



Vortex™ Cotton Candy Machine **Owner's Manual**



Important Safety Precautions



To minimize the risk of injury, read and heed these important safety precautions when operating this machine. Following these precautions, as well as general safety rules as you would for any work area, will help to prolong the life of your machine.

- **DO** keep your work area clean, well-lit and free of clutter or obstruction.
- **DO** wear proper eye protection when servicing, cleaning or maintaining your machine such as safety glasses.
- **DO** ensure that your Vortex™ machine is properly grounded to avoid potential electric shock. **UNDER NO CIRCUMSTANCES SHOULD YOU ATTEMPT TO USE AN UNGROUNDED OUTLET.**
- **DO** unplug your Vortex™ machine before any service or maintenance to prevent potential electric shock.
- **DO** read and refer to these precautions, warnings and instructions before you operate this machinery. Please refer to this manual often.
FAILURE TO FOLLOW THESE WARNINGS COULD RESULT IN SERIOUS INJURY OR DEATH.
DTX International will not be responsible for injury that occurs as a result of failure to follow these precautions.
- **DO NOT** make any alternations to your machine. Altering your machine will void your warranty and could result in serious injury or death to yourself, other workers or the public.
- **DO NOT** immerse any part of your machine in water. Immersion may result in damage to the machine. Use minimal water in the cleaning process and remove excess water when reassembling.
- **DO NOT** allow untrained personnel, the public, and especially children to operate or have direct physical contact with the machine. **FOR COMMERCIAL USE ONLY.** All operators must be 18 years or older.
- **CAUTION!** Spinning floss head operates at 3500 RPM. All operators **MUST** keep their body well away when machine is in operation. Keep jewelry, long hair, hands and face away from the floss head to avoid serious injury.
- **DO NOT** clean with detergent. This may potentially clog the machine.



IMPORTANT SAFEGUARDS & TECHNIQUES

When using electrical appliances, basic safety precautions should always be followed including the following:

1. Read all instructions.
2. To protect against risk of electrical shock do not put the unit in water or other liquid.
3. Close supervision is necessary when any appliance is used by or near children.
4. Unplug from outlet when not in use, before putting on or taking off parts, and before cleaning.
5. Avoid contacting moving parts. Never place fingers or other utensils into feed or discharge areas.
6. Do not operate any appliance with a damaged cord or plug or after the appliance malfunctions, or is dropped or damaged in any manner. Return appliance to the nearest authorized service facility for examination, repair or electrical or mechanical adjustment.
7. The use of attachments not recommended or sold by the manufacturer may cause fire, electric shock or injury.
8. Do not let cord hang over edge of table or counter or touch hot surfaces.
9. Check spinning head and bowl for presence of foreign objects before using.
10. Do not place on or near a hot gas or electric burner or in a heated oven.
11. To disconnect, turn the power switch to **OFF**, then remove plug from wall outlet.
12. Do not use appliance for other than intended use.
13. Avoid long periods of extended use without resting the machine. For every hour of continuous use, turn off and rest machine for 20 minutes.
14. Do not allow the spinning head to run for long periods of time without floss.
15. **ALWAYS UNPLUG FROM OUTLET AND BE SURE MACHINE IS OFF BEFORE CLEANING OR MAINTENANCE!!**
16. Clean daily. Do not use detergent to clean, clean with water and a soft cloth.
17. NOTE: If your spinning head becomes jammed, switch Power to OFF, unplug, remove head and clean off sugar and reassemble.



SAVE THESE INSTRUCTIONS

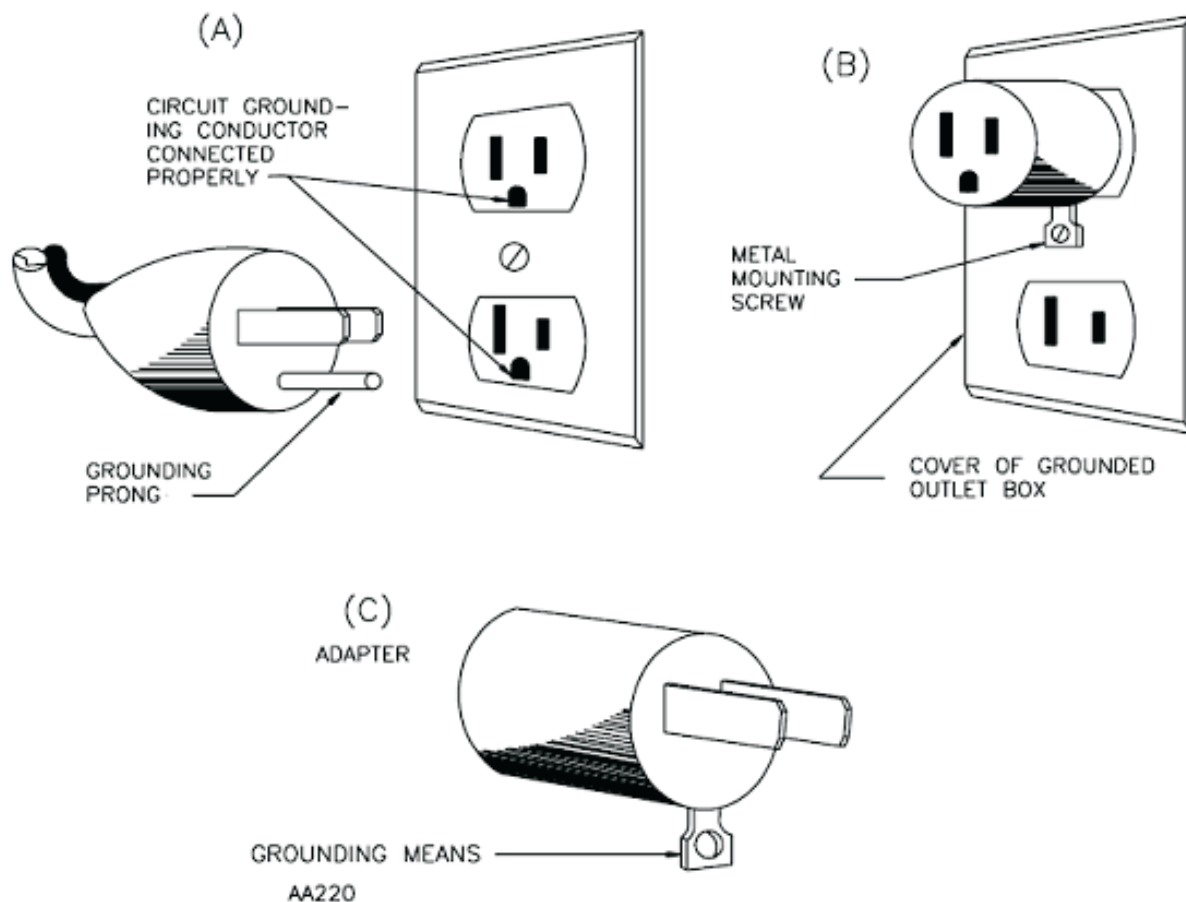
GROUNDING INSTRUCTIONS

This appliance must be grounded while in use to protect the operator from electrical shock. The appliance is equipped with a 3-conductor cord and a 3-prong grounding-type plug to fit the proper grounding-type receptacle. The machine has a plug that looks like sketch A in Figure 73.1. An adaptor, sketch B, should be used for connecting sketch-A plugs to two-prong receptacles, **BUT WE DO NOT RECOMMEND THIS. THE MANUFACTURER IS NOT RESPONSIBLE FOR LOSS OR INJURY RESULTING FROM IMPROPER GROUNDING OR MISMATCHED ELECTRICAL SUPPLIES.** The grounding tab which extends from the adaptor must be connected to a permanent ground such as a properly grounded outlet box as shown in sketch C using a metal screw.

EXTENSION CORDS

Use only 3-wire extension cords which have 3-prong grounding-type plugs and 3-pole cord connectors that accept the plug from the appliance. Use only extension cords having an electrical rating not less than the rating of the appliance. Do not use damaged extension cords. Examine extension cord before using and replace if damaged. Do not abuse extension cord and do not yank on any cord to disconnect. Keep cord away from heat and sharp edges.

Figure 73.1
Grounding methods



Congratulations on your Vortex™ Cotton Candy machine purchase!

You have chosen one of the finest and most reliable Cotton Candy machines on the market. We are committed to your satisfaction.

Should you have questions or comments, or if you would like to find out about our other products, please call: 1-800-665-0728 or find us on the web at www.greatnorthernpopcorn.com.

We appreciate your business!

ELECTRICAL SPECIFICATIONS

REQUIREMENTS:

The Vortex™ Cotton Candy machine should be plugged into a grounded 110V/950W/60HZ, 15 amp circuit, 60 cycle power supply.

UNDER NO CIRCUMSTANCES should you attempt to use a 3-prong to 2-prong adapter. Make sure to use a grounded, 3-prong outlet.

If you do not have access to a properly grounded outlet, one should be installed by a certified electrician familiar with the electrical and safety codes of your area.

Plug your Vortex™ machine into its own dedicated outlet.

Avoid the use of extension cords which can compromise output and performance of your machine and which could become a safety hazard.



OUTSTANDING FEATURES

- Easy-clean pan...cleans up with water
- Great Northern Popcorn Company's 1 year limited warranty
- Heavy-duty construction designed to stand up to your business' busy schedule. Our machine is built with commercial use in mind.
- Our commercial, heavy-duty motor

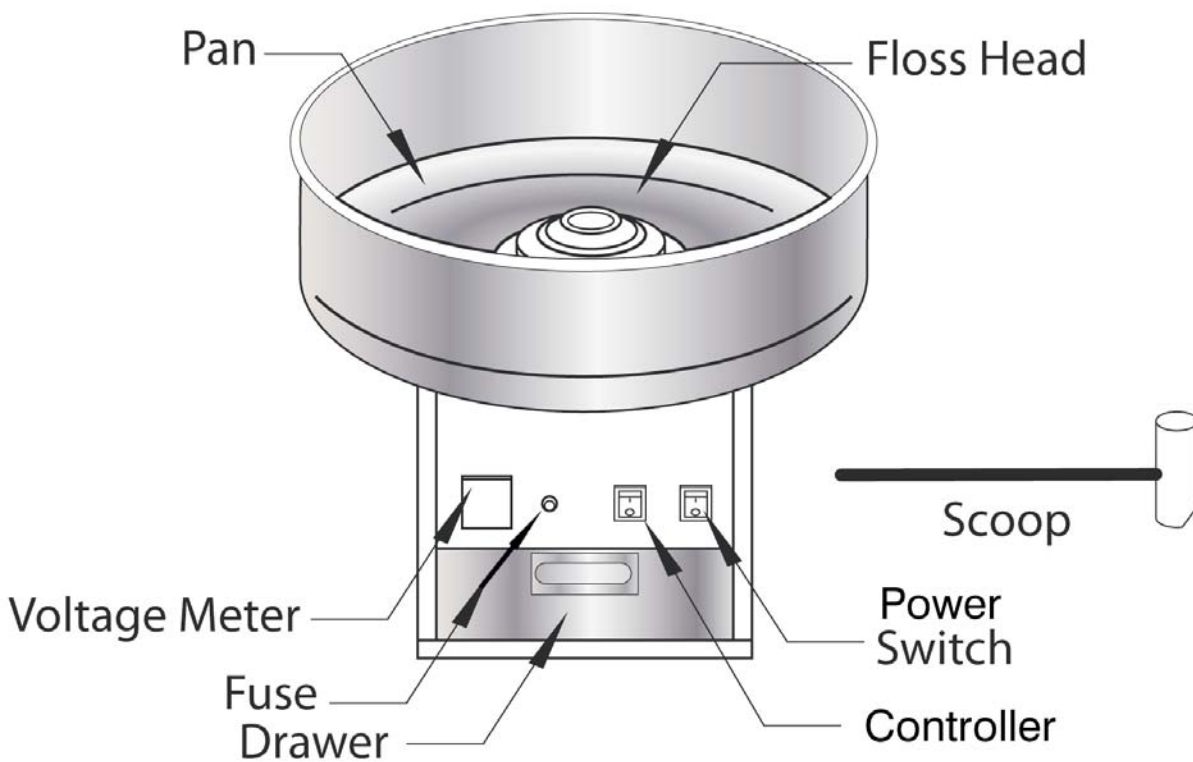
WARRANTY

- The Vortex™ Cotton Candy machine carries the Great Northern Popcorn Company's limited 1 year warranty. Motor bearings and the floss kettle/pan are excluded.

COMPONENTS & SPECIFICATIONS

To minimize the risk of injury, familiarize yourself with the components and specifications of your new cotton candy machine. Pay close attention to the electrical requirements for this unit. If you are using your cotton candy machine without the cart, be sure to place on a **STABLE** surface such as a heavy duty worktable or a table that is securely fastened to the floor.

CAUTION! This unit's floss head spins at a very high speed! **TO PREVENT INJURY, KEEP ALL CHILDREN AND UNAUTHORIZED OR UNTRAINED PERSONS AWAY DURING OPERATION!**



SPECIFICATIONS

Dimensions	Yield	Frequency	Motor Power	Voltage	Heating Power
Machine Only: 20.5" x 20.5" x 19.7"	1/30sec	60Hz	80W	110V	950W
Machine with Cart: 28.3" x 28.3" x 19.7"					

ASSEMBLY PROCEDURES

Please consult the Electrical Specifications section on page 5 of this manual before operating.

Unpacking Your Machine

1. Open the shipping cardboard box and remove the foam packers in each corner (Figure A).
2. The cotton candy pan is packed upside down over the motor assembly (Figure B). Remove the pan and set aside.
3. The spinning head and motor assembly is packed directly beneath the inverted pan and protected by foam (Figure C). Remove the foam and locate the cart assembly instructions, scoop and replacement motor belts packet (Figure D) and set aside.
4. Carefully remove the head and motor assembly. Do not tilt or lean the body of the machine more than 45 degrees (Figure E). Test the drawer (Figure F) to ensure that it slides freely.
5. Open and confirm the contents of the packet (Figure G). The plastic packet should contain instructions for cart assembly, a floss scoop and (2) complimentary motor belt replacements.
6. Inspect your machine for any loose parts or screws. Check to make sure that the rubber feet are securely fastened (Figure I) and inspect the power cord and plug (Figure H). If the plug or cord are damaged, DO NOT ATTEMPT TO START MACHINE. Instead, call support or contact us online (See page 5 for contact details).



OPERATING PROCEDURES

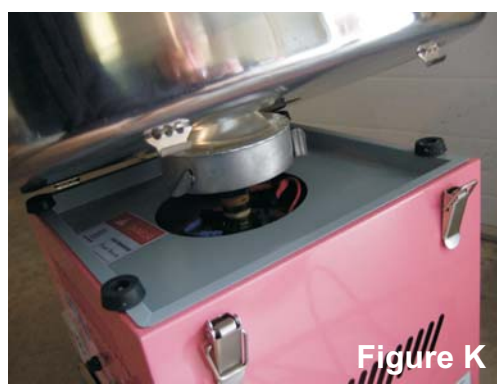
Please consult the Electrical Specifications section on page 5 of this manual before operating.

Initial Setup

After unpacking your machine:

NOTE: If your machine came with a cart, skip forward to page 12 and complete the cart assembly before completing this portion of the setup.

1. Wipe the pan and floss head with a clean, soft cloth moistened with water. **Dry thoroughly. IMPORTANT! Before any cleaning or maintenance, be sure that your unit's Power Switch is OFF and the machine is UNPLUGGED.**
2. If you are using the machine without a cart, make sure that you have chosen a safe location for operation and that you place it on a stable, sturdy surface. This machine operates at high speeds. **STABILITY IS ESSENTIAL FOR SAFETY.**
3. Be sure that your electrical supply matches the requirements of this machine and that a properly grounded outlet is available. **NEVER TAMPER OR MODIFY THE GROUNDING PIN OR CORD.** Avoid the use of extension cords and 3-prong adapters.
4. Thoroughly familiarize yourself with this manual, all machine components and the safety precautions before operating. Assemble your cotton candy machine securely by checking to be sure that the pan is locked into place using the clamping brackets (Step 5, below). Ensure that your machine is plugged into a dedicated, grounded outlet and that you are not wearing any loose jewelry, clothing, etc. (**see page 3 for further precautions**).



5. To attach the floss pan to the motor body assembly, first place the cleaned pan over the floss head as shown in Figure J. Next, align the brackets on the bottom of the pan with the bracket clamps as shown in Figure K. Finally, hook the metal rings of the clamps over the lips of the brackets and close the clamps into place securely. Repeat for the other side of the machine, securely fastening all four clamps and brackets.

OPERATING PROCEDURES

Cotton Candy Machine Controls & Operation

1. Turn the **Power Switch** to **ON** by pushing down on the red switch (Figure M). Observe the stability of your machine. Check for excessive vibration and if you notice this, turn the **Power Switch** to **OFF**, unplug the machine and make sure that your working surface is level. Check to see that the floss head is sitting levelly and evenly.

2. To bring the machine up to temperature, turn the **Heating Controller Switch** (Figure N) to **ON**. Allow to heat up for 2-4 minutes; the floss head will heat to a temperature of around 445 degrees F, so take care to keep body parts and flammable materials away when the machine is in operation. Subsequent batches will not require a preheating period.

3. After machine is hot, add 1 scoop (with the sugar ladle provided) of cotton candy floss mixture into the spinner head (Figure P). **USE CAUTION! FLOSS HEAD IS SPINNING AT ULTRA-HIGH SPEEDS. TAKE CARE NOT TO CONTACT THE SPINNING HEAD WITH YOUR HAND OR THE SCOOP! DO NOT OVERFILL. OVERFILLING CAN LEAD TO EXCESSIVE SMOKING.**

4. Within 5-45 seconds, cotton candy floss will appear (Figure Q, also, see page 10 for cone-building instructions). Make sure to spin the floss head until all sugar is gone.

VERY IMPORTANT! FAILURE TO BURN OFF AND SPIN OFF EXCESS SUGAR COULD LEAD TO SMOKING AND/OR BURNED SUGAR DURING NEXT RUN CYCLE.

Repeat steps 3-4 to continue spinning floss; once the machine is warmed up, no preheating is needed.

5. To clean the floss head, **TURN MACHINE OFF, UNPLUG AND ALLOW TO COOL COMPLETELY, THEN WIPE WITH A CLEAN MOISTENED WARM SOFT CLOTH. CLEAN MACHINE AFTER EVERY USE.**



MAKING COTTON CANDY

Cotton Candy Sugar

You may use any pre-mixed commercial cotton candy floss in your machine. Pre-mixed preparations are convenient to use and commonly packaged in sealed containers designed for easy pouring.

Alternately, you may choose to add a floss concentrate to high quality sugar to produce your own mixture. Please be sure to use high quality sugar with no additives as these may clog your machine and require higher heat settings.



IMPORTANT PRECAUTIONS!



DO NOT allow untrained personnel, the public, and especially children to operate or have direct physical contact with the machine. **FOR COMMERCIAL USE ONLY.** All operators must be 18 years or older.

CAUTION! Spinning floss head operates at 3500 RPM. All operators **MUST** keep their body well away when machine is in operation. **Keep jewelry, long hair, hands and face away from the floss head to avoid serious injury.**



CAUTION! Spinning floss head is **HOT!** Do not touch head immediately after use! **DO NOT TOUCH PLUG WITH WET HANDS!** **ALWAYS** wear protective eyewear

USE ONLY COTTON CANDY FLOSS CONES TO COLLECT SUGAR FLOSS.

MAKING COTTON CANDY

Cotton Candy Production

TO MAKE CONES:

1. Follow the instructions on page 9 to create floss. Grip floss cone by the small tapered end and insert the larger end into the spun mat of floss.

IMPORTANT! Take care when cone building to keep jewelry or loose clothing away from the spinning floss head. **Floss head will be hot!**

2. Twirl the floss onto the cone in a counter-clockwise direction.
3. Lift off and roll the floss onto the cone to the desired size. If you are using floss bags insert the cotton candy cone into the bag floss-end first and remove floss from cone by gripping the exterior of the bag to pull floss away.
4. Cones may be stored in the holes of the cart shelf or in the drawer of the machine. Be sure to follow the procedures in this manual, paying particular attention to overfilling precautions and proper procedures for clearing excess sugar from the spinning head and end of production practices.
5. Experiment with multiple colors to attract customers and familiarize yourself with floss production to improve cone build-up time for your patrons. Consider using bags in addition to cones to ensure that you have cotton candy on hand for larger crowds.

6. CLEAN MACHINE AFTER EVERY USE. TURN MACHINE OFF, UNPLUG AND ALLOW TO COOL COMPLETELY, THEN WIPE WITH A CLEAN MOISTENED WARM SOFT CLOTH.

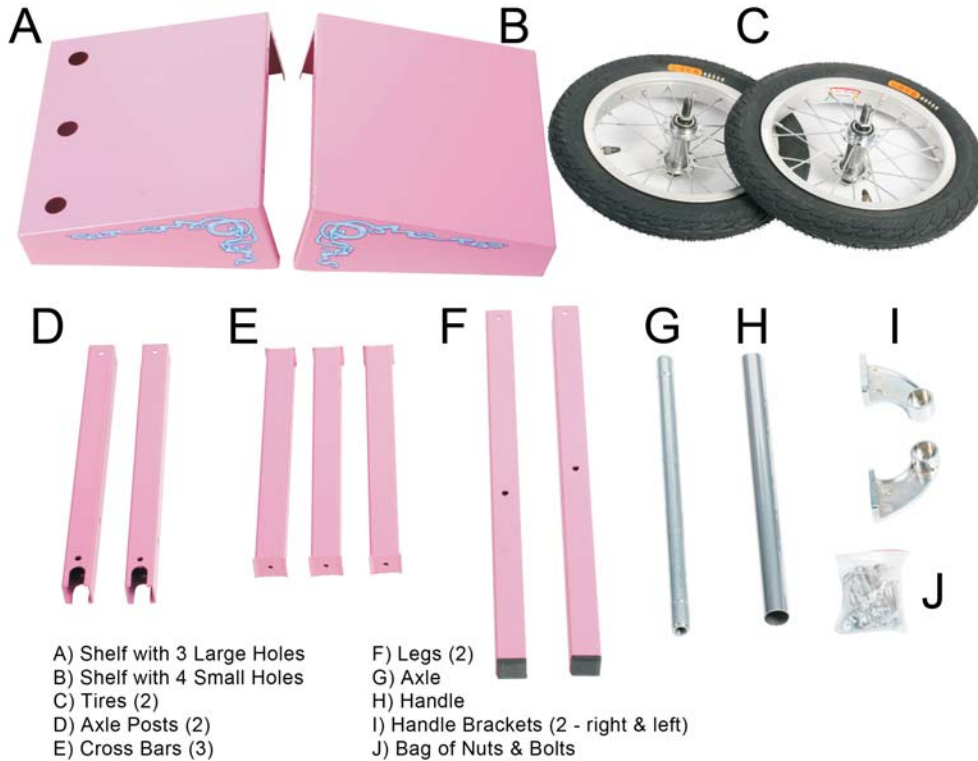
AVOID USING EXCESSIVE AMOUNTS OF WATER WHEN CLEANING AND ENSURE THAT THE MACHINE IS THOROUGHLY DRY BEFORE USE.



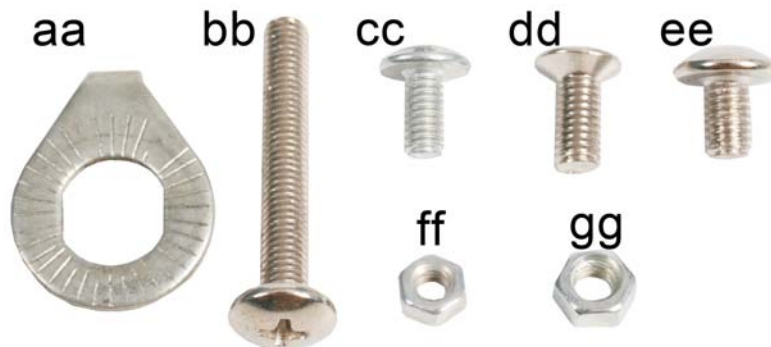
Vortex™ Cart Assembly

NOTE: It is recommended that you assemble the cart before the machine as you will need to get inside the unit to insert nuts and bolts that hold the shelves on. Should you already have the cotton candy maker assembled, you must remove the pan and the grey lid from the machine in order to complete these steps.

Parts List - Cart Major Components



Parts List - Nuts & Bolts Bag



Ensure that you have all the parts needed by comparing to the parts list on Page 12. Once you have determined that you have all the parts necessary you may begin assembly. If anything is missing, contact **Great Northern Popcorn at 1-800-665-0728** to resolve any missing parts issues.

NOTE: Refer to parts list on Page 12 for all parts references.

Cart Assembly

1) Obtain one Axle Post (D), one Leg (F), and one Cross bar (E). Assemble using two Frame Bolts (bb) as shown in **Figure R**.

2) Repeat step 1 with remaining parts.

3) With the remaining cross bar (E), span the two assemblies together using two more Frame Bolts (bb). See **Figure S**. When finished it should look like **Figure T**.

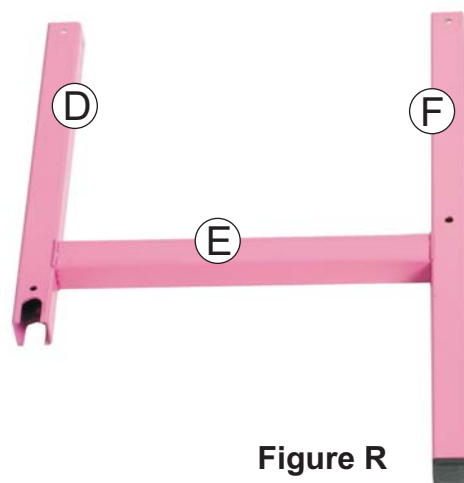


Figure R

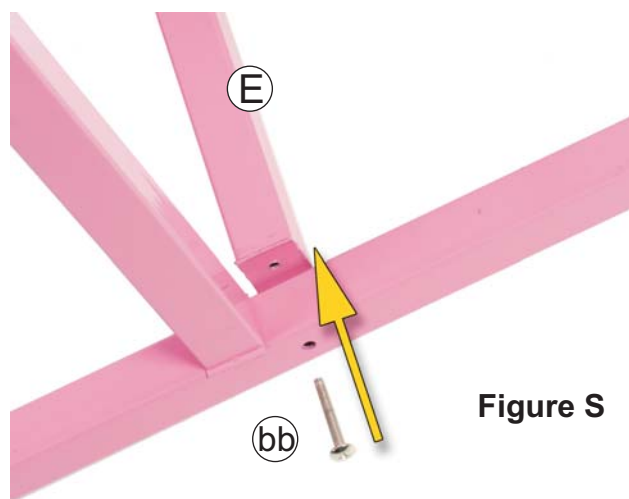


Figure S

4) Ensure the cart frame sits level when placed upside down on the floor or other flat surface, and that the two grooves in the axle posts are facing sideways to the assembly, as shown in **Figure T**.



Figure T

Cart Assembly - Cont.

5) See figure U. Place the axle (G) on top of the two slots in the axle posts (D). Push down firmly until the axle is seated completely into the bottom of the slots. A rubber mallet might be helpful if the axle is difficult to seat properly. Figure V shows the axle seated completely.

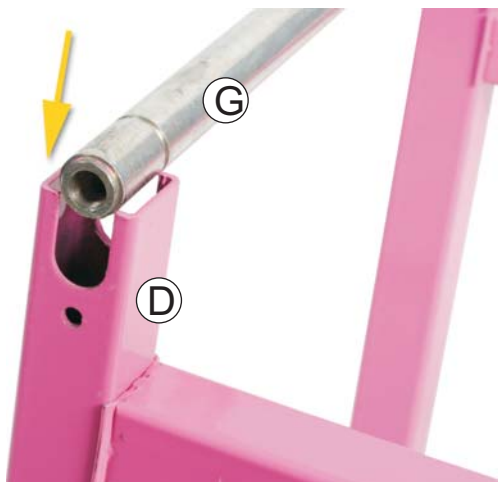


Figure U

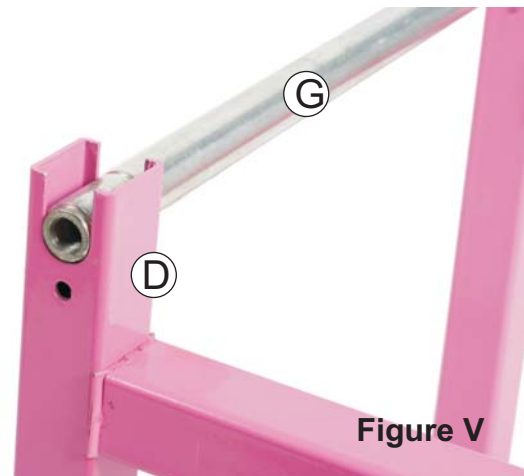


Figure V

6) Locate an axle lock (aa) from the bag of nuts and bolts. Place the axle lock on one side of the axle with the protruding tab sitting in the hole above the axle (Figure W). The tab will be snug in the hole. If it doesn't go into the hole completely this will not affect operation.

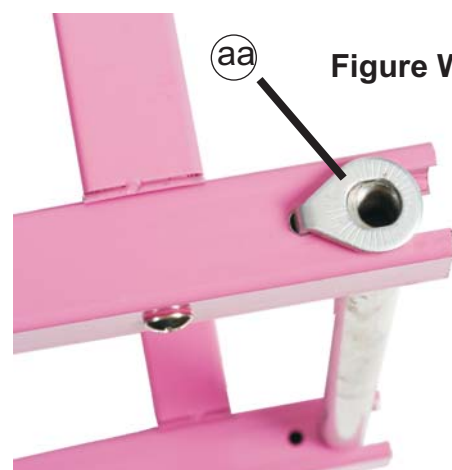


Figure W

7) Place the threaded axle of one of the tires (C) into the end of the axle (G) that you just placed the axle lock (aa) onto. See Figure X. Begin screwing the tire axle into the axle post by hand. When snug use an adjustable wrench or a 17mm wrench to finish tightening all the way. **DO NOT** tighten by using the nut on the outside of the tire axle. This may cause the bearings to become bound up and the wheel will not function properly. Always tighten from the nut on the side nearest the cart frame.

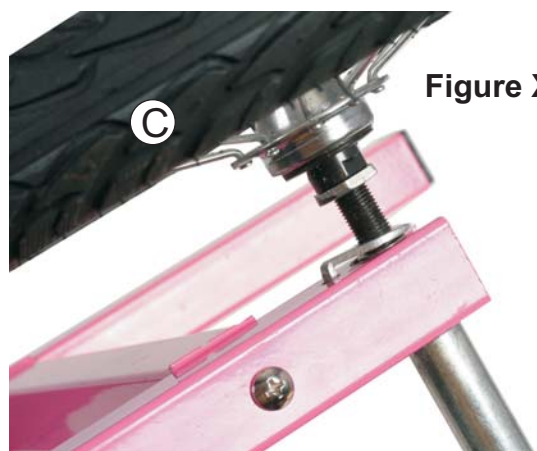


Figure X

8) Repeat steps 6 & 7 for the other tire and axle lock.

9) When finished your cart frame and wheels should look like Figure Y. Ensure the cart sits flat on the floor or table top before proceeding. You are now ready to mount the frame onto the cotton candy machine.

Cart Assembly - Cont.

10) Slide the frame into the base of the cotton candy machine top, ensuring that there are no bits of metal still inside the machine base from the drilling process. Use a small screwdriver or pick to remove any stubborn burrs or metal flakes. The frame should slide fairly easily into the base of the machine (**Figure Z**). Secure each corner with two short screws (**ee**) as shown in **Figure AA**.

NOTE: The cart can be attached to the machine one of two ways. The decision as to which side to put the wheels will depend upon your application or location for your cart display.



Figure Y



Figure Z

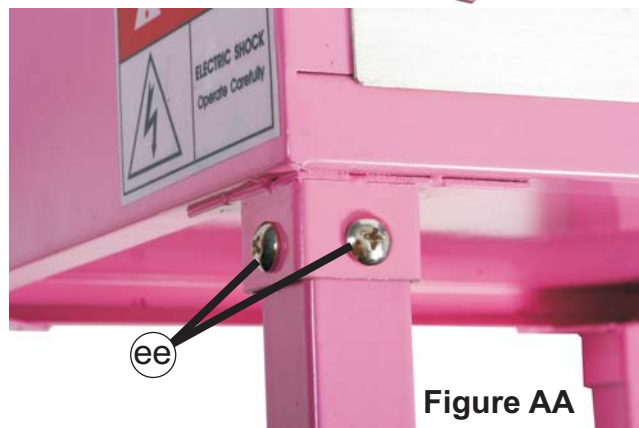


Figure AA

Cart Assembly - Shelves

11) Ensure that the pan and gray cover are removed prior to continuing.



Figure BB

12) Which side you have chosen to install your cart to will determine the side your shelves must be attached to. The shelf (**A**) with the **three large holes** will go on the **SAME SIDE** of the cart as the wheels. Hold shelf (**A**) in place and insert small bolts (**cc**) through the holes from under the shelf and secure with 7mm nuts (**ff**). Repeat until all four small bolts and nuts are fastened securely (see **Figure BB**).

13) Repeat **step 12** with Shelf (**B**) on the opposite side of the machine (the side opposite the wheels).

Cart Assembly - Handle

14) Install one of the handle brackets (I) on the edge of the shelf (B) so that the open end of the bracket is facing inward. Use two tapered bolts (dd) and two 8mm nuts (gg) to secure the handle bracket. See **Figure CC**.

15) Place one end of the handle (H) into the not attached handle bracket. While holding the handle in place set the other handle bracket (I) in position and secure with the remaining two tapered bolts (dd) and 8mm nuts (gg). See **Figure DD**.

Figure CC

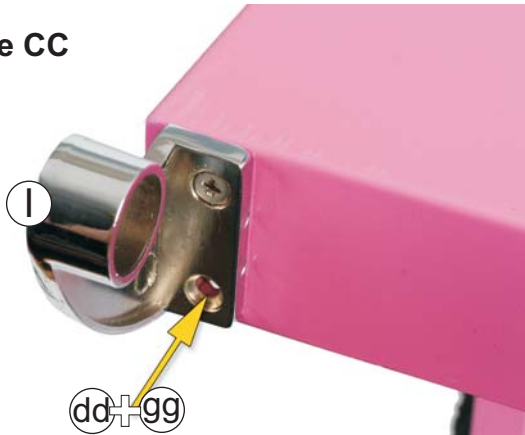


Figure DD



Congratulations! Your Great Northern Cotton Candy Cart is now finished. You may now reinstall your gray cover and return to [Page 8](#) to complete your setup and begin making the best cotton candy you ever tasted!

