

Tornado and Deluxe Whirlwind

Instruction Manual

Model #3005 & #3005SS, Model #3008 & #3008SS
and Model #3015 & #3015SS



 **GOLD MEDAL**®

FUNFOOD EQUIPMENT & SUPPLIES

Cincinnati, OH 45241-4807 USA

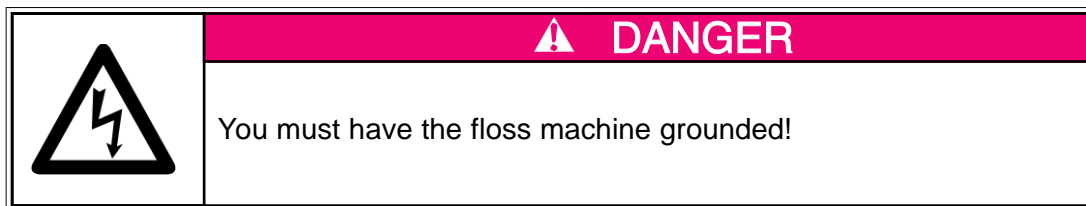
ELECTRICAL REQUIREMENTS

All Gold Medal floss equipment must have sufficient line voltage for proper operation. You must furnish an adequate size supply line and hardware. Refer to the following chart for requirements.

Model No.	Machine	Voltage	Maximum Amperage	Line Size (Amperage)
3005	Tornado	120	26	30
3008	Deluxe Whirlwind	120	27	30
3015	X-15R Whirlwind	120	17	30

The power supply cord is a grounding type. These units must be grounded in accordance with local codes; or in the absence of local codes, with the National Electric Code - ANSI/NFPA No. 70-1987.

In a grounded three wire system, your electrician should double check all outlets for the proper polarity. Improperly wired outlets may cause a hazard to the operator.



CONTROLS AND THEIR FUNCTIONS

TORNADO AND DELUXE WHIRLWIND CONTROLS

MOTOR SWITCH

DPST switch which serves as a master OFF-ON switch and energizes the cooling fan and spinner head drive motor.

NOTE: The drive motor is equipped with an internal centrifugal safety switch which makes contact when the floss spinner head reaches approximately 2050 RPM, thus completing the heat circuit. This mechanism provides a safety circuit for the heating ribbons in the case of a motor malfunction.

HEAT SWITCH

Three position DPDT switch: Emergency, Off, Normal
Emergency (Red position)

This position applies the fixed transformer to increase the line voltage 35 volts (increase the heat in the spinner head) and provide for faster heating. This position should be used when low supply voltage conditions exist. While this position is ordinarily used for start-up under normal operating conditions, it might also be used in situations where the ribbons or equipment have had extensive use.

Off

With the switch in this position, the floss ribbons will not heat.

Normal (Blue position)

This position applies the fixed transformer to decrease the line voltage by 35 volts (decrease the heat to the spinner head) and provide a normal operating range.

HEAT CONTROL

This is a variable transformer used to provide finer control across the pre-selected range of the heat switch. It increases or decreases the voltage to the spinner head (raising or lowering the heat to the head). On the door panel surrounding the heat knob are red and blue graduated scales from 1 to 9 designed to correspond with the setting of the heat switch. For example, if the heat switch is set to normal (blue), adjustments to the ribbon temperatures using the heat control are made reading the blue scale. The greater the number, the greater the heat.

X-15R WHIRLWIND CONTROLS

MAIN POWER AND MOTOR SWITCH

DPST switch which serves as a master OFF-ON switch and energizes the cooling fan and spinner head drive motor. **NOTE:** The drive motor is equipped with an internal centrifugal safety switch which makes contact when the floss spinner head reaches approximately 2050 RPM, thus completing the heat circuit. This mechanism provides a safety circuit for the heating ribbons in the case of a motor malfunction.

HEAT RANGE SWITCH

This is a 4-position tap switch with "A", "B", "C" and "OFF" positions. The "A" position corresponds to the highest heating potential, "B" is an intermediate range, and "C" corresponds to the coolest position.

HEAT CONTROL FINE TUNING

This is a rheostat which allows you to make small, incremental adjustments to the spinner head ribbon temperatures. The higher the number, the greater the voltage and temperature.

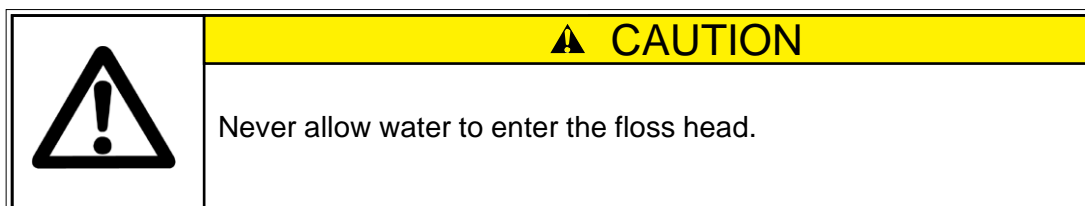
MAKING FLOSS

1. Before operating your machine, read this section on how to make floss.
2. Using a damp cloth, moisten the inside of the floss pan. This will cause the floss to adhere to the sides of the pan. The Whirlgrip Floss Stabilizer Model No. 3010 works more effectively to prevent floss from leaving the pan and is offered by Gold Medal at a modest price. See the illustration on page 6 which shows proper installation of the Whirlgrip Floss Stabilizer.
3. After reading this entire section, operate your machine as described in the operating instructions for your machine following this section.
4. Pay attention to the direction of the floss as it is spun out of the head. It should be thrown against and adhere to the sides of the floss pan. Attached to the top plate of the spinner head are two floaters, these give additional air current for floss control. By twisting the leading edge of the floaters down, you get more lift and the floss will go upward. With the leading edge up, the floss will go down. A little practice should give you good control in any climatic condition.
5. To pick up floss: Once you practice awhile, anyone can be an expert at rolling the web of cotton candy onto the cone. First, pick up the cone. If it sticks in the stack of cones, do not pull, but twist it off the stack. Hold an inch or two of the pointed end of the cone between your two fingers and your thumb. With a light flicking action, break the web of floss that is building up in the pan. Usually some floss will stick to the cone. Lift up the cone with the ring of floss attached and, by rotating the cone, wind the floss onto it. Do NOT roll floss onto the cone while it is inside the pan. This will just pack the floss onto the cone, causing you to use more floss to fill the cone, and result in less cones of floss per load of sugar. For additional help, see the illustrations on page 7.

If you experience difficulty in getting the floss to stick to the cone, it will be helpful to pass the cone over a damp sponge. One pass over the sponge should cause the floss to stick, allowing easier floss pick-up. Many experienced operators prefer to lift the ring out of the pan and, with a flick of the wrist, turn the ring into a figure eight and whip it around the cone. This leaves giant air pockets and makes it appear that you are serving a larger portion.

6. When stopping operation for the day or any prolonged period, it is good to run all the sugar out of the floss head. When empty, turn the heat to the highest position for approximately one minute to remove carbonization from the ribbons. This will prevent a build-up of moisture on the band and ribbons.

A damp cloth will be sufficient to wipe off the floss head after using, but be sure to unplug the main electrical supply cord before doing this. Make sure all parts are dry before resuming operation.



SUGAR FOR YOUR COTTON CANDY

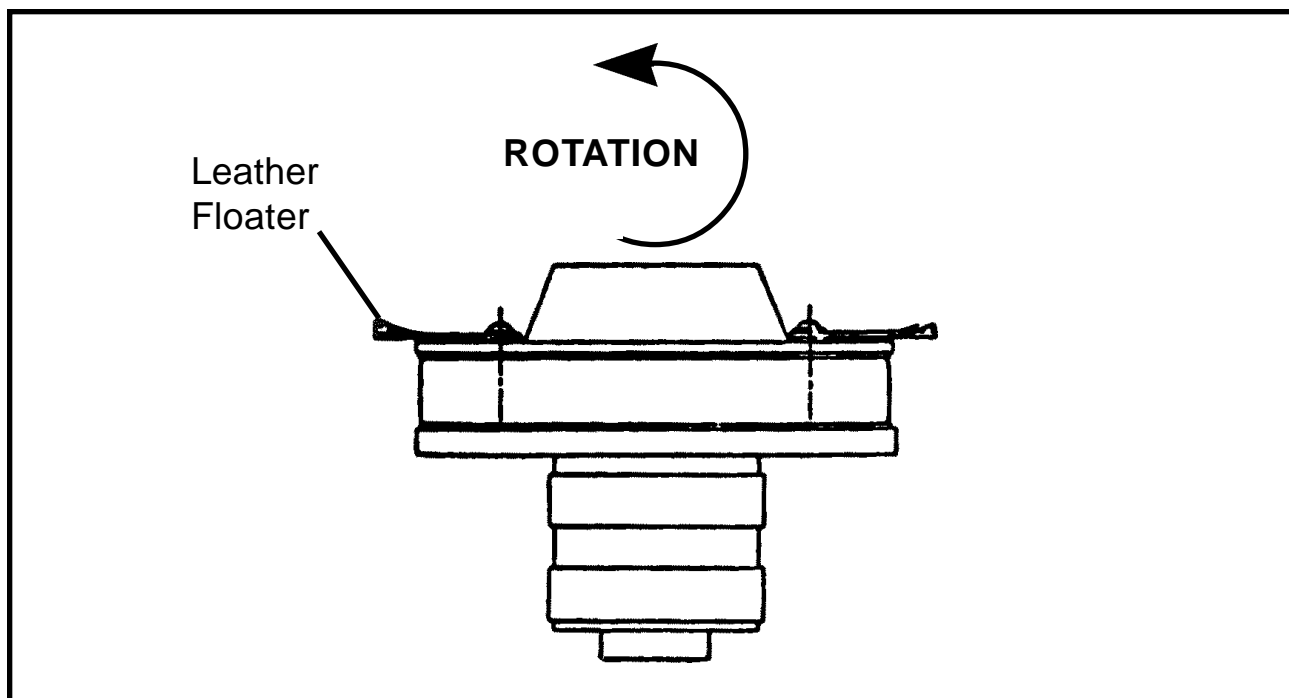
Our ready to use FLOSSUGAR is the preferred sugar for your new cotton candy machine, but and 100% pure Cane or Beet Sugar will do just fine. Our FLOSSUGAR gives you good rich colors, and great flavors, too. It is packed in handy half-gallon sealed cartons, with E-Z pour spout for filling your machine. FLOSSUGAR comes in 8 flavors, and you can easily change colors for greatest variety, and best sales.

If you want to “Mix Your Own”—use our FLOSSINE, and please follow our directions. If you want a deeper color, slightly dampen the mixed sugar—use a tablespoon of water per five pounds of sugar—sprinkle water over sugar, and mix well. **DO NOT USE EXCESS COLOR**—too much color will mess up the ribbons on your machine, and could impart a bitter taste to the candy. There is a limit as to how dark you can make cotton candy—that’s because it is 98% air; and we cannot color the air.

Today 99% of the sugar manufactured is “Extra Fine Granulated” which does have some small particles which can slip thru the ribbons without being melted. If this becomes objectionable, you can seek out Medium Coarse, or sanding sugars. The larger crystal size will require a little more heat to melt. Read the label on the bag of sugar—today we see some “Free Flowing” sugar for restaurants, and it contains cornstarch, which will burn onto your ribbons, clogging them rapidly. We have also seen some cheap off-brand “sugar” which is a blend of sugar and dextrose or corn syrup. This product makes very poor cotton candy. Please make sure you get good sugar for your cotton candy machine.

FLOATER ADJUSTMENT

Form leather floaters as shown. This creates a lifting action to float the floss across the gap to the side of the floss pan.

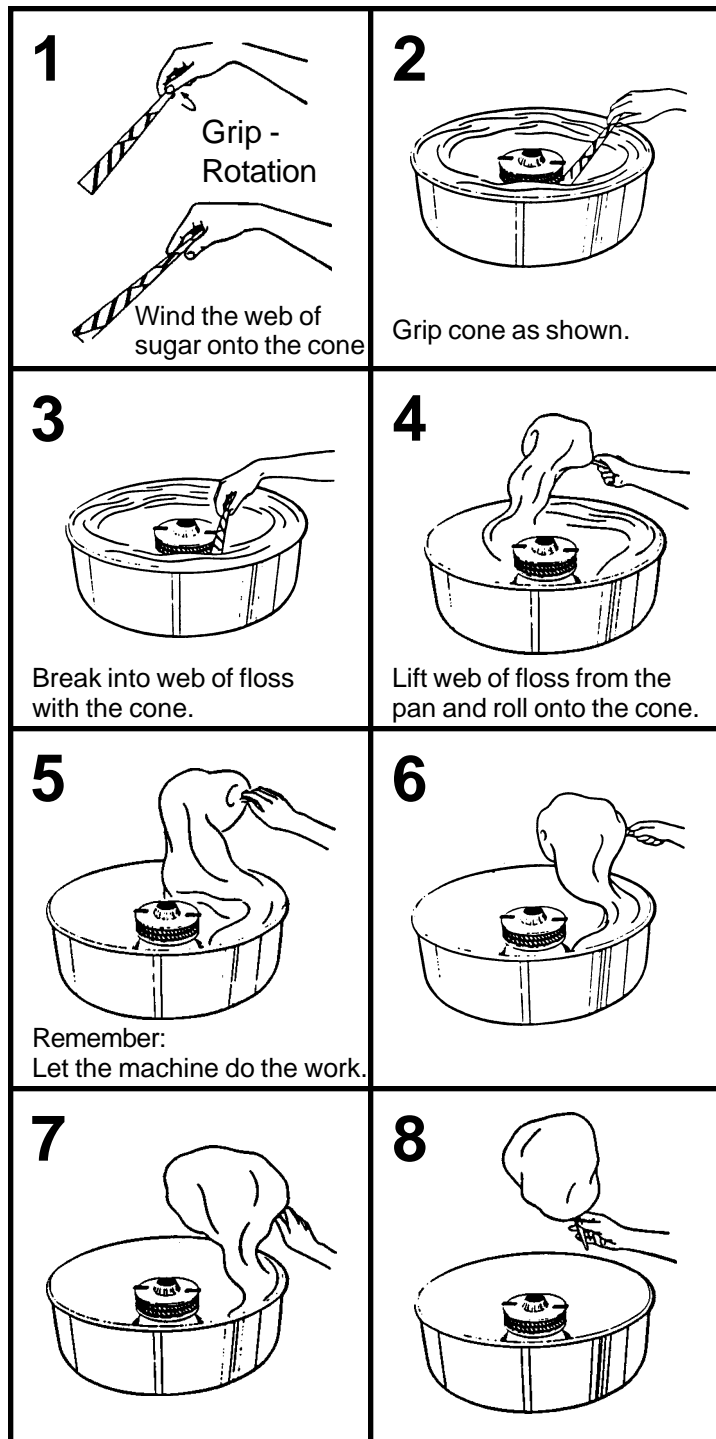


FLOSS MAKING PROCEDURES

Add Flossugar only while motor is off. Then, manually spin the head to balance. This will eliminate excessive vibration of the head.

When adding sugar, always fill about 90% full.

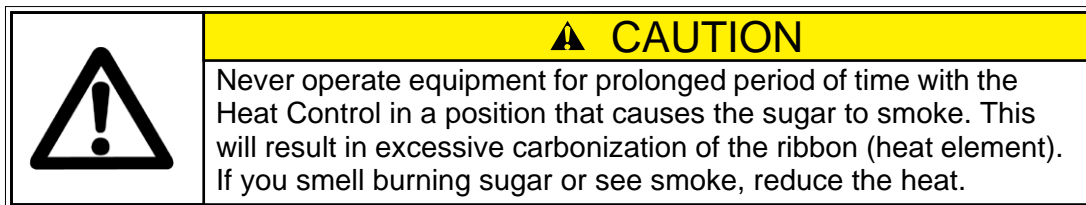
DO NOT OVERFILL!



OPERATING INSTRUCTIONS

TORNADO AND DELUXE WHIRLWIND

1. Plug in floss machine.
2. Before turning on the motor switch and with the spinner head stationary, fill floss head about 90% full with sugar. Do NOT overfill! Whenever you add sugar to the floss head, always fill it about 90% full. This is necessary to obtain a balanced condition in the floss head or excessive vibration will occur. Never add sugar when motor is running. After adding Flossugar, manually rotate head to balance.
3. Flip Motor Switch to On position.
4. Flip the Heat Switch to Emergency position. This is for a fast warm up. Turn Heat Control up until voltmeter indicator arrow moves into the red start area.
5. The machine should begin to make floss in a matter of a few seconds. After floss is being produced, place Heat Switch in Normal position. Adjust the Heat Control until the voltmeter indicator arrow moves into the green run area.



6. Once you find the ideal setting for the Heat Control, you should be able to operate near this position each time.
7. Read the section in this manual on Making Floss before going into full production

X-15R WHIRLWIND

1. Plug in floss machine.
2. Before turning on the main power and motor switch, and with the spinner head stationary, fill the floss head about 90% full with sugar. Do Not Over Fill! Whenever you add sugar to the floss head, always fill the head about 90% full. This is necessary to obtain a balanced condition in the floss head and eliminate excessive vibration. Never Add Sugar When Motor Is Running. After Adding flossugar manually rotate head to balance.
3. turn the Main Power and Motor Switch to the On position.
4. Turn Heat Range Switch to position "A". Rotate Heat Control Fine Tuning Knob to Maximum position (No. 8). This setting will produce the fastest possible war up.
5. You should start making floss in a few seconds. When the unit gets up to heat, it will probably start to smoke. Reduce the Heat Control Fine Tuning setting to eliminate the smoke. If you cannot eliminate the smoking in this manner, turn the Heat Range Switch to position "B" and set the Heat Control Fine Tuning to postion No. 8 once more. If smoking continues reduce the Heat Control Fine Tuning setting. If necessary, repeat once more with the Heat Range Switch on "C".

NOTE: You can fine tune in all three heat range positions.

6. Once you find the ideal Heat Range Switch and Heat Control Fine Tuning positions, you should be able to operate near these positions each time you operate.
7. Read the section on Making Floss before going into full production.

X-15R WHIRLWIND CONTROLS

MAIN POWER AND MOTOR SWITCH

DPST switch which serves as a master OFF-ON switch and energizes the cooling fan and spinner head drive motor.

NOTE: The drive motor is equipped with an internal centrifugal safety switch which makes contact when the floss spinner head reaches approximately 2050 RPM, thus completing the heat circuit. This mechanism provides a safety circuit for the heating ribbons in the case of a motor malfunction.

HEAT RANGE SWITCH

This is a 4-position tap switch with "A", "B", "C" and "OFF" positions. The "A" position corresponds to the highest heating potential, "B" is an intermediate range, and "C" corresponds to the coolest position.

HEAT CONTROL FINE TUNING

This is a rheostat which allows you to make small, incremental adjustments to the spinner head ribbon temperatures. The higher the number, the greater the voltage and temperature.

INDOOR COTTON CANDY SUCCESS TIPS

1. **The Unifloss Stand:** Choose either the complete Unifloss Stand or the top half only and mount it onto your Snack-N-Treat Bar. The Unifloss Stand plus the Whirl Grip Floss Stabiizer effectively eliminates all indoor objections. In addition, the new Animated Motion Sign Effectively helps merchandise the cotton candy.
2. **Candy Floss Is Clean:** In fact, it is "poly clean" when you sell cotton candy in poly bags. Cotton candy is never sticky in poly bags. Always make cotton candy on attractive striped cones and put the floss cone and all in the bag. The "Kid Appeal" comes from having a circus style serving on the cone. If you sell cotton candy as a pad, you lose this appeal.
3. **Always Use A Printed Cotton Candy Bag:** This tends to package the end product more attractively. It only cost a tenth of a cent more to go first class a tenth of a cent is all it cost to make every sale a walking advertisement for building your profits.
4. **Use The Automatic Floss Bagger:** It's as handy as having three hands. The bag is opened by a stream of air. Hold it open with your free hand and stuff the floss in the bag cone and all.
5. **To Sell More Cotton Candy,** you should always rotate your colors often. The easiest way is to use Flossugar in the eight exciting color-flavor combinations. Simply pour from the handy half gallon carton into the floss head and presto, you have a new color. Always change colors as the floss head runs out of sugar.
6. **Always Display Cotton Candy:** Both the Floss Display Board and the Cotton Candy Tree hold enough bagged cotton candy to allow you to produce three complete loads-each a different color. Always display more than one color on the board-it helps to sell more.
7. **Point Of Purchase Signs:** Paper ppoint of purchase signs are included with each case of cones.
8. **In Store Promotions:** it always pays to be able to use the public announcement system to help announce to the buying public the location of the cotton candy department. Secondary Display Boards Loaded with product in high traffic areas will also help stimulate sales. Always suggest the multiple sale - carry one-sixth bushel brown kraft bags to help your customers carry out a half dozen at a time.
9. **External Promotions:** coupons in your ad for free Cotton Candy-or for cents off-always pull in shoppers and build store profits. Free Ad Mats are yours for the asking.

TROUBLESHOOTING

Gold Medal Floss Equipment requires very little maintenance, most of which can be accomplished with a few simple hand tools and testing equipment.

TOOLS

Common screwdriver - medium size

Phillips screwdriver - medium size

$\frac{7}{16}$ " Nut driver

$\frac{1}{4}$ " Nut driver

$\frac{3}{32}$ " & $\frac{7}{64}$ " Allen wrench

Strips of 180-J Emery Cloth -1" by approximately 20" (Available from Gold Medal)

TEST EQUIPMENT

Circuit testing device (one of any of the following)

Neon Light tester

Voltmeter with lead wires

IF EQUIPMENT IS DEAD ELECTRICALLY

Check power supply, is the machine plugged in and the switch turned on? Check electric outlet and protective devices-fuse. Circuit breaker, etc. Will another appliance operate from the same outlet? Check the outlet with a circuit tester.

If you are sure of current at your wall outlet, then the problem is probably in the equipment.

After checking over the mentioned items and the equipment is still inoperative, the trouble is in one of the components. It is best to have them checked by a competent electrician or returned to Gold Medal for repair. However, here is a simple check you can perform to determine which component is at fault.

Disconnect motor lead wires and induce current directly into the motor. If the motor runs, you have a faulty motor switch. If the motor fails to run, it is the faulty part. When removing wires be sure to remember which terminals they came from and that you return them to the correct terminals.

IF MOTOR RUNS, BUT EQUIPMENT FAILS TO PRODUCE FLOSS

On equipment without a voltmeter, a circuit tester can be used to determine if you have current to the brushes. Remove the brushes. With the equipment plugged in and switches on, touch a lead wire from the circuit tester to the inside of the brush holder. If the tester shows current to the brushes, your problem is in the head assembly.

1. Check the floss head to make sure there is sugar present.
2. Check the brushes-are they sitting flush against the slip rings and bear no evidence of arcing?
3. Check connections on the brush lead wires.
4. Check ribbons for excessive carbonization-the ribbons may be completely clogged with carbon, disassemble the band and ribbons as described previously in this manual.

If these procedures are followed and the problems still have not been located, it is necessary to check the control components; i.e. heat and motor switches, heat controls, and fixed transformers, if applicable. The servicing by an electrician is encouraged for this procedure. However, if you have a continuity tester or voltmeter with lead wires, it may be possible to find the faulty component by using the process of elimination. Use the wiring diagrams provided for all necessary wire tracing.

5. With the equipment plugged in and switches in the normal operating positions, check for current flow into or out of each component. If there is evidence that a component is defective. It may be helpful to look for evidence of arcing or burning. Frequently, a fault component will bear evidence of excessive heat.

LOW PRODUCTION

1. A primary reason for low production is excessive carbon on the ribbons. Follow the instructions for removal and cleaning of bands and ribbons.
2. Check heat control for correct setting. Metered equipment has marked graduations on the voltmeter which indicate points where the equipment should operate most efficiently.
3. Check the line voltage. A primary reason for low production and poor working of equipment is low line voltage. Have an electrician check the line voltage and add new lines if there is not enough current for the requirement listed on the equipment name plate. **NOTE:** The Tornado and Deluxe Whirlwind equipment have the ability to increase the line voltage approximately 20%.
4. Check the ribbons. One burned out or shorted ribbon will cut production in half.
5. Foreign objects in the head assembly may short a ribbon or create an out of balance condition.

EXCESSIVE SMOKE

1. Check heat control setting. After warm up, equipment should make good floss at a reduced setting. **NOTE:** Never run the machine with the heat so high as to see smoke or smell sugar burning.
2. Check the mixture of the product being used in the head. Use nothing with a cornstarch base-do not over use Flossine-be sure sugar is dry and free of lumps.
3. Check the band and ribbons for excessive carbon build up and remove it as previously stated in this manual.

EXCESSIVE VIBRATION

1. If the equipment is new, check for shipping bolt or packing material accidentally left in the machine.
2. Whenever you add sugar to the floss head, you should always fill it completely. This is necessary to obtain a balanced condition in the head and eliminate vibration. Do NOT add sugar with motor running!
3. Check for stretched or uneven suspension springs.
4. Check for foreign objects or lumps of sugar in the head assembly. Run the sugar completely out for this.
5. Loosen the spinner cap retainer screws. Tighten and balance the head as previously described.