WARRANTY STATEMENT

What is most important to Sports Attack is that your machine meets your expectations of quality and performance. We stand behind the material and workmanship of our machines for five (5) years from the date or original purchase for institutional and residential use and one (1) year for commercial environments, with the following exceptions:

- Throwing Wheels are warranted for two (2) years;
- Electronic Controller is warranted for two (2) years; and,
- Throwing Wheel Motors are warranted for two (2) years.

This warranty excludes any cosmetic issues or normal wear and tear of the unit, and is not in effect if the machine has been misused, misapplied, improperly assembled, or modified without the express written permission of Sports Attack. In addition, this warranty does not apply to damage in transit, in any accident unrelated to the direct operation of the equipment, or by fire, flood or act of God.

If you encounter any issues during the warranty period, Sports Attack will quickly get your machine back in working order. If the warranty repair involves a replacement part, we will make sure you get both the part and easy instructions for replacement at no cost to you. If a service person is needed, Sports Attack will pay the pre-approved labor charge to get your machine back in working order.

Please know that any problem can quickly be resolved with a phone call to our experienced, responsive customer service department at 800.717.4251. We are here to answer your questions and to make sure your machine provides you years of service.

RETURNS

Sports Attack manufactures the highest quality sports training equipment in the world. If for any reason you are not satisfied, a machine can be returned within 30 days of receipt for any reason for a full refund less a 15% restocking fee. Cost of shipping the unit back to Sports Attack will also be the responsibility of the purchaser. Please note that the refund amount may be reduced by any non-cosmetic damage to the machine.

If you have any questions or concerns, please give our experienced, responsive customer service department a call at 800.717.4251 or 775.345.2882

SHIPPING DAMAGE CLAIMS PROCEDURE

NOTE: For your protection, please note that equipment in this shipment was carefully inspected and packaged by skilled personnel before leaving the factory.

Upon acceptance of this shipment, the transportation company assumes full responsibility for its safe delivery.

IF SHIPMENT ARRIVES DAMAGED:

1. VISIBLE LOSS OR DAMAGE: Be certain that any visible loss or damage is noted on the freight bill or express receipt, and that the note of loss or damage is signed by the delivery person.

2. FILE CLAIM FOR DAMAGE IMMEDIATELY: Regardless of the extent of the damage.

3. CONCEALED LOSS OR DAMAGE: If damage is unnoticed until the merchandise is unpacked, notify the transportation company or carrier immediately, and file “CONCEALED DAMAGE” claim with them. This must be done within fifteen (15) days from the date the delivery was made to you. Be sure to retain the container for inspection.

Sports Attack, LLC. cannot assume liability for damage or loss incurred in transit. We will, however, at your request, supply you with the necessary documents to support your claim.
INTRODUCTION

Thank you for purchasing this Sports Attack, LLC. equipment. Your Drop Attack will be shipped in the right-hand spin position.

Proper assembly, careful operation and consistent maintenance of this equipment will ensure that it gives you the very best performance and a long, economical service life.

This manual contains the information needed to properly set up the Drop Attack Rugby Machine, and to use, care for and maintain the Drop Attack in a manner which will ensure its optimum performance.
SAFETY INSTRUCTIONS

ELECTRICAL SAFETY

Use a 110 or 220 volt (to match the power source) single phase 3-wire grounded power source.

Up to 200 ft. from power source, use a minimum #14/3 grounded 3-wire extension cord.

Over 200 ft. from power source, consult a licensed electrician for required power cord size.

OPERATING SAFETY

CAUTION: Never reach down near moving throwing wheels for any reason! If it is necessary to reach into the throwing wheels, ALWAYS:

1. Turn speed dial to “0”.

2. Turn the power switch “OFF”.

3. Unplug Drop Attack from power source.

4. Wait until the throwing wheels have come to a complete stop before reaching hands or fingers anywhere near the throwing wheels.

CAUTION: Carefully check Drop Attack for completeness and condition before connecting to electrical power.

Carefully check the throwing wheels frequently for cleanliness, chips and cracks. Do not use the machine if the throwing wheels are damaged, or if chips or cracks appear in the wheels. (For damage within warranty period, see Warranty Statement, page xi.)

ALWAYS set the speed control to “0” before connecting the machine to power.

Check that the speed control is at “0” before turning the throwing wheels “ON”.

Do not allow anyone to walk in front of the Drop Attack Rugby Machine if it is connected to electrical power.

CAUTION: DO NOT plug in or energize this equipment until all assembly instructions and operation instructions are read and followed.

BALL SELECTION

Balls must be official size and consistent in type to produce repeatability.

Never use wet or damp balls! Ball air pressure must be between 9.5-10.0 lbs.
If you have any questions regarding the safe operation of the Drop Attack, please call:

Sports Attack Customer Service Department
Ph 800-717-4251 or 775-345-2882
Fx 775-345-2883

**GENERATOR INFORMATION**

1. Drop Attack requires a generator capable of providing clean electricity (inverter technology) of a minimum 1000 watts at 120 or 220 volts 60hz.

2. Be sure the power switch is “OFF” before plugging Drop Attack into the generator.

3. Start the generator and allow it to reach full speed before turning the power switch “ON”.

**IMPORTANT:** Generator speed fluctuations can damage the electronic speed control. Maintain adequate fuel in the generator at all times.

4. Turn the Drop Attack power switch “OFF” before shutting off the generator and before unplugging the Drop Attack.
SAFETY HINT

When lowering or lifting, Drop Attack keep your back straight and lift with your legs. Be ready to grab the wheel guard and guide Drop Attack into the upright position.

WARNING

HAZARD FROM HIGH-SPEED PROJECTILES

Being struck by a thrown ball can cause serious injury or death. Make sure that no one steps in front of Drop Attack while it is connected to electric power.

Clear everyone away from machine before connecting Drop Attack to electric power.

SET-UP & PREPARATION USING THE DROP ATTACK

IMPORTANT: Lock pin must be removed (See Figure 5) and stored in adjacent hole to left. This will allow machine to pivot horizontally.

IMPORTANT: For maximum distance, balls must be properly inflated.

A. Setting machine up

1. Tilt machine up onto wheel guards.
2. Using wing nuts which are stored on bolts, attach throwing head to undercarriage, tighten wing nuts securely to passing stand (See Figure 6).
3. Insert 3 legs into sockets.
4. Using lifting handles tilt machine up onto all three tripod legs.
5. Remove lock pin and store in adjacent hole to left (See Figure 5).
6. Loosen horizontal control handle (See Figure 5).
7. Loosen stand elevation handle (See Figure 7).
8. Plug machine into power source. (110v or 220v)
9. Turn power switch “ON.”
10. Dial wheel speed to approximate speeds.
11. Continue throwing test balls and adjusting speeds until desired distance and speed is achieved.
12. To tilt throwing wheel to throw either end over and drop kick or spiral passes loosen wheel tilt knob and pivot motor.

SAFETY HINT

When lowering or lifting, Drop Attack keep your back straight and lift with your legs. Be ready to grab the wheel guard and guide Drop Attack into the upright position.

WARNING

HAZARD FROM HIGH-SPEED PROJECTILES

Being struck by a thrown ball can cause serious injury or death. Make sure that no one steps in front of Drop Attack while it is connected to electric power.

Clear everyone away from machine before connecting Drop Attack to electric power.
SHUTTING DOWN & TRANSPORTING

TURNING Drop ATTACK “OFF”

1. Set each speed control dial to “0”.
2. Turn the power switch “OFF”.
3. Unplug Drop Attack from the power source.

TRANSPORTING

1. Be sure machine is turned “OFF” and wheels are not turning.
2. Unplug cord from extension cord, standard outlet or generator.
3. Transport lock pin must be inserted in hole to right, locking head into position for transporting (See Figure A).
4. Using the elevation control, tilt the throwing head up (to high position) and lock into place (See Figure B). This will facilitate transporting.
5. Using handles (See Figure C) tip machine up and over onto the wheel guards.
   Unsocket two lower (front) legs, leaving upper (rear) leg in socketed position.
6. Lift rear leg and roll machine (See Figure D).

WARNING
PERSONAL INJURY HAZARD

Never reach down near throwing wheels for any reason! Always turn all three speed control dials “0”, turn the power switch “OFF”, unplug Drop Attack from the power source and wait until the throwing wheels have come to a complete stop before reaching hands or fingers anywhere near throwing wheels.

Figure A  Lock pin inserted to lock throwing head into position for transporting.

Figure B  Loosen stand elevation handle.

Figure C  Use handles to lift or lower the Drop Attack.

Figure D  Lift rear leg and roll. Shown being used with pass and punting stand.
CARE, CLEANING & MAINTENANCE

LUBRICATION (once per season, or as required):

1. Elevation Control Handle
   Apply fresh grease to threads.

2. Horizontal Swivel Lock
   a. Completely remove the horizontal swivel lock. Clean all old grease, dirt, etc. from the threads.
   b. Wipe the threads with a very small amount of fresh grease.
   c. Reinstall.

THROWING WHEEL MOTORS
Motors are sealed and require no lubrication.
Check bolts for tightness once a season. Tighten bolts securely, but do not over-tighten. See page 11.

CLEANING THE throwing wheels
The throwing wheels must be kept clean to maintain accuracy. Clean the wheels periodically to control the build-up of grass and dirt.

1. Turn the power switch “OFF” and allow the wheels to come to a complete stop. Unplug Drop Attack from electric power.
2. Dampen a rag with soap and water. Turn the throwing wheel by hand and scrub the wheel until the build-up is removed. For very heavy build-up, a synthetic scouring pad, such as a Scotch-Brite® scouring pad, may be used sparingly.

EXAMINE THE MACHINE
Examine Drop Attack for condition and completeness before every use:

1. Throwing wheels must be tight on the motor shafts. Check that the four bolts holding the motor to the throwing head assembly are tight.
2. Wheel guard and ball cradle must be securely fastened.

CAUTION
PERSONAL INJURY HAZARD
Never attempt to clean the throwing wheels while they are turning. Rags or implements caught in spinning wheels can cause serious injury.
Unplug the machine before cleaning the wheels or performing any service.
COMPONENT REPLACEMENT

THROWING WHEEL REPLACEMENT

1. Turn the throwing wheels “OFF” and unplug the power cord. Remove 4 bolts holding the top wheel guard to the bottom wheel guard.

2. Hold the wheel so that it cannot move. Turn the keyway retaining bolt counter-clockwise using a box end wrench (See Figure 10).

   SUGGESTION: If the bolt is too tight, give the opposite end of the wrench a series of light taps with a hammer making sure the wrench remains on the bolt.

3. Remove the bolt and washers.

4. Work the wheel off of the motor shaft. Be sure to catch the key as it is freed from the keyway.

5. Ball throwing wheels are machine balanced. Small holes in the side of the wheel are applied at the factory and are normal.

Reassemble in reverse order.

   a. Install wheel to motor shaft with key slots aligned.
   b. Be sure the key is in place, and inserted so that it is flush with the boss at the wheel center.
   c. Be sure the Washer and Lock Washer are installed in the right order, and that the keyway retaining bolt is tightened.
   d. Test the wheel by spinning it by hand and making sure that it spins freely without wobble before turning the unit “ON”.
   e. Be sure the top wheel guard is properly and securely reinstalled.

NOTE: Check bolts for tightness once a season. Tighten bolts securely, but be sure not to over-tighten.
COMPONENT REPLACEMENT (cont’d)

MOTOR REPLACEMENT

1. Turn the power switch “OFF” and unplug the power cord.
2. Remove top wheel guard.
3. Remove the throwing wheel (See page 11).
4. Remove bottom wheel guard.
5. Remove four screws holding the controller into the control box casting. Note the position of the motor wires on the controller, then disconnect the wire for the motor to be replaced (See Figure 14 on page 13).
6. Note the routing of the motor wires. Loosen wire clamps and pull wire away from machine.
7. To remove motor, remove the 1 - 1/4” nylon nut using a 7/12” socket. Then remove the 2 - nylon nuts using a 1/2” socket.
9. Reassemble in reverse order.

NOTE: Check bolts for tightness once a season. Tighten bolts securely, but be sure not to over-tighten.

MOTOR REPLACEMENT TOOLS

When replacing the motor, you will see two sets of bolts:

2 - 1/4” x 3/4” coarse Allen flat socket cap screw
2 - 5/16” x 1” coarse thread bolts

The Allen wrench needed for the 1/4” Allen screw is a 5/32”.
The wrench or socket size needed for the 5/16” bolt is a 1/2”.

Removing bottom wheel guard, shown using a 1/2” socket.
COMPONENT REPLACEMENT (cont’d)

CONTROLLER REPLACEMENT

1. Turn the power switch “OFF” and unplug the power cord.

2. Remove knob from the controller.

3. Remove four screws holding controller faceplate into main casting. Note the position of the main power and motor wires on the controller, then disconnect the wires. See Figure 14 for the two motor wires. See Figure 13 for the main power cord wires.

4. Loosen the nuts holding the speed control shaft (potentiometer) to the faceplate, then remove the controller.

Reassemble in reverse order.
Be sure wires are correctly reinstalled. Motor wire connectors are different sizes. Be sure they are installed on the correct size terminal. See Figure 14 for the two motor wires and Figure 13 for the power cord wires.

Figure 14 Wiring diagram for all two motors.

Figure 15 Wiring for all two motors.

Figure 16 Wiring diagram for Automatic Model.

<table>
<thead>
<tr>
<th>Motor</th>
<th>Black Wire</th>
<th>White Wire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Right</td>
<td>A-</td>
<td>A+</td>
</tr>
<tr>
<td>Left</td>
<td>A+</td>
<td>A-</td>
</tr>
</tbody>
</table>

Left is the side with the Control Plate as you stand behind machine.

Black motor wires are 1/16” female disconnect and white wires are 1/8” female disconnect.
EXPLODED VIEW - DROP ATTACK

1. Cane Tip
2. Leg
3. Swivel Assy
4. Handle Horizontal Swivel Lock
5. Locking Pin Frame to Swivel
6. Undercarriage Assy
7. Handle, Elevation
7A. Bolt, Carriage
8. Disc, Elevation
8A. Elevation Clutch
9. Throwing Head Assy
10. Motor 110V or 120V
11. Throwing Wheel
12. Wheel Guard, Lower Left
13. Wheel Guard, Upper Left
14. Wheel Guard, Lower Right
15. Wheel Guard, Upper Right
16. Controller (110V/220V)
17. Lifting Handle
18. Slide, Lower Cradle Slide
19. Slide, Upper Cradle Slide
20. Ball Cradle
21. Wheel Tilt Knob
22. Travel Wheel
<table>
<thead>
<tr>
<th>EM</th>
<th>PART NO.</th>
<th>DESCRIPTION</th>
<th>QTY PER</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>280-1003</td>
<td>Cane Tip</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>532-0007</td>
<td>Leg</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>531-1046</td>
<td>Swivel Assy</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>533-2016</td>
<td>Handle Horizontal Swivel Lock</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>340-2009</td>
<td>Locking Pin Frame to Swivel</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>533-2014</td>
<td>Undercarriage Assy</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>533-2026</td>
<td>Handle, Elevation</td>
<td>1</td>
</tr>
<tr>
<td>7A</td>
<td>410-0040</td>
<td>Bolt, Carriage</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>533-2027</td>
<td>Disc, Elevation</td>
<td>1</td>
</tr>
<tr>
<td>8A</td>
<td>340-2049</td>
<td>Elevation Clutch</td>
<td>1</td>
</tr>
<tr>
<td>9</td>
<td>533-2500</td>
<td>Throwing Head Assy</td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td>530-1012</td>
<td>Motor 110V OR (220V match w/power source)</td>
<td>2</td>
</tr>
<tr>
<td>11</td>
<td>530-1013</td>
<td>Motor 220V OR (110V match w/power source)</td>
<td>2</td>
</tr>
<tr>
<td>12</td>
<td>531-0009</td>
<td>Throwing Wheel</td>
<td>2</td>
</tr>
<tr>
<td>13</td>
<td>533-2022</td>
<td>Wheel Guard, Lower Left</td>
<td>1</td>
</tr>
<tr>
<td>14</td>
<td>533-2023</td>
<td>Wheel Guard, Upper Left</td>
<td>1</td>
</tr>
<tr>
<td>15</td>
<td>533-2021</td>
<td>Wheel Guard, Lower Right</td>
<td>1</td>
</tr>
<tr>
<td>16</td>
<td>533-2024</td>
<td>Wheel Guard, Upper Right</td>
<td>1</td>
</tr>
<tr>
<td>17</td>
<td>530-0005</td>
<td>Controller (110V or 220V) - Specify</td>
<td>1</td>
</tr>
<tr>
<td>18</td>
<td>533-2016</td>
<td>Handle Lifting</td>
<td>2</td>
</tr>
<tr>
<td>19</td>
<td>350-0006</td>
<td>Slide, Lower Cradle Slide</td>
<td>1</td>
</tr>
<tr>
<td>20</td>
<td>350-0007</td>
<td>Slide, Upper Cradle Slide</td>
<td>1</td>
</tr>
<tr>
<td>21</td>
<td>533-2501</td>
<td>Ball Cradle</td>
<td>1</td>
</tr>
<tr>
<td>22</td>
<td>280-2001</td>
<td>Knob, Wheel Tilt</td>
<td>1</td>
</tr>
<tr>
<td>23</td>
<td>281-0001</td>
<td>Travel Wheel</td>
<td>2</td>
</tr>
</tbody>
</table>

To order additional parts, please contact:
Sports Attack
Customer Service Dept.
Ph 800-717-4251
Fx 775-345-2883
Please visit our web site www.sportsattack.com for information about Sports Attack sports training products, or call 800-717-4251 for complete information and specifications.
Please visit our web site www.sportsattack.com for information about Sports Attack sports training products, or call 800-717-4251 for complete information and specifications.