



## **SMASH ATTACK™**

**VOLLEYBALL MACHINE**

SMASH ATTACK™ VOLLEYBALL MACHINE  
PATENTS APPLIED FOR

### **INSTRUCTION MANUAL**

OPERATION · SETUP · USE & CARE · SERVICE



SPORTS ATTACK LLC. | 800.717.4251 | [www.sportsattack.com](http://www.sportsattack.com)

## WARRANTY STATEMENT

What is most important to Sports Attack is that your machine meets your expectations and represents our high standards of quality and performance. No matter the circumstances, if this is not the case, we encourage you to call our customer service department at 800.717.4251.

### Warranty:

#### Residential & Institutional

We stand behind the material and workmanship of our machines as well as all wear components (i.e., throwing wheels, controllers, and motors) for a period of two (2) years from the date of original purchase based on the serial number and date codes on the unit.

#### Commercial

We stand behind the material and workmanship of our machines as well as all wear components (i.e., throwing wheels, controllers, and motors) for a period of one (1) year from the date of original purchase based on the serial number and date codes on the unit.

#### Requirements of the Warranty

- Warranty wear components such as motors, controllers and wheels may now require a picture or live video when submitting your request.
- The serial number that represents the date of original shipment must be legible on the Product, it cannot be removed or altered in any way.
- All date codes on unit components must be legible, not removed or altered in any way.
- If warranty components have previously been provided by Sports Attack for the unit, video evidence of their use on the machine must be provided when submitting your request.

#### Not Included in this Warranty:

- Normal wear and tear;
- Cosmetic damage (i.e., minor scratches, surface deformations, or discolorations) including natural fading of colors;
- Damage caused by misuse, abuse, accident or negligence including prolonged exposure to inclement weather;
- Damage caused by fire, flood or any other Act of God;
- Unauthorized modification or alteration of a machine including the use of non-authorized, after market components; and
- Any damage or failure arising after the warranty period.

#### The Warranty Process

If you encounter any issues during the warranty period, Sports Attack will quickly get your machine back in working order. To submit a warranty request, you must call our customer service department at 800.717.4251. 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.

#### 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.

**Please call customer service department at 800.717.4251 for returns.**

## 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.

*(cont. on page 1)*

To register the Warranty, please go to our website:  
[sportsattack.com/warranty](http://sportsattack.com/warranty)

**For repairs and service after the Warranty period, please call:**

Sports Attack  
Customer Service Dept.  
**Ph 800.717.4251**  
**Fx 775.345.2883**

## RETURNS

**To return an item, please contact our Customer Service Department at 800.717.4251.**

A 15% restocking fee will be charged for any items accepted for return. It is the customer's responsibility to handle the repacking and shipment (as well as all associated fees) back to Sports Attack.

No returns will be accepted after 30 days of receiving product.

**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.

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**INTRODUCTION**

Thank You for purchasing this Sports Attack LLC. equipment.

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 setup the Smash Attack, and to use, care for and maintain the Smash Attack in a manner which will ensure their optimum performance.

**RECEIVING THE PRODUCT**

Please check the contents of your boxes to ensure you have received all parts for the machine. If anything is missing or damaged, call Sports Attack Customer Service, 800-717-4251. If the product or package has been damaged in shipping, note on shipping tag, save all evidence of damage along with related documents and contact the shipper immediately.

**ADDITIONAL INFORMATION**

If you have any questions regarding the safe operation of your machine, please call:

Sports Attack Customer Service Department  
Ph 800.717.4251  
Fx 775.345.2883

**GENERATOR INFORMATION**

1. Smash Attack requires a generator capable of providing clean electricity (inverter technology) of a minimum 1200 watts at 120 volts 60hz.
  2. Be sure the power switch is "OFF" before plugging machine 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 machine power switch "OFF" before shutting off the generator and before unplugging.

## SAFETY INSTRUCTIONS

### ELECTRICAL SAFETY

Use a 115 volt single phase 3-wire grounded power source.

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

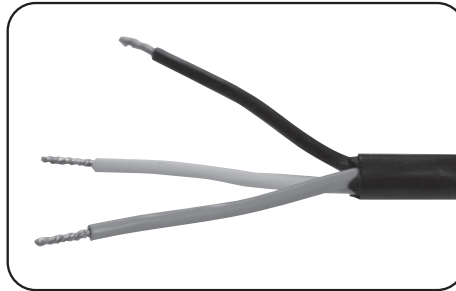
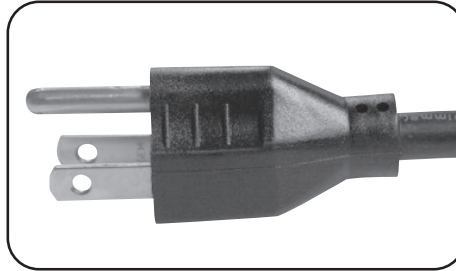
Over 200 ft. from power source, consult a licensed electrician for required power cord size.

### OPTION B 208/220/230V

**Green = Earth**

**White or Blue = Neutral**

**Black or Brown = Line**



### OPERATING SAFETY

1. Never reach hands into throwing wheel area.
2. Always use the Smash Attack with wheel guards in place.
3. Use the Smash Attack only under adult supervision.
4. Use the Smash Attack only for its intended purpose.
5. Do not operate the Smash Attack with a damaged cord or plug, if the machine malfunctions or has been damaged.
6. Check machine before turning "ON" to make sure there are no foreign object in feed chute.
7. If ball becomes lodged and stops motor, immediately turn machine off before dislodging.
8. To dislodge ball from throwing wheel, unplug machine and push ball through chute. Do not reach hand into feed chute with the machine running.
9. Only one person at a time should operate the Smash Attack.
10. Be sure chain is locked when standing on platform.
11. Do not allow anyone to walk directly in front of the machine. Keep face and hands away from ball exit.
12. A ball should always be test thrown from the Smash Attack before beginning any drill. Throw several balls to verify end location.  
**Refer to ball manufacturer for proper inflation requirements.**
13. Keep hands, hair and loose clothing away from moving parts.
14. Do not use near water or use damp or wet balls.

### WARNING PERSONAL INJURY HAZARD

Carefully read all instructions in this manual, and all labels and warnings on the Smash Attack before using either of the machines.

Use machine only under adult supervision. Failure to operate Smash Attack as described in this manual can result in severe personal injury or death.

### ELECTRICAL SHOCK HAZARD

Smash Attack must be connected to a properly grounded electrical receptacle.

Do not operate on wet ground.

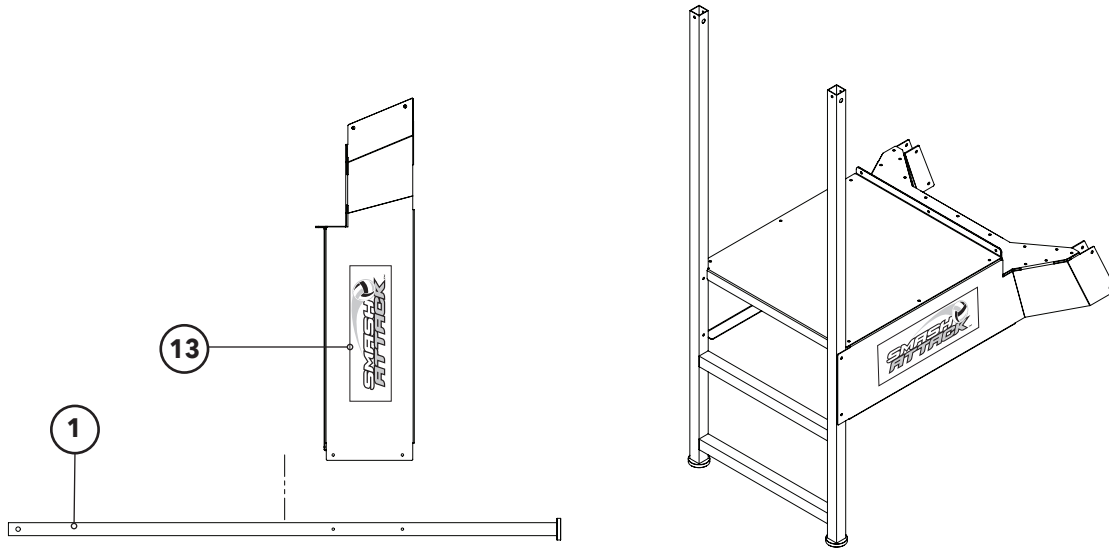
### WARNING PERSONAL INJURY HAZARD

Keep hands away from throwing wheels anytime the machine is connected to a power source.

Carefully check the Smash Attack for completeness and condition before connecting to electrical power.

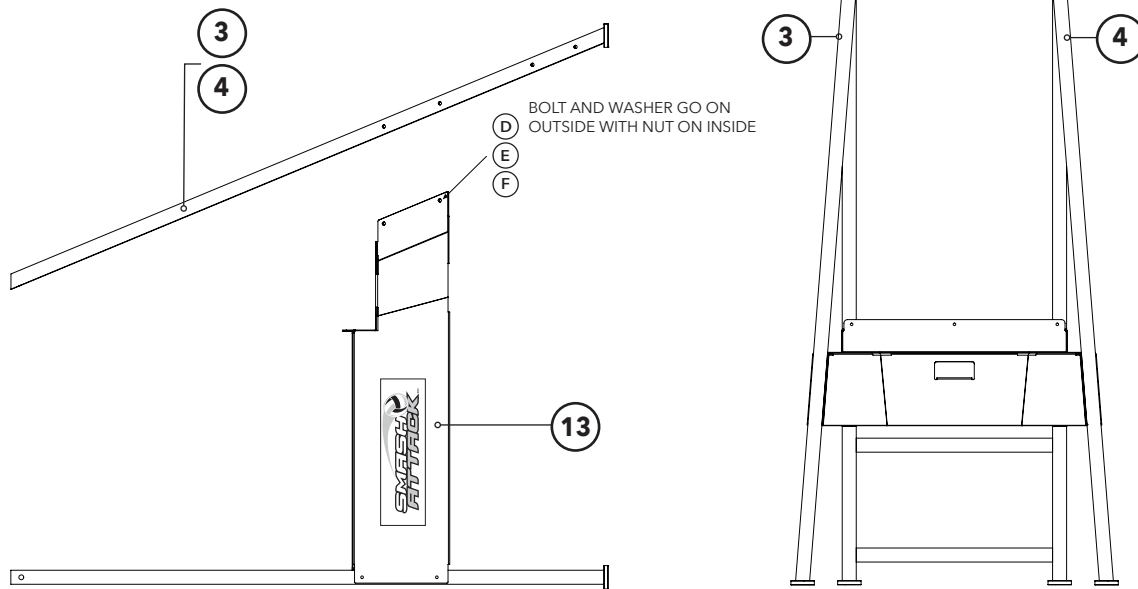
### EQUIPMENT ELECTRICAL DAMAGE

**DO NOT** plug in or energize the equipment until all Assembly and Operation Instructions are read and followed.



**STEP 1** Attach Back Legs to Platform

Using 2 7/16" wrenches or sockets, fasten the platform assembly (13) to the rear frame assembly (1) with 4 1/4-20 x 2" bolts (A), 4 1/4" SAE Washers (B) and 4 1/4-20 Flanged Nylock Nuts (C). Insert the bolts from the outside with the washers between the bolt head and the side of the platform assembly. **DO NOT FULLY TIGHTEN HARDWARE UNTIL FINAL STEP OF FRAME ASSEMBLY.**

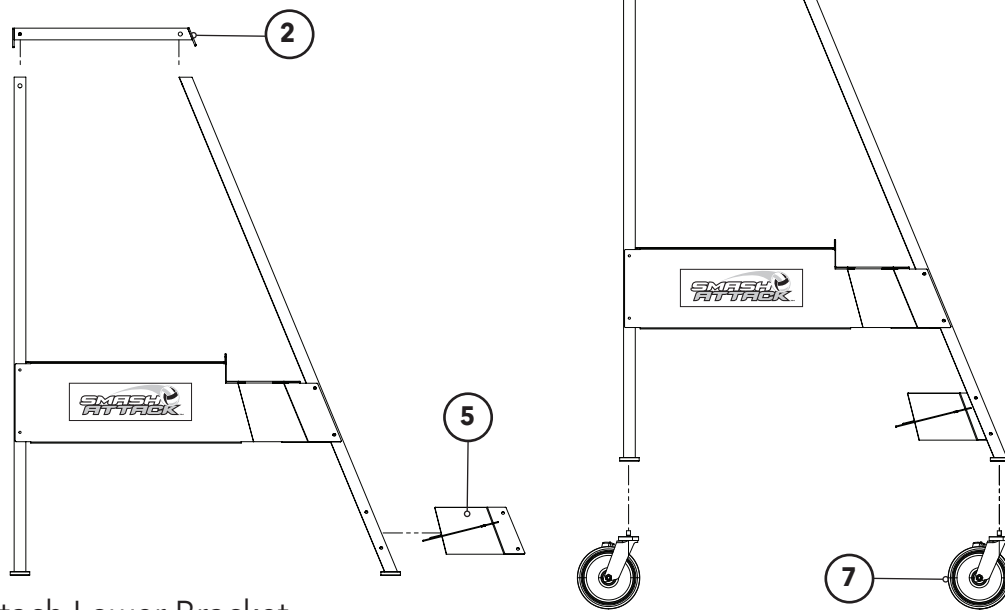


**STEP 2** Attach Front Legs to Platform

Using 2 1/2" wrenches or sockets, fasten the two front frame posts (3,4) to the front of the platform assembly by inserting 4 5/16-18 x 2-1/4" bolts (D) with 5/16" washers (E) and 5/16-18 Nylocks (F) into the holes shown above. Ensure the bolts and washers are inserted such that the bolt head and washer are on the outside of the **DO NOT FULLY TIGHTEN HARDWARE UNTIL FINAL STEP OF FRAME ASSEMBLY.**

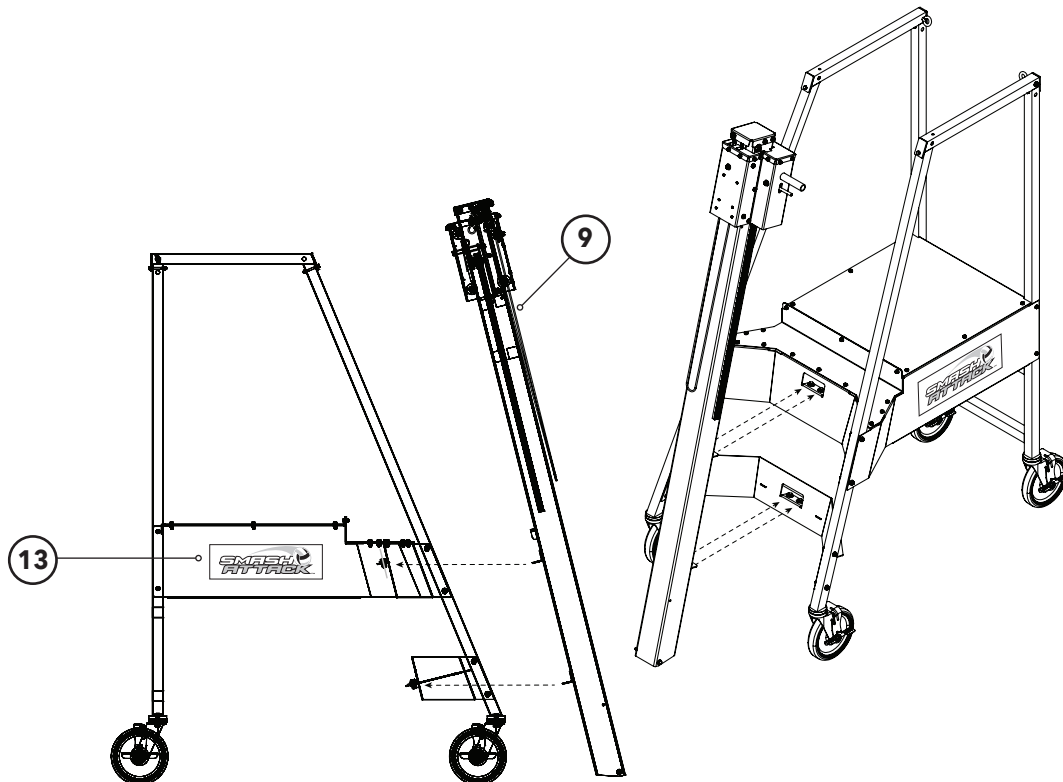
**NOTE: Front legs are different, caster mounts must be parallel to floor as shown.**

## SMASH ATTACK ASSEMBLY



### STEP 3 Attach Lower Bracket

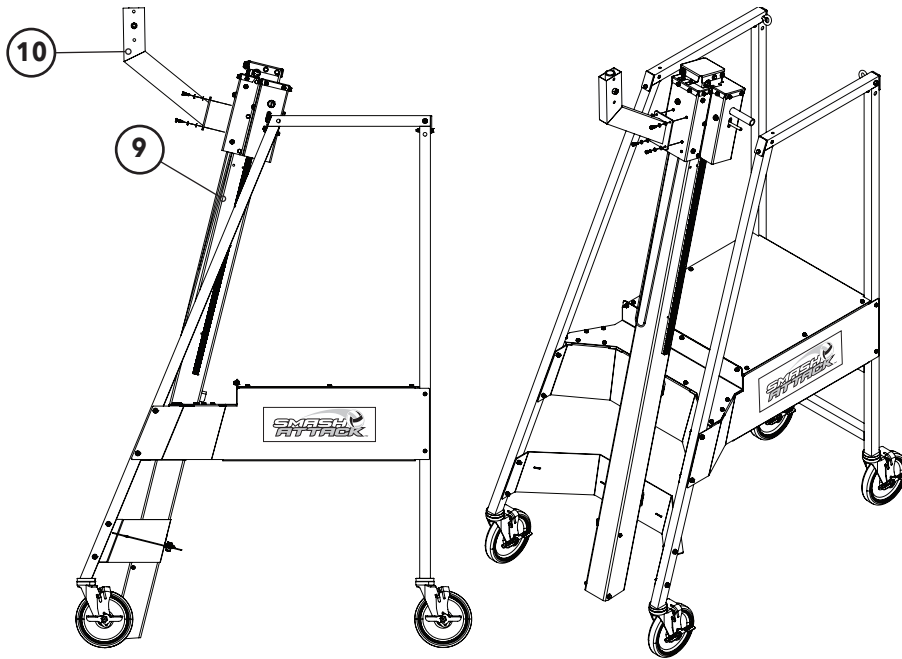
Using 4 1/4-20 x 2-1/4" bolts (G), 4 1/4" washers (B) and 4 1/4-20 flanged nylock nuts (C) align the holes from the cross frame tube assembly (2) to the top of the frame posts as shown above and loosely fasten the bolts to the nuts. Using 4 5/16-18 x 2-1/4" bolts (D), 4 5/16" washers (E) and 4 5/16-18 Nylocks (F) loosely fasten the Lower Front Panel (5) into place as shown above. Next, install the four casters (7). Tighten all bolts and nuts and ensure the frame is stable before moving to next step.



### STEP 4 Attach the Mast to Frame

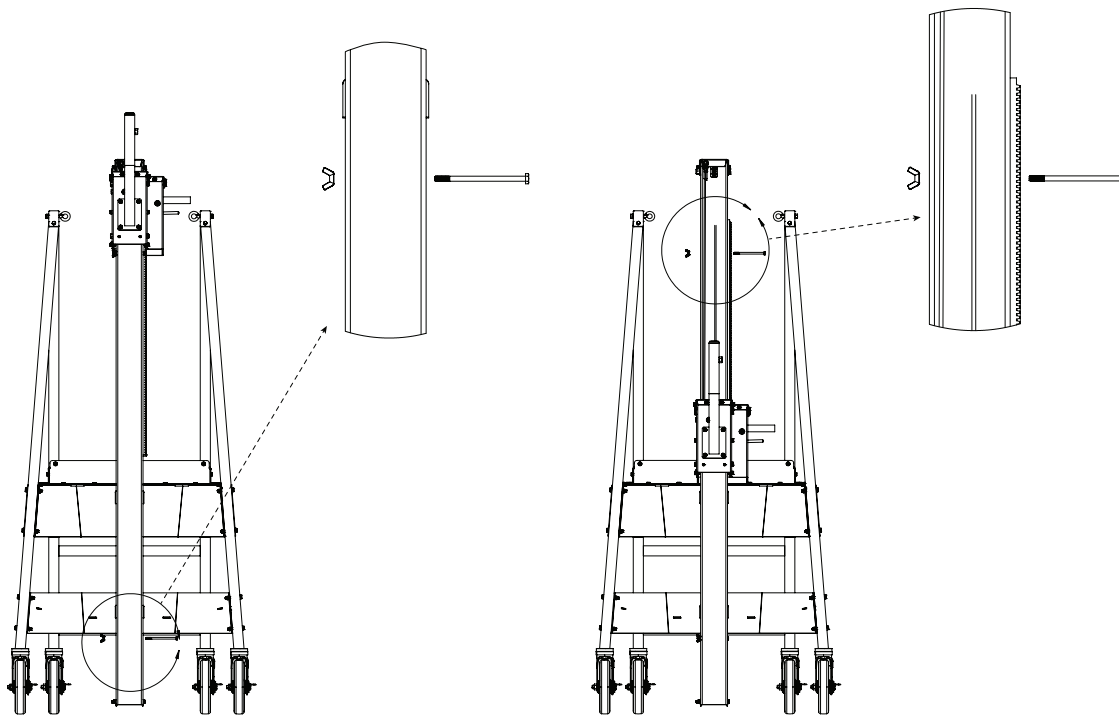
For this step, you will need at least two people. Lock the casters so that the assembly will not roll freely. Lift the Mast (9) and insert the two tabs on the back into the slots located on the front of the platform assembly (13) and lower front panel (5). While one person holds the mast into place, the other inserts 4 3/8-16 x 1" bolts (H), 8 3/8" USS Washers (J) and 4 3/8" Nylock Nuts (I) and tightly fastens the mast into place.

## SMASH ATTACK ASSEMBLY



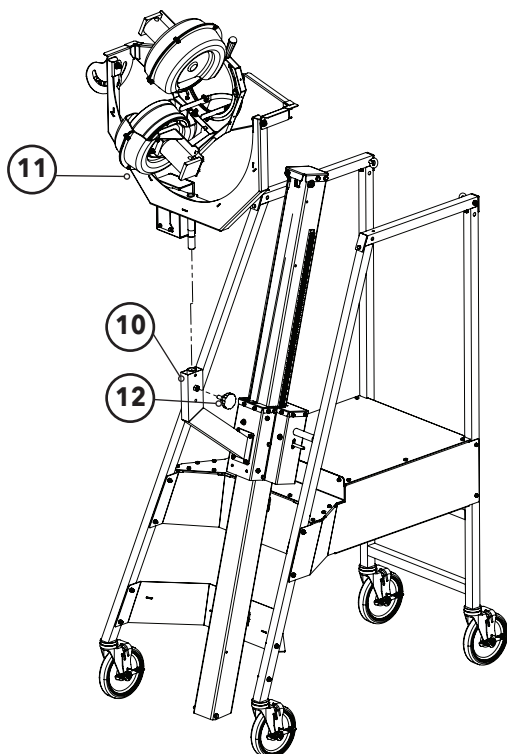
### STEP 5 Attach Throwing Head Arm

Using 4 1/4-20 x 3/4" bolts (K) and 4 1/4" split lock washers (L) fasten the arm (10) to the mast assembly (9) with a 7/16" wrench or socket. Fully tighten the bolts.



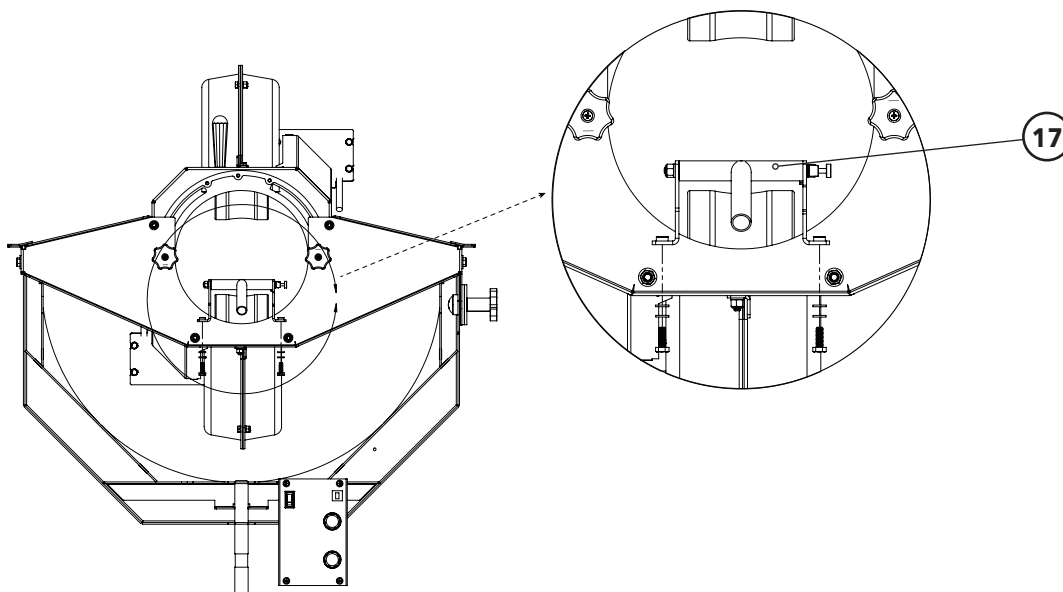
### STEP 6 Install Bolt and Wingnut to Mast

To safely lower the carrier, first remove the 1/4-20 bolt and wing nut from the bottom of the mast. This will allow the counter weight inside mast to move upward when the carriage is pulled down. One person can grasp the handle and lever to pull down and hold the arm and carrier assembly to its lowest position. The other person should place the bolt and wing nut into the hole shown in figure at top right to support the counter weight in the top of the mast tube. The person holding the carrier down should lightly release to ensure that the bolt is keeping it in place.



### STEP 7 Attach Throwing Head

Using a 2 person lift, place the shaft of the throwing head assembly (11) into the arm assembly (10). Tighten into place using the 1/2-13 x 1-1/4" knob (12).



### STEP 8 Attach Chute Assembly

Using a 7/16" wrench or socket set, fasten 2 1/4-20 x 3/4" bolts (K), 1/4" split lock washers (L) and 1/4" washers (B) to the chute assembly (17) as shown above.

# COMPONENT PARTS SMASH ATTACK



**15 & 16- Motor**  
90V - #1133-9500-1  
180V - #1133-2423-1

**17- Chute Assembly**  
#3412-8028-1

**14- Controller**  
#3262-4745-1

**11- Throwing Head**  
#3412-8034-1

**12- Knob**  
#3023-5068-1

**Ball Bag & Frame**  
#3022-4296-1

**10- Arm**  
#3412-8050-1

**2- Cross Frame Tube Assembly**  
#3412-8039-1

**9- Mast Assembly**  
#3412-8002-1

**3- Right Front Frame Post**  
#3412-8041-1

**1- Rear Frame Assembly**  
#3412-8057-1

**13- Platform Assembly**  
#3412-8061-1

**4- Left Front Frame Post**  
#3412-8040-1

**5- Frame Lower Front Panel**  
#3412-8048-1

**7- Locking Castor**  
#3013-4636-1

# SMASH ATTACK PARTS LIST

## SMASH ATTACK™

	PART NO.	DESCRIPTION	QTY PER
1	3412-8057-1	Smash Rear Frame Assembly	1
2	3412-8039-1	Smash Cross Frame Tube Assembly	2
3	3412-8041-1	Smash Right Front Frame Post	1
4	3412-8040-1	Smash Left Front Frame Post	1
5	3412-8048-1	Smash Frame Lower Front Panel	1
6	3413-8043-1	Smash Right Frame Panel	1
7	3013-4636-1	Caster, 8" x 1 1/2", Locking	4
8	3412-8038-1	Smash Frame Assembly	1
9	3412-8002-1	Smash Mast	1
10	3412-8050-1	Smash Arm	1
11	3412-8034-1	Smash Throwing Head	1
12	3023-5068-1	Knob, Hand, 1/2-13 X 1-1/4" Stud	1
13	3412-8061-1	Platform Assembly	1
14	3262-4745-1	Controller	1
15	1133-9500-1	90V Motor	1
16	1133-2423-1	180V Motor	1
17	3412-8028-1	Chute Assembly	1

### HARDWARE

A	9113-1171-1	Bolt, 1/4-20 x 2"	4
B	9113-5402-1	Washer, 1/4", Flat SAE	16
C	9113-4682-1	Nut, Hex, Flanged, Nylock, 1/4-20	8
D	9113-2061-1	Bolt, Hex, 5/16-18 x 2 1/4"	8
E	9113-5437-1	Washer, 5/16", Flat SAE	16
F	9113-4727-1	Nut, 5/16-18, Nylock	8
G	9113-2338-1	Bolt, Hex, 1/4-20 X 2-1/4"	4
H	9113-1505-1	Bolt, Hex, 3/8-16 x 1"	4
I	9113-4775-1	Nut, Hex, 3/8-16, Nylock	4
J	9113-6140-1	Washer, 3/8" USS	8
K	9113-1082-1	Bolt, Hex, 1/4-20 x 3/4"	6
L	9113-5394-1	Washer, 1/4" Split Lock	6

### NOT INCLUDED IN KIT

M	9113-8053-1	Bolt, Hex, 1/4-20 X 4-1/2"	1
N	9113-0007-1	1/4-20 Wing Nut	1

To order additional parts,  
please contact:

**Sports Attack  
Customer Service Dept.**

**Ph** 800.717.4251

**Fx** 775.345.2883

## INSTALLING A BALL BAG



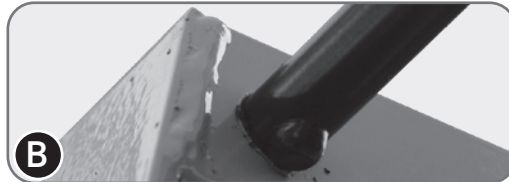
**Step 1** Insert one arm of the ball bag frame into the appropriate holes on the platform frame.



**Step 2** Carefully apply firm pressure to bend the other arm so that it lines up with the corresponding holes on the platform frame.



**Step 3** Insert arm of ball bag frame into the holes on the platform frame.



**Step 4**  
A Use your palm to "whack" the ball bag frame.  
B Button will rest against frame.



**Step 5** Both arms are securely in place.



**Step 6** Tie ball bag straps.

## INSTALLING A BALL BAG

### STEP 1

Insert one arm of the ball bag frame into the appropriate holes on the the platform frame. The second arm of the ball bag frame will not line up with the set of corresponding holes on the platform frame. This is intentional.

### STEP 2

Holding on to the platform frame as shown in the photo for Step 2, carefully apply firm pressure on the second arm and bend it until it lines up with the corresponding holes in the platform frame.

### STEP 3

Insert arm into the corresponding holes on the platform frame.

### STEP 4 A & B

Still holding on to the platform frame with one hand, use the palm of your other hand to "whack" the frame (photo A) until the button rests against the frame (photo B).

### STEP 5

Both arms are now securely in place with the proper amount of tension to keep ball bag in place.

### STEP 6

You may now tie the ball bag straps to the platform frame.

**To order additional parts, like a ballbag, please contact:**

**Sports Attack  
Customer Service Dept.**

**Ph 800.717.4251**

**Fx 775.345.2883**

## OPERATION

The Smash Attack is a total practice machine. No special training other than the complete, careful reading of this manual is required to operate the machine. Many coaches have broadened and refined their own coaching skills by its use.

## ELEVATING AND LOWERING THE MACHINE HEAD

Always raise or lower the machine head from the floor. Never raise or lower the machine head from the raised platform.

## INCREASE OR DECREASE SPEED

1. Before turning machine "ON," turn dials located on the throwing head to the "0" position.
2. Turn on/off switch to "ON." The wheels will spin slowly. Turn speed control knobs clockwise to increase speed.
3. Turn the speed control knobs counter-clockwise to decrease speed.

## BALL SPIN, BREAK OR MOVEMENT

1. **Floater:** Both knobs turned to the same setting, making the wheels spin at the same RPM.
2. **Top Spin:** Upper wheel turning fast, lower wheel turning slowly. Variations of the ball spin and break are determined by the wheel speeds.

## HORIZONTAL CONTROL

1. Loosen to vary direction. Do not loosen knobs more than necessary to rotate the head. Always re-tighten knobs before throwing a ball.
2. Tighten for repeatability.

## SHUTTING DOWN

### TURNING SMASH ATTACK "OFF"

1. Set each speed control dial to "0."
2. Turn the on/off switch "OFF."
3. Unplug Smash Attack from the power source.

## TRANSPORTING

1. Turn the machine "OFF" and unplug.
2. Lower throwing head to the lowest position on the sliding tray.

**DO NOT STORE OR TRANSPORT WITH THROWING HEAD ELEVATED.**

## PLACING MACHINE

Always place the machine on a flat, hard, level surface. Always lock the casters before climbing onto the machine platform.

Always attach the safety chain after reaching the platform.

Never lean on the safety chain.

Never lean on or over the side rails of the frame.

## CARE, CLEANING & MAINTENANCE

### LUBRICATION

#### Throwing Wheel Motors

Motors are sealed and require no lubrication.

### CLEANING THE THROWING WHEELS

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

1. Turn the on/off switch "OFF" and allow the wheels to come to a complete stop.  
Unplug machine from electric power.

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, or medium sandpaper may be used sparingly. Methyl Ethyl Ketone (M.E.K.) may be required to help loosen the build-up of dirt or ball residue.

### EXAMINE THE MACHINE

Examine Smash Attack for condition and completeness before every use:

1. Throwing wheels must be tight on the motor shafts. Check that the keyway retaining bolts are tight.
2. Wheel guard must be securely fastened to the throwing head.
3. Check rolling casters once a year for tightness. Tighten bolts securely using wrench provided, but do not over-tighten. See Page 8, Schedule 3.
4. Check all casters and bolts of frame once a year for tightness.

### 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 machine before cleaning the wheels or performing any kind of service.

### CHEMICAL HAZARD

#### Methyl Ethyl Ketone (M.E.K)

Read and follow the directions and safety instructions on the M.E.K container.

### FIRE HAZARD

#### Methyl Ethyl Ketone (M.E.K)

M.E.K. is flammable. Do not use M.E.K. around a fire or flame. Do not use M.E.K. near a running generator or other source of ignition.

## COMPONENT REPLACEMENT

### THROWING WHEEL REPLACEMENT

1. Turn the throwing wheels "OFF" and unplug the power cord. Remove four bolts holding the wheel guard to the motor-side 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 9).  
**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. A slight wobble is also 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 before turning the unit "ON".
- e. Be sure the wheel guard is properly and securely reinstalled.

**NOTE:** Check bolts for tightness once a season. Tighten bolts securely, but do not over-tighten.

### MOTOR REPLACEMENT

1. Turn the on/off switch "OFF" and unplug the power cord.
2. Remove the throwing wheel (see above) and two wheel guards.
3. Remove four screws holding controller into main electrical box. Note the position of the motor wires on the controller, then disconnect the wires. See Page 14.
4. Note the routing of the motor wires. Loosen any wire clamps.
5. Remove bolts holding the motor to the main frame.

#### Reassemble in reverse order.

**NOTE:** Check bolts for tightness once a season. Tighten bolts securely, but do not over-tighten.



Figure 9 Hold wheel while loosening bolts.

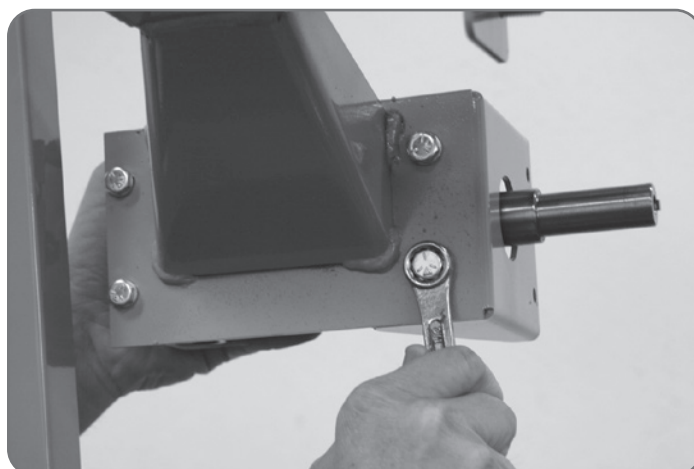
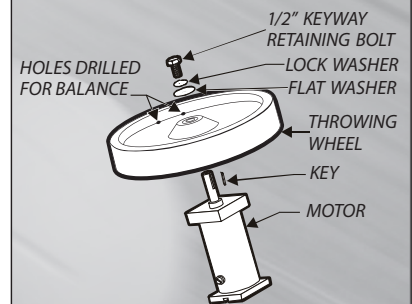


Figure 10 Shown using a 6" 1/2" wrench.



Figure 11 Shown using a 1 1/2" wrench.

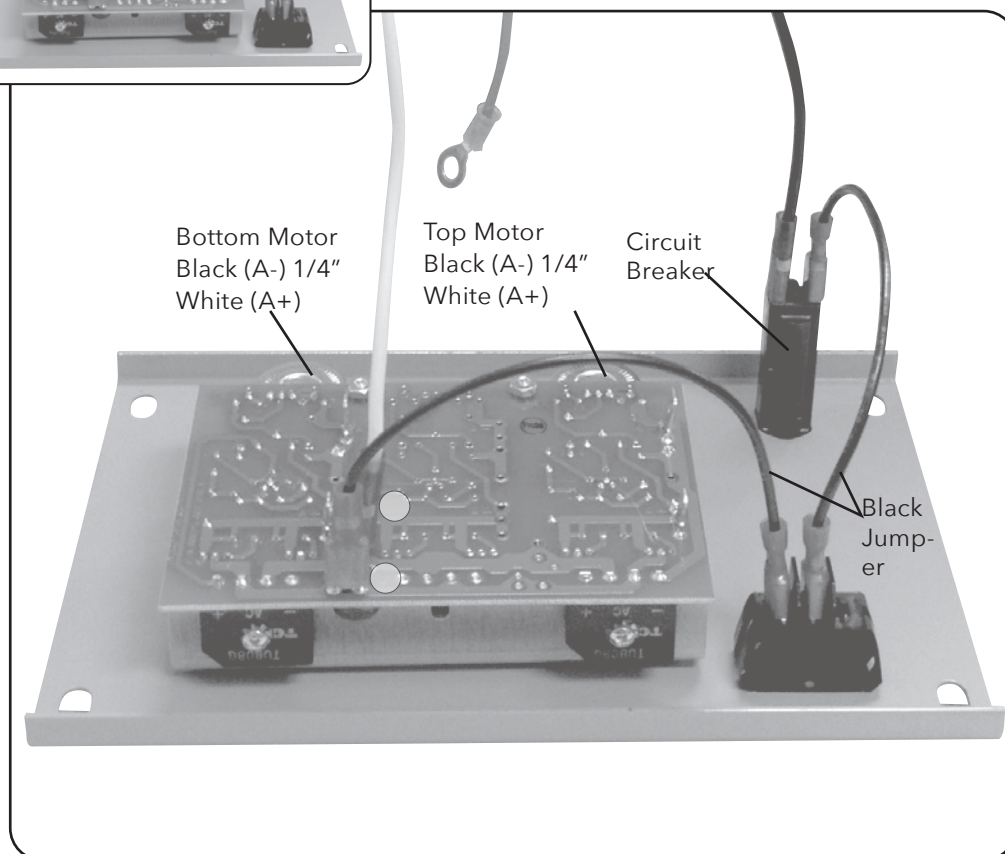
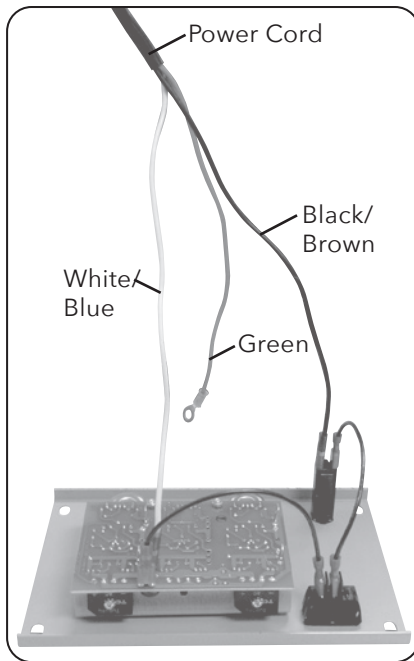
## COMPONENT REPLACEMENT (cont'd)

### CONTROLLER REPLACEMENT

1. Turn the on/off switch "OFF" and unplug the power cord.
2. Remove the four screws holding controller faceplate. Note the position of the main power and motor wires on the controller, then disconnect the wires.

#### Reassemble in reverse order.

- a. Be sure wires are correctly reinstalled. Motor wire connectors are different sizes. Be sure they are installed on the correct size terminal.
- b. When attaching the knobs, turn the speed control shafts fully counter-clockwise, then install the knobs with the pointer to "0."



## WIRING

### POWER CORD

#### White or Blue Wire (1)

To middle male terminal marked "N."

#### Black or Brown Wire (2)

To circuit breaker.

#### Green Wire (3)

Grounds to machine/motor.

### MOTOR WIRE LEADS

**White 3/16"** wide connectors.

**Black 1/4"** wide connectors.

**Black Wire (2)** connects to A- on circuit board.

**White Wire (2)** connects to A+ on circuit board.

### CONTROLLER

#### Black Wire (2)

2 PR jumper wire:

- 1 from on/off switch to circuit breaker
- 1 from on/off switch to circuit board terminal "L".