



# Operation and Safety Manual

## Installation and Set-up

Please make sure that the inflatable is operated by trained operator(s), a trained operator is one that has been instructed in the safe operation of a particular inflation device and has completely read all instructions provided by the manufacturer of the ASTM recommended operations of inflatable structure devices

### Tie Downs ( **ASTM recommendation** )

1. All air supported devices shall be anchored per manufacturers requirements.
2. All ground stakes/anchors shall be of sufficient depth to prevent movement of the device at the maximum allowed operational wind speed.
3. No more than two tie down ropes shall be attached to any one tie down stake/anchor.
4. All tie down ropes/straps attached to the device must be used.
5. In lieu of tie down stakes/anchors, a minimum of 75 lbs weight must be attached to each tie down. The weight used shall be of sufficient amount to prevent movement of the device at the maximum allowed operational wind speed.
6. In lieu of tie down stakes/anchors, sand bags, water barrels, metal weights may be used. No concrete or cinder blocks will be allowed.
7. No tie downs to motor vehicles shall be allowed.
8. Ropes, tethers and tie downs shall be sufficiently strong enough to prevent breakage.
9. The recommended size is ½ “ solid-braided polypropylene with a tensile strength of 3700 or 370 lb test rated.

### Survey the site you plan to install

A. Verify that the dynamic dimensions (inflated size) make sure you do not interfere with power lines or other overhead obstructions. The site selected for set-up should be clear of debris and includes sharp objects, sticks, stones, etc



B. Verify, before deciding on location, that driving stakes into the ground will not create a shock hazard by violating utility lines such as gas or power in staking area. Contact your local utility company for information if you are not sure.

### Ground Tarp

A. Lay out ground tarp in the area you have chosen for installation. Tarp should be left on the ground during entire time inflatable is installed, roll Inflatable onto the tarp, and decide the direction of the entrance into the inflatable.

Face inflatable with a slide away from direct sun. facing your inflatable with slide towards the north or northeast will keep the unit cooler.

B. Unroll the inflatable to locate the front or back. Locate the blower tubers on rolled inflatable for location of front or back. Point the inflatable in the direction you have chosen for your set-up.



Locate Zippers and close them.

A. Unfold inflatable and locate zippers. Close all zippers and seal flap over zippers completely as to make sure air is sealed.



**Blowers ( ASTM recommendation)**

1. Each device shall have the proper number of blowers and proper horse power as stated in the manufacturers specifications.
2. Each blower shall be of the proper horse power to properly maintain inflation of the device. All blowers, extension cords, electrical boxes shall meet the requirements of the most current National Electrical Code.
3. All blowers shall have a Ground Fault Interrupters (GFI) in the circuit.

**Locate Power**

A. Locate the power source. If you are connecting to your own generator, to the next step. If you are connecting to provided power, make sure power is a 20 amp 100v circuit that doesn't get turned off by a switch or timer.



< Do Not Connect to Timer outlet

B.If you are using two blowers, each one needs to have its own 20 amp circuit If using a generator keep generator 15 feet from blower system. Exhaust fumes can cause carbon monoxide poisoning inside inflatable.

C.Follow all instructions listed on the generator, such as grounding instructions. Ensure the electric cord is tied to the generator, so it will not pullout by accident .



Connecting Blower.

A. Connect blower system (s).

- 1) Pull the blower tube over the neck of the blower.
  - 2) Pull the webbing around the blower and pass it through the buckle
  - 3) Make sure the webbing is tight around the blower
- Do not turn on the blower.



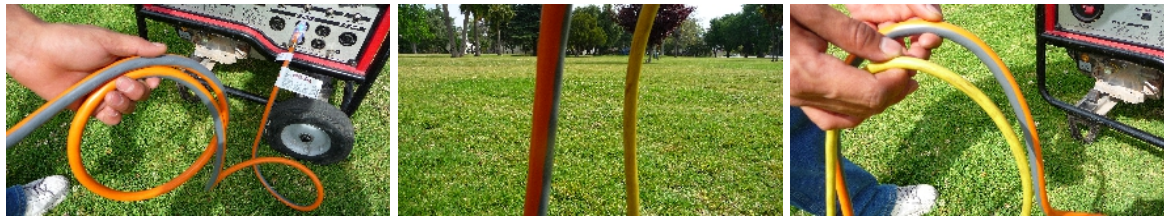
B. The other blower tube is also securely fastened.

- 1) Grab the other blower tube and fold about 18 inches down, and fold once more in half
  - 2) Pull the webbing through the buckle as tight as possible.
- Do not turn on the blower.



Using extension Cords.

A.If an extension cord is needed, most Municipalities require a 12/3 cord for each blower. The picture illustrated 14/ 3 electrical cord vs. a 12/3 cord (12/3 is the thicker cord)



### Locate Tethers / Laying out Tethers

Each inflatable system has a series of bottom or bottom and top tethers.

- A. At this time you should have the inflatable laid out before you with tethers pulled straight.
- B. Pull out tethers from inflatable to find out where the stakes should go
- C. Locate your anchors so that the top tethers will be at a 50° vertical angle (Approximate 7' – 12' from inflatable, (Except for Slides))



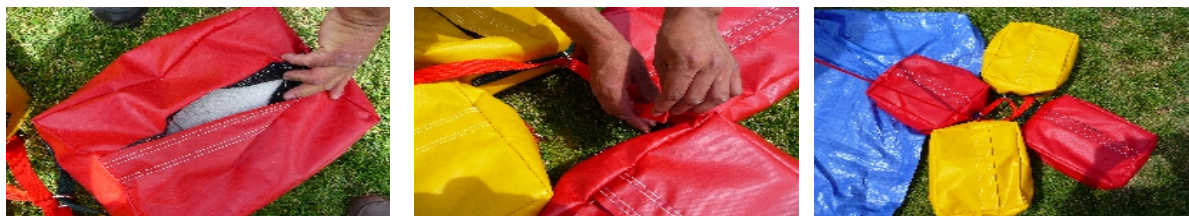
### Anchoring / Stakes

- A. Place anchors tip inside the D-Ring
  - B. Pull bottom tether so it is tight
  - C. Pound stakes into ground approximately 70% down
- Do not turn on the blower.



### Anchoring / Sand Bags

- A. Ensure each sand bag has 50 LB of sand (For Bounce House inflatable a Minimum of 75 of weight is required on each anchor location)
- B. For slides Locate top tether lines and loosely connect to sand Bag
- C. When using multiple sandbags pass the webbing through every D-Ring, keeping some slack -unless windy.



Before inflating

- A. If winds exceeding 20 MPH do not inflate inflatable.
- B. If winds exceed 10 MPH but below 20 mph, secure top tethers by Shortening any play in tether lines.

## **Inflate**

Place the blower so it can't accidentally be unplugged, causing the inflatable to collapse.

A Turn on the blower. Inflate inflatable and secure stake.

B. Guide the unit up. For Slides making sure tether lines are not restricting inflation.

C. After inflatable is completely inflated, straighten blower tubes as they may have become kinked during inflation.



## **Safety Precautions,**

**Please read the section below under SAFE OPERATION**

## **Minimum Inspection Requirements**

Inspections of your units is critical and it should be conducted every time you set up a unit for customer use. Keep a log of inspections

### **For all inflatables inspect for the following**

- Inspect each anchor point to ensure it is snug, Inspect for worn or cut straps, missing D rings.
- Inspect the blower tubes and retaining strap and buckle are ensure they are in good condition, and the blower/inflation tube connection tight.
- Inspect the blower flaps, the flaps should fall freely , the blower has no exposed wires or loose bolts, screws etc. and that the mesh guards over the air inlet and outlet are secure and intact; electric cables are not worn or chafed and that plugs, sockets and switches are not damaged;
- When fully inflated, all walls are firm and upright, and the pressure in the bed and step is sufficient to give a reliable and firm footing
- Inspect the surfaces of the platform for debris, rips, holes, and seams that may be stressed Inspect the velcro flaps and deflation zippers to ensure proper function.
- Inspect the netting ( window nor basket ball net ) for any tear. If a childs head can fit through the tear the child can chock.

### **Additional Inspection points**

- For Slides and Combos: Check Steps, handrails, and any climbing surface to ensure webbing and stitching are intact. Ensure the slippery surface has sufficient lubricity. To rejuvenate the sliding area none flamable spray on wax may be used.
- For Slides and Combos: Ensure the Velcro and both the top and bottom surfaces of the slide is in good condition and there is no signs of cracking, peeling.
- Obstacle courses Inspect insides of tunnels, tubes, and crawl spaces for excessive wear, or rips.

→Bungee runs, a) inspect the connection to the back wall . If this area gives way the participant will fall off the unit and the cord will injure the participant. b) Inspect bungee cord harness closures and buckles and ensure they are in good condition. c) Inspect bungee cord for excessive wear, breaking strands, dryness , rotting of the rubber. Note, the bungee cord loses it strength and elasticity over time and it should be replace with any signs of wear .

→Boxing Ring a) inspect the headgear for any tears in the fabric, Inspect straps and buckles excessive wear or tear , ensure the protective foam is plush and is able to cushion the blows. Foam deteriorates over time and head gear should be replaced as needed. b) Inspect the boxing gloves for sharp seams , crack or buckle, inspect the padding to ensure it is soft and the outer material in good shape

→Joust a) inspect the headgear for any tears in the fabric, Inspect straps and buckles excessive wear or tear , ensure the protective foam is plush and is able to cushion the blows. Foam deteriorates over time and head gear should be replaced as needed b) inspect the pedestals that participants stand to ensure it does not wobble or cave in, the stand should provide a good solid standing base. c) inspect the padding on the poles ends ensure they is plenty of cushion and no tears or break exists. Inspect pole for warped, cracked, or splintering.

## **After the Event**

### **Inflatable Take Down**

A. Inspecting the unit for damages.

B. Using a mini vac, to vacuum inside of the inflatable after every use.

C. Using Simple green, spray and wipe with a terry towel to clean any dirt from inside the jumping area of the unit.

D. Spray Odoban inside the inflatable around the seam line and surfaces to disinfect the unit and wipe off rapidly. Never soak the inflatable as mildew may form and therefore voiding the warranty!

E. Do not pack up your inflatable when wet! Moisture can cause mildew and that can cause the vinyl fabric to breakdown, and voiding warranty!

There are many different cleaning products and some can be harmful to your unit or more importantly can be harmful to the occupants of the inflatable. Make sure that any cleaner you use is free of bleach or chlorine, which will weaken the threads, Methyl Ethyl Ketone (MEK) will break down the vinyl and weaken its integrity.

Do not use any cleaner, which states its use, is not intended for soft or pliable vinyl. Avoid any cleaner with caustic agents in them, like degreaser. Each unit should be completely dry inside and out before you place inflatable in storage. Webbing, straps, threads and netting all tend to stay wet or damp and do not dry as fast as the vinyl itself. The damp/wet material can bleed and discolor the vinyl, cause mold, or mildew, or start to rot and decay.



## Deflation

When deflating the ride, keep the ride anchored and other people away from the ride

A. Locate the deflation zipper and open

B. Locate the blower switch and turn off the blower, and remove blower from tube.

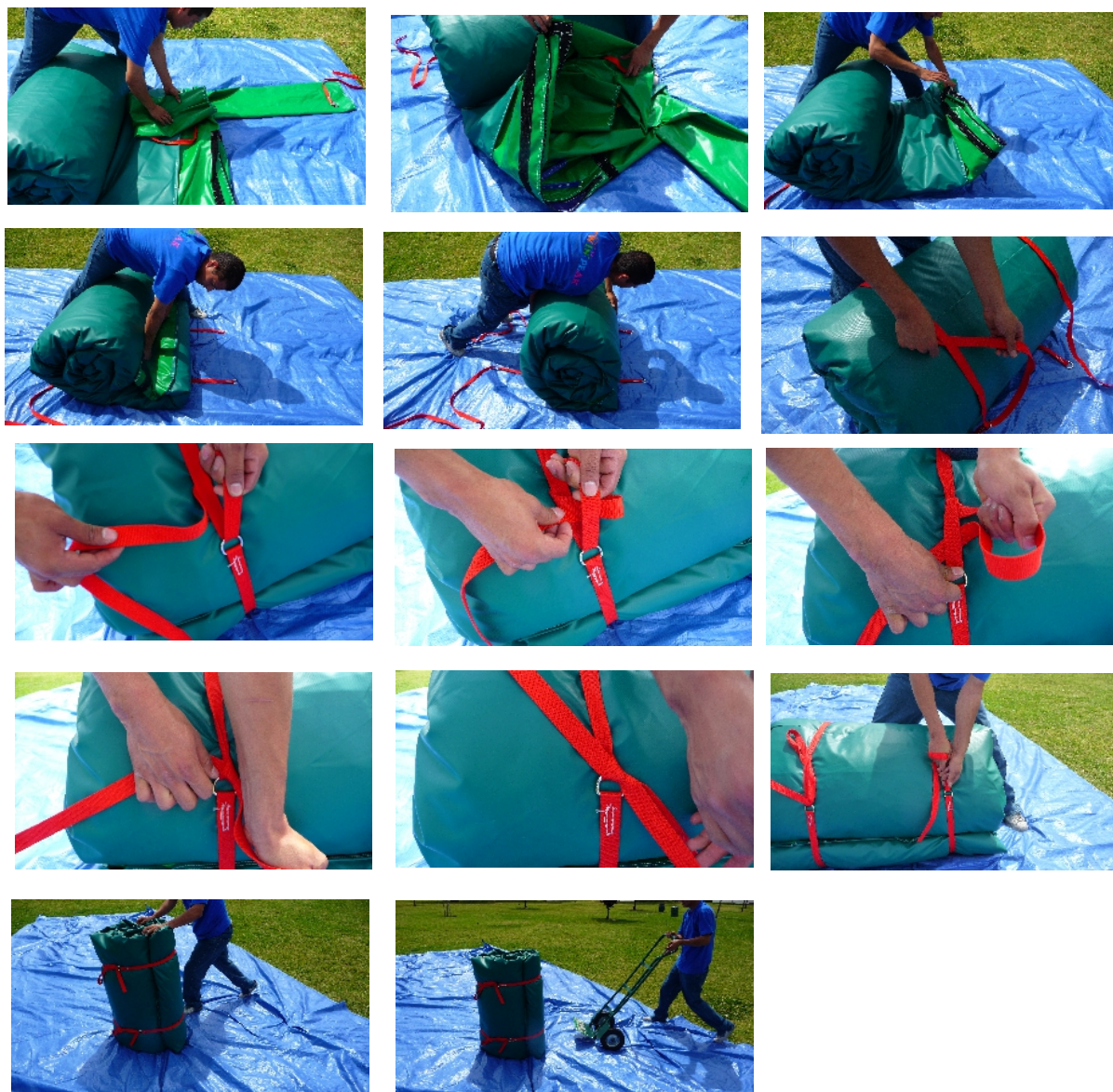
C. Open the strap on the second blower tube and allow the inflatable to deflate.



Rolling up the Inflatable ( follow pictures left to right, row by row)







## SAFE OPERATION

In the majority of circumstances an inflatable is hired from an Operator ( Operator = Individual or company renting out the inflatable) . The Operator will generally deliver the inflatable and may inflate it. Operators may supply Attendants whose role/function is to supervise users and ensure safe operation and use of the inflatable.

However, the contract may make the Renter responsible for supervision of the inflatable while the inflatable is in use. If so it is essential that the Operator supplies clear guidance and instructions for safe use. In such circumstances the renter should appoint a sufficient number of suitable i.e. mature and responsible persons, to act as Attendants.

It is the responsibility of the Operator to provide training for the Attendants ( Renter, or a person over the age of 18 assigned by the renter)

It is particularly important that a responsible person, capable of exercising some authority over users, especially children, supervises the use of the bouncer at all times.

A "safe system of work" must be established to ensure that the users are admitted to the inflatable bouncer in a controlled and safe manner.

The operator must:

- ✓ Ensure that ride does not operate if the wind exceeds 25 mph.
- ✓ Ensure that all users remove their footwear (except socks) and any other hard, sharp or dangerous objects from their person, such as buckles, pens, purses etc. It is advised that spectacles be best removed;
- ✓ Ensure that users are not consuming food/drink or chew gum in the inflatable
- ✓ Ensure no one bounces on the step (entry ramp). The step is only to be used to assist the users on or off;
- ✓ Not allow anyone to climb or hang from the outside walls;
- ✓ Not allow users who are taller than the outside walls of inflated bouncing surface to use the bouncer.
- ✓ Watch the activity on the bouncer constantly.
- ✓ They should use a whistle or other device to obtain attention and take action at the first sight of any misbehavior, keeping an eye on the safety and well-being of all the users, particularly children and especially the smaller, more timid ones. Rough horseplay must not be allowed.
- ✓ It is the responsibility of the operator to ensure that the equipment is not overloaded, therefore, creating possible danger to the users.
- ✓ Sort riders by size. Only riders of the same size should be allowed in the ride at the same time, larger / older children should, where possible, be segregated from smaller children.
- ✓ Ensure the number of users at any one time are limited to a number which allows each user enough room to play safely.
- ✓ Ensure the weight capacity of the inflatable is never exceeded. The capacity of the ride can be found in the owner's manual.
- ✓ Ensure the rules posted on the warning sign is strictly enforced.
- ✓ Assist the riders while they exit the ride.
- ✓ For slides operator must be aware that elbows, knees and backs of legs can become burned if the unit is too hot due to extreme hot temperatures. To avoid friction burn, operator should instruct riders of slides to cross arms over their chests to avoid elbow and arm contact.