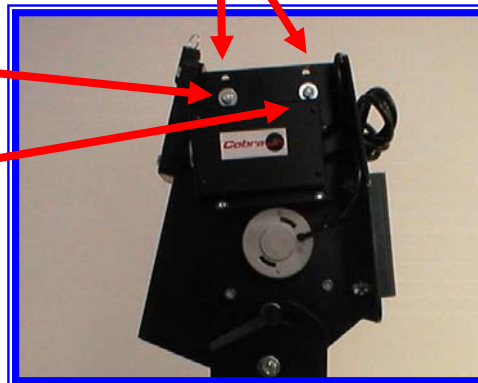
Pad

“GAP”

Softball Bolt Holes

Baseball Bolt Holes

Pad Bolts



Power Sources, Extension Cords, & Speeds

Power Sources:

Your Cobra Jr. operates on 110/120 volt AC electricity (60 Hz). You may plug your machine directly into a standard 110v household outlet or use an extension cord as noted below.

Extension Cords:



If you require an extension cord, it is important that you select one with an adequate wire gauge. An inadequate cord will cause overheating, poor performance, and premature motor burnout.

Adequate wire gauge size depends on the length of the cord. The longer the cord, the thicker the wire gauge must be. Wire gauges come in even numbers (8, 10, 12, 14, 16, etc...). The lower the number, the thicker the wire. For example, an 8-gauge cord is thicker than a 16-gauge cord. When selecting an extension cord, please follow these basic guidelines:

<i>CORD LENGTH</i>	<i>RECOMMENDED GAUGE</i>
25 Feet	16 Gauge
50 Feet	14 Gauge
100 Feet	12 Gauge
150 Feet	10 Gauge
200 Feet	8 Gauge

Power Sources, Extension Cords, & Speeds Contd.

Operating Speeds:

Your Cobra Jr. has 10 basic settings. These settings control the RPM of the wheel and the speed of the pitch. While not 100% accurate, the following chart provides a guide to the relationship between the speed setting on the control knob and the pitch speed of the ball. Please remember that all speeds are based on a 60' pitching distance using the recommended Axiom Sports Manufacturing balls.

REMEMBER:



The Cobra Jr. IS NOT designed to be used with real baseballs or softballs. Please use the recommended Axiom Sports Manufacturing Dimpled Baseballs.

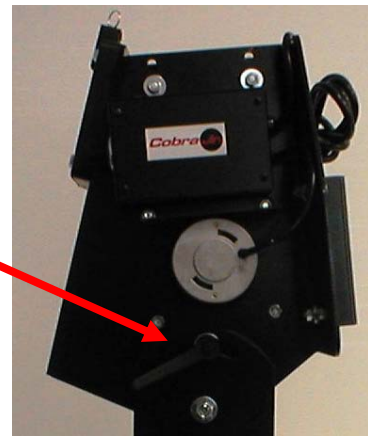
<i>SPEED SETTING</i>	<i>WHEEL RPM (App)</i>	<i>SPEED — BASEBALL MPH (App)</i>	<i>SPEED — SOFTBALL MPH (App)</i>
<i>1</i>	<i>700</i>	<i>0</i>	<i>0</i>
<i>2</i>	<i>900</i>	<i>0</i>	<i>0</i>
<i>3</i>	<i>1130</i>	<i>13</i>	<i>13</i>
<i>4</i>	<i>1600</i>	<i>20</i>	<i>19</i>
<i>5</i>	<i>2250</i>	<i>30</i>	<i>27</i>
<i>6</i>	<i>2800</i>	<i>36</i>	<i>35</i>
<i>7</i>	<i>3350</i>	<i>43</i>	<i>40</i>
<i>8</i>	<i>3820</i>	<i>50</i>	<i>46</i>
<i>9</i>	<i>3900</i>	<i>54</i>	<i>48</i>
<i>10</i>	<i>3900</i>	<i>60</i>	<i>54</i>

MAINTENANCE

Your Cobra Jr. requires periodic maintenance. Please follow these basic instructions to ensure proper performance of your machine

- ⇒ Check all nuts and bolts for tightness before each use
- ⇒ There is a single point where the pitching head pivots vertically. The locking handle at this point should be tight enough to keep the pitching head in the proper elevation without rotation during use. Please DO NOT over tighten

Pitching Head Elevation Locking Handle



- ⇒ When not in use, please store the Cobra Jr. in a clean, dry location. If you choose to leave your machine outside, make sure it is covered and kept dry. A plastic trash-can liner with a draw-string works well. Axiom does not recommend storing your machine outside. Moisture will ruin the electronic circuitry of the machine and void the warranty. Additionally, constant exposure to direct sunlight will shorten the lifespan of the pitching wheel
- ⇒ Keep the pitching wheel clean, dry, and free of debris. Residue from balls does not need to be removed. If you need to clean the pitching wheel, rubbing alcohol and a coarse rag work very well. **DO NOT CLEAN THE WHEEL WITH THE MACHINE PLUGGED IN AND/OR RUNNING!**

NOTE: After throwing several thousand pitches, you will notice a groove forming on the pitching wheel and that material from the wheel has collected on other parts of the machine. This is normal. Simply remove the material and debris that has collected on the machine. Using a clean, old paint brush works well for this exercise

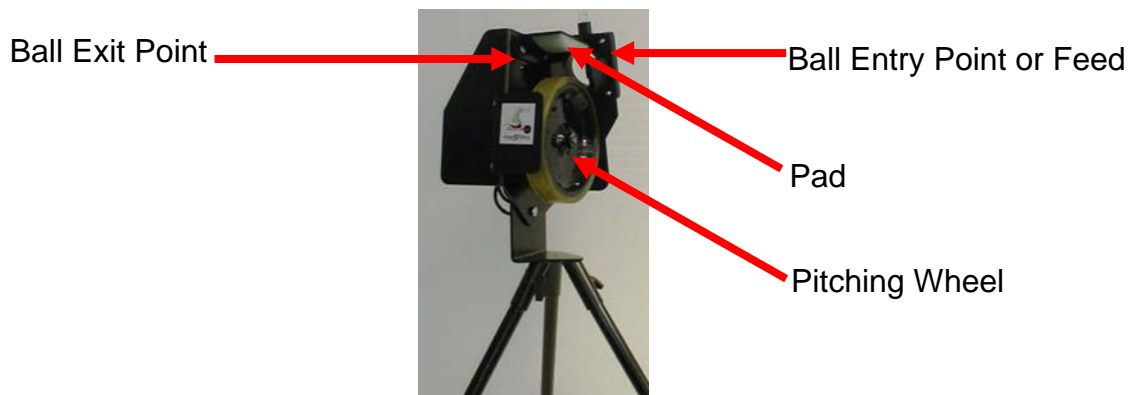
MAINTENANCE Contd.

- ⇒ Use care when transporting your Cobra Jr. Avoid the following:
 - ⇒ Allowing the pitching wheel to come in contact with the ground
 - ⇒ Dropping the machine
 - ⇒ Laying the machine down with the speed adjustment knob facing downward
 - ⇒ Bending any metal parts
 - ⇒ Stepping or pulling on the electrical cord
- ⇒ Occasionally, you may need to tighten the pitching wheel set-screw. The pitching wheel on the Cobra Jr. is secured to the motor shaft by a set-screw located in the center of the rim closest to the motor shaft. This set-screw can be tightened by using a 6mm Allen wrench. This set-screw **MUST BE** as tight as possible.

OPERATING INSTRUCTIONS

Basic Pitching Operation:

- ⇒ Place the machine on the pitcher's mound or in an appropriate location. Aim the machine at the hitting area or home plate



OPERATING INSTRUCTIONS Contd.

- ⇒ Select the type of pitch (baseball or softball) you are going to throw and adjust the “GAP” accordingly (Consult the “GAP” selection discussion on page 6)
- ⇒ Select the delivery or pitching angle (Adjust the Pitching Head Elevation Locking Handle as discussed on page 9)
- ⇒ Select the power source and proper cords (Consult page 7)
- ⇒ Before plugging the machine into the power source, be certain the speed control dial is turned to “0”. Now plug the machine into a surge protector and plug the surge protector into the selected power source
- ⇒ Start the machine by turning the speed control dial clockwise and setting it at the selected speed setting (See page 8). Please allow 8 to 12 seconds for the wheel to reach the required RPM before inserting the first ball into the feed chute
- ⇒ Throw the first pitch and adjust the location as required. To adjust the inside/outside location simply move the legs left or right. To adjust the pitching height, loosen the Pitching Head Elevation Locking Handle and reposition the head as required
- ⇒ After setting the speed and location, pitch at least 10 balls BEFORE allowing the batter to step into the batter’s box. The hitter should watch these 10 test pitches to become accustomed to the overall speed and angle of the delivery

Throwing Groundballs and Fly balls:

- ⇒ If your machine has a feed chute extension attached (for an automatic ball feeder — sold separately), you must remove it in order to throw fly balls. You may leave the feed chute extension in place for groundballs
- ⇒ To throw fly balls, tilt the pitching head back and lock in place. Set the speed as needed to achieve desired distance
- ⇒ To throw groundballs, tilt the pitching head forward. Set the speed as needed

Fly Ball Orientation



Groundball Orientation



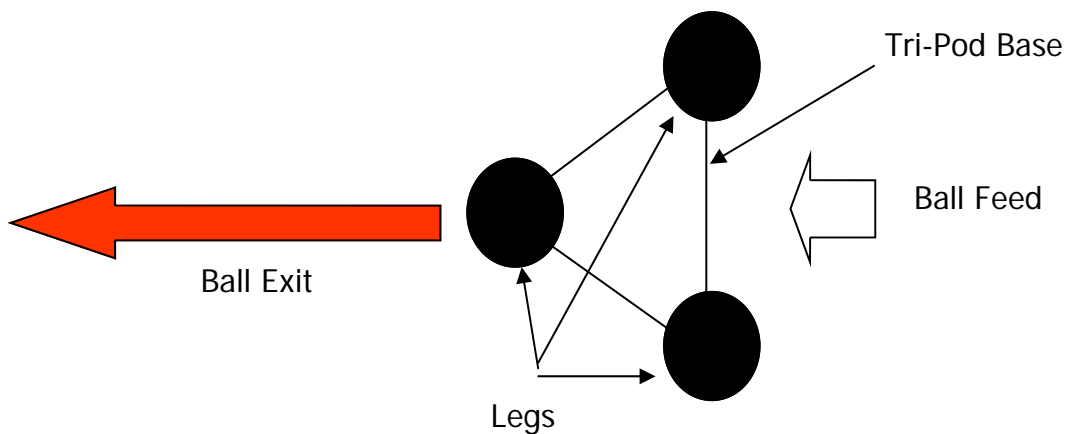
LEG ORIENTATION

It is important to properly orient the legs of your Cobra Jr. in order to achieve consistent pitch speed and direction. Due to the velocity at which the Cobra Jr. pitches balls, a tremendous amount of energy is created when the ball exits the machine. With the legs appropriately positioned (see below), this energy is transferred to the ball creating consistent speeds at the exit point.

If the legs are not situated as noted below, you may experience some backward motion, or recoil, of the pitching head or the machine (like the recoil produced by a cannon). This recoil will transfer some of the energy away from the pitch. In short, not all of the machines energy will be used to pitch the ball at the desired speed.

To properly orient the legs, simply ensure that the pitching head is rotated to a point that allows you to have two support legs behind the machine at the ball input side. This will leave the third leg in front of the machine, at the ball exit side .

Proper Leg Orientation



A NOTE ABOUT BALLS:

Your Cobra Jr. is designed to throw a wide range of baseballs and softballs. Here are just a few of the balls your machine will pitch:

- ⇒ Poly balls (at lower speeds)
- ⇒ Ventilated poly balls (at lower speeds)
- ⇒ Durafoam balls
- ⇒ Dimpled baseballs
- ⇒ Dimpled softballs
- ⇒ Leather baseballs
- ⇒ Leather softballs

While the Cobra Jr. is designed to throw real leather balls, here are some important points you should consider.

- 1) Real leather balls have raised seams as part of their construction
- 2) Raised seams increase the overall wear on the polyurethane wheels of the machine and will potentially shorten the life of the wheel — this is true of all pitching machines
- 3) Raised seams also increase the overall wear on the ball itself potentially reducing the life span of the ball — this is also true of all pitching machines
- 4) Due to the components used to construct the core of a real leather ball, constant use in a pitching machine will result in an overall softening of the ball, caused by breaking apart these internal components, thereby reducing its accuracy and “feel”— this is also true of all pitching machines
- 5) While real leather balls are sold at a variety of price points, they typically are more expensive than dimpled baseballs and softballs
- 6) **Do not use synthetic leather baseballs as they will leave a significant residue on the wheel and void your warranty**
- 7) Dimpled baseballs, made of polyurethane, are specifically designed for high speed pitching machines. These balls offer weight and size matches to real baseballs and softballs but will last longer, create less wear on the machine, and cost less (in most instances) than real balls
- 8) Used properly, with appropriate pitching head alignment, you will find that the Cobra Jr. will throw high-speed fastballs as effectively as real baseballs

YOUR COBRA JR. WARRANTY

Customer warranty statement for the Cobra Jr. Combination Pitching Machine

Purpose of Warranty:

To provide customers with confidence that they have purchased a quality product that will withstand the rigors of normal batting practice use. In order to protect all parties, certain conditions are imposed on the warranty. Rest assured that Axiom Sports Manufacturing stands behind all of our products and supports them with the after sales service they deserve.

Warranty:

This warranty is divided into two parts

Part 1 — The Full Warranty Period:

The full warranty period covers the first six (6) months of use from the date of purchase.

During this period, Axiom Sports Manufacturing warrants that it will, at its own option, repair, replace, or adjust, free of charge, any part that Axiom finds to be defective in materials and/or workmanship when used within the conditions of this warranty. All shipping costs related to returning products to Axiom Sports Manufacturing will be the responsibility of the customer.

Part 2 — The Pro-Rated Warranty Period:

The pro-rated warranty period covers the 6 to 24 months of use from the date of purchase.

This warranty is void if the product transfers ownership. During this period, Axiom warrants that it will, at its own option, repair, replace, or adjust any component that Axiom finds to be defective in materials and/or workmanship when used within the conditions of this warranty, at commercial rates based on the pro-rated schedule below. All shipping costs related to returning products to Axiom Sports Manufacturing will be the responsibility of the customer.

Age of Cobra Jr	0 to 6 Months	6 to 12 months	12 to 18 Months	18 to 24 Months
Warranty	100%	75%	50%	25%

YOUR COBRA JR. WARRANTY Contd.

Customer warranty statement for the Cobra Jr. Combination Pitching Machine

Subject Conditions & What Your Warranty Does Not Cover:

- ⇒ The defect is a consequence of the customer's failure to properly maintain, or use the Cobra Jr. pitching machine in accordance with good practice
- ⇒ This warranty does not apply to conditions caused by abuse, neglect, improper maintenance, or misuse
- ⇒ Shipping damage not originating from original product shipment to customer
- ⇒ Normal wear and tear
- ⇒ The use of the Cobra Jr. in commercial situations voids this warranty
- ⇒ Water damage
- ⇒ Use of improper balls

NOTE: At times, Axiom Sports Manufacturing will request that the consumer replace a part on the product in an effort to shorten the products "down time" and save the customer shipping costs

How to Obtain Service:

Prior to returning a product to Axiom Sports Manufacturing, you must:

1. Call us at 901-366-9144
2. Have your proof of purchase (receipt, bill of sale, or invoice) ready
3. Explain the problem to the representative who answers the phone
4. If the representative determines that you should return the product you will be provided with a **return authorization number**. This nine (9) digit number should be written clearly on the outside of the shipping carton when you return the product
5. Return the product in question along with a brief note describing the malfunction. Please include the following information:

YOUR COBRA JR. WARRANTY Contd.

- Your Name
- Your Address
- Your Phone Number
- Your E-Mail Address
- A Copy of Your Proof of Purchase

6. Ship the product, prepaid, to the following address:

Axiom Sports Manufacturing

ATTN: Returns (fill in Return Authorization Number here)

3889 Raines Road

Memphis, Tennessee 38118

Product Registration:

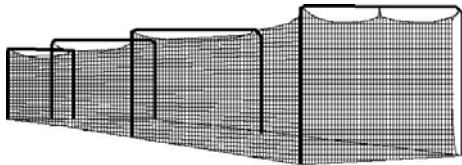
Please complete and mail the product warranty registration card packed with your Cobra Jr. This will make it much easier to contact you should it ever be necessary. Returning your product registration card will also make it easier to verify your original purchase information should warranty coverage be required.

How State Laws Relate to this Warranty:

This warranty gives you specific legal rights and you may have other rights that will vary from state to state

Thank You

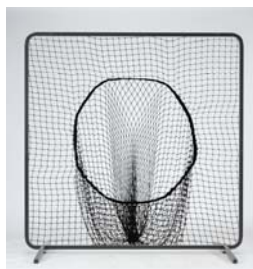
COBRA JR. ACCESSORIES



Batting Cage Kits & Backyard Kits:

From backyard kits to professional strength, from 30' to 70' in length and from 10' to 14' in width, a wide variety of choices are available

Please contact Axiom Sports for details



The Sock Net:

7' x 7' Net #81515, MSRP \$99.97

7' x 7' Frame #81161, MSRP \$99.97



Fielder's Screen

7' x 7' Net #81508, MSRP \$69.97

7' x 7' Frame #81161, MSRP \$99.97



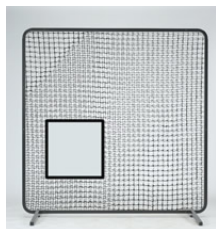
Pitcher's "L" Screen:

7' x 6' Net #81511, MSRP \$59.97 or

7' x 7' Net #81164, MSRP \$69.97

7' x 6' Frame #81160, MSRP \$99.97 or

7' x 7' Frame #81159, MSRP \$129.97



Softball Screen:

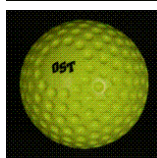
7' x 7' Softball Net #81165, MSRP \$69.97

7' x 7' Frame #81161, MSRP \$99.97



Venom Baseballs:

12-Pack #83020, MSRP \$24.97



Venom Softballs:

12-Pack #84010, MSRP \$29.97



Axiom Sports Manufacturing
A Division of Fitec International
3525 Ridge Meadow Parkway
Memphis, TN 38115
(901) 366-9144