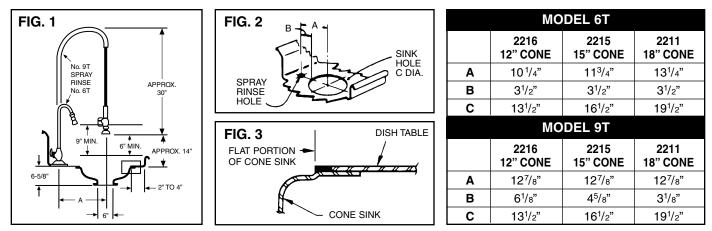


# INSTALLATION INSTRUCTIONS

# COMMERCIAL DISPOSER MODELS 2000, 3000, 5000 AND 10000

## BEFORE INSTALLING, READ ENTIRE INSTRUCTIONS CAREFULLY. RISK OF INJURY TO PERSONS FROM HAZARDOUS MOVING PARTS. SERIOUS INJURY POSSIBLE IF NOT PROPERLY INSTALLED WITH A HOPPER OR A CONE SPECIFIED IN THE INSTRUCTION MANUAL.



# IF YOU ARE REPLACING AN OLD DISPOSER GO TO **POSITIONING AND** INSTALLATION OF COMMERCIAL DISPOSER

# **INSTALLATION OF CONE SINK INTO DISH OR WORKTABLE**

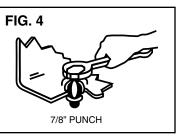
- (See Figures 1 and 2.) Locate hole center as shown on Figure 2. Cut a "C" (Figure 2) diameter hole in dish or work table, a minimum of 2" from the inside front edge (operator's side). Hole can be cut with a "nibbler" after a knockout hole 1<sup>1</sup>/<sub>2</sub>" diameter has been punched.
- 2. Lift cone to underside of table with cone flange overlapping all around (Figures 1 and 3).
- Check alignment of cone spray fittings to be sure they are in the proper position. For 15" and 18" cones, position such that holes are located to right and left side of operator. (See Figure 7 for location.)
- 4. Tack weld, spot weld, bolt, or rivet flange of cone sink to underside of dish or work table. If bolted or riveted, smooth top surface and washsolder around bolt or rivet heads and sand smooth.
- 5. Bead weld or solder and wash-solder all around where the table joins flange of cone sink for a clean, watertight, sanitary installation.
- 6. The cone sink has been designed with the step, as shown in Figure 3. In the welding or soldering operation required to assemble the cone sink to the dish or work table, every attempt should be made to keep the recessed, flat portion of the cone free of the weld or solder material. This will minimize the clean-up time required and provide a smooth, flat surface for any cover.
- 7. Minimum installation criteria:
  - Minimum clearance between left and right side of waste disposer and side wall: 18 inches.
  - Minimum clearance to back wall: 10 inches.
  - No front panel/door between waste disposer installation cavity under a sink/dish table and room.

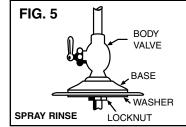
# SPRAY-RINSE INSTALLATION

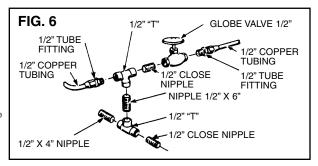
- 1. Locate center (Figures 1 and 2).
- 2. Drill 7/16" diameter hole through center.
- Assemble 7/8" punch and tighten bolt head, as illustrated, until the die pierces the stainless steel, leaving a clean opening of 7/8".
- 4. Place body valve and base in position, assemble **washer** and **locknut** as shown in Figure 5.
- 5. Attach vol-temp assembly to the projecting nipple.

# POSITIONING AND INSTALLATION OF COMMERCIAL DISPOSER

- 1. Subassemble plumbing for swirl sprays as shown in detail in Figure 6, and as shown assembled on final unit in Figure 7.
- Slide Hush Cushion<sup>®</sup> up over edge of flange on cone sink. The inner edge of this Hush Cushion<sup>®</sup> is chamfered to facilitate this operation.
- 3. Slide one clamp ring over Hush Cushion<sup>®</sup>, place between two upper beads and tighten, this firmly attaches the Hush Cushion<sup>®</sup> to the cone sinks. NOTE: On the six inch opening only to make certain that the Hush Cushion<sup>®</sup> is not mounted upside down, look down into the cone sink from above the work table and check that the wording is readable on the center plug on the Hush Cushion<sup>®</sup>. This reads, "Remove before using".







## FIG. 7

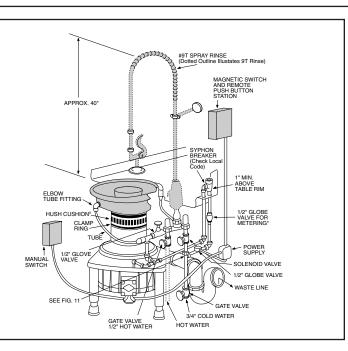
### NOTE:

A globe valve used for metering flow to prevent solenoid hammering must be installed between solenoid valve and disposer. See Fig. 7. Any valve ahead of the solenoid valve must be opened and cause no restrictions.

IMPORTANT! Do not test or run disposer without *minimum water flow* (see Plumbing Installation) as this will damage the seal and void the warranty.

#### NOTE:

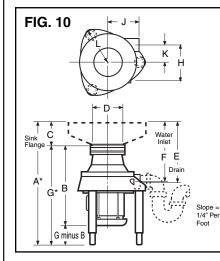
Disposer assembly includes disposer, outlet, nipple, Hush Cushion<sup>®</sup>, clamps and supporting legs. Other items must be purchased separately. **Items shown in gray in Figure 7 are available in equipment groups ordered separately**.



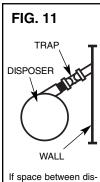
#### AERATOR SPRAY FIG. 9 CONVERTIBLE SPRAY **FIG. 8** SPRAY GASKETS I OCK STEEL WASHER The convertible spray NUT NUT should be located TUBING opposite the direction of travel of dishes in CONICAL scrapping operation. **BRASS WASHERS** TUBING SPRAY HEAD I OCK GASKET NUT NUT SPRAY HEAD STEEL WASHER

- 4. Slide second clamp ring loosely over Hush Cushion® and up to previously tightened clamp ring. Do not tighten.
- 5. Unscrew legs until there is a space of approximately 1/4" between the top of the upper housing and the Hush Cushion<sup>®</sup>. Raise disposer until the upper housing slides into the Hush Cushion<sup>®</sup>.
  - Slide the loose clamp ring between the two lower beads on the Hush Cushion® and tighten.
- Assemble swirl spray or swirl sprays as shown in Figure 8. The method of assembly of the swirl sprays is typical. Other combinations of convertible and fixed swirl sprays are available. The outlet hole of fixed spray head should be horizontal to promote swirling action in cone sink. (convertible spray see Figure 9.)
- 7. Connect copper tube or tubes to swirl sprays and bend in gradual curve to connect to fittings in valves. See Figure 7.
- 8. Thread special nipple into drain outlet, slide hush connector over pipe and assemble and tighten clamp ring in two grooves. NOTE: ALL PLUMBING AND ELECTRICAL CONNECTIONS SHOULD BE MADE ACCORDING TO LOCAL CODES.

# INSTALLATION DIMENSIONS AND DRAINLINE CONNECTIONS



DIMENOIONO	
DIMENSIONS	
2000-1 2000-3 3000-3 5000-3 5000-3	8 10000-3
<b>A*</b> 32 <sup>3</sup> /8 - 35 <sup>1</sup> /8 32 <sup>7</sup> /8 - 35 <sup>3</sup> /8 32 <sup>61</sup> /64 - 35 <sup>2</sup>	<sup>29</sup> /64 32 <sup>61</sup> /64 - 35 <sup>29</sup> /64
<b>B</b> 21 <sup>5</sup> /16 20 <sup>9</sup> /16 22 <sup>15</sup> /32 22 <sup>1</sup> /2 22 <sup>37</sup> /6 <sup>2</sup>	4 23 <sup>37</sup> /64
<b>C</b> 6 <sup>5</sup> /8	6 <sup>5</sup> /8
<b>D</b> 6 6 6 8	8
<b>E</b> 16 <sup>1</sup> /4 16 <sup>1</sup> /4 17 <sup>15</sup> /16 17 <sup>19</sup> /64 17 <sup>3</sup> /8	17 <sup>3</sup> /8
<b>F</b> 16 16 16 <sup>1</sup> /8 16 <sup>5</sup> /8 16 <sup>23</sup> /32	2 <b>16<sup>23</sup>/32</b>
<b>G*</b> 25 <sup>3</sup> / <sub>4</sub> - 28 <sup>1</sup> / <sub>2</sub> 25 <sup>3</sup> / <sub>4</sub> - 28 <sup>1</sup> / <sub>2</sub> 25 <sup>3</sup> / <sub>4</sub> - 28 <sup>1</sup> / <sub>2</sub> 26 <sup>1</sup> / <sub>4</sub> - 28 <sup>3</sup> / <sub>4</sub> 26 <sup>21</sup> / <sub>64</sub> - 28 <sup>5</sup>	<sup>i3</sup> /64 26 <sup>21</sup> /64 - 28 <sup>53</sup> /64
<b>H</b> $5^{1}/8$ $5^{1}/8$ $6^{7}/8$ $8^{7}/16$ $8^{7}/16$	8 <sup>7</sup> /16
<b>J</b> $5^{3}/_{4}$ $5^{3}/_{4}$ $8^{7}/_{8}$ 8	8
<b>K</b> 2 <sup>5</sup> /8 2 <sup>5</sup> /8 3 <sup>3</sup> /8 4 <sup>3</sup> /4 4 <sup>3</sup> /4	4 <sup>3</sup> /4
L 6 <sup>7</sup> /16 6 <sup>7</sup> /16 7 <sup>13</sup> /16 10 <sup>13</sup> /16 10 <sup>13</sup> /16	5 <b>10<sup>13</sup>/</b> 16



If space between disposer and wall is insufficient to allow for installation of trap, waste line may have to be at an angle to the wall as shown.

\* Legs are adjustable beyond the minimum shown in the screw adjustment. 2" clearance must be maintained beneath unit for proper ventillation.

# PLUMBING INSTALLATION

NOTE: Refer to Figure 10 for installation dimensions and drainline connections.

- 1. Plumb unit using valves and fittings as shown typically in Figure 7. **NOTE:** Syphon breaker, available as option item, is approved in most areas. Check local code to be sure it conforms in your area.
- 2. When overhead spray rinse is used, split the incoming 3/4" cold water into two 1/2" lines and connect one to the 1/2" "T" at the bottom of the unit and the other to the globe valve on the cold water side of the spray rinse. Connect one 1/2" hot water line to the globe valve on the hot water side of the spray rinse.
- **3**. On models 3000, 5000, and 10000 connect 3" drain to the hush connector. **Drain line must have a minimum of bends**. The unit is equipped with a drain outlet designed for a connection to a conventional 3" trap. For model 2000 drain line and trap will be 2".

**IMPORTANT!** Before installing the Waste King<sup>®</sup> disposer, the connecting waste line must be **cleaned out** all the way to the connecting sewer main. DO NOT CONNECT INTO GREASY TRAP.

The trap may be connected to a 3" branch waste line running directly into the stack. For model 2000, branch waste line can be 2". A minimum slope of 1/4" per foot of run of waste line is recommended. Limit the horizontal drain line to a 15 foot run free of turns; then, using a long 45° "Y", connect to a 3" or 4" horizontal line or stack. Recessed thread fittings must be used throughout and all pipe ends should be carefully reamed. A minimum number of elbows, tees, etc., reduce the possibility of plumbing stoppages. Water is injected to underside of table chamber through a control that allows approximately 4 gallons per minute flow. Do not restrict or alter this control as it is necessary to properly clean the inside of the unit.

**IMPORTANT**: If unusual sewer conditions exist (too many bends or too long to main), if the water pressure is low for application resulting in low water flow rate, or if high percentage of leafy and/or paper material is included in food waste, serious consideration should be given to the use of a time delay and water injector into the sewer to overcome stoppages. Under such conditions a larger size cold water line should be used along with larger solenoid valves and syphon breakers. (Parts and data available from factory.)

\*Minimum Water Flow RATE Used with Model: 2000 and 3000 – 10 gallons per minute. 5000 and 10000 – 14 gallons per minute.

## TESTING

# IMPORTANT! Do not test or run disposer without minimum water flow (see Plumbing Installation) as this will damage the seal and void the warranty.

**1**. Test assembly for leaks:

- a. Where cone sink joins table b. Where disposer joins cone sink
- c. At all piping connections
- d. Where swirl spray fittings connect
- After plumbing and electrical connections are made, turn on disposer to be sure all parts are in working order and that the disposer turntable rotates clockwise when viewed from above. Open valve in vacuum breaker line and, using globe valves in plumbing assembly (Refer to Figure 6), adjust so that water swirls around just below the rim of the cone sink. Leave valves open in these positions.

**NOTE:** When the convertible swirl spray is used to remove food waste from dishes, adjust the flow to provide a convenient combination of anti-splash and high flow volume characteristics (top of flume approximately 3" above cone sink). These combinations provide a flow of approximately 8 gallons of water per minute.

- 3. Replace cover, retest for leaks and turn unit off.
- 4. Unit is now ready for operation.

# **OPERATING INSTRUCTIONS**

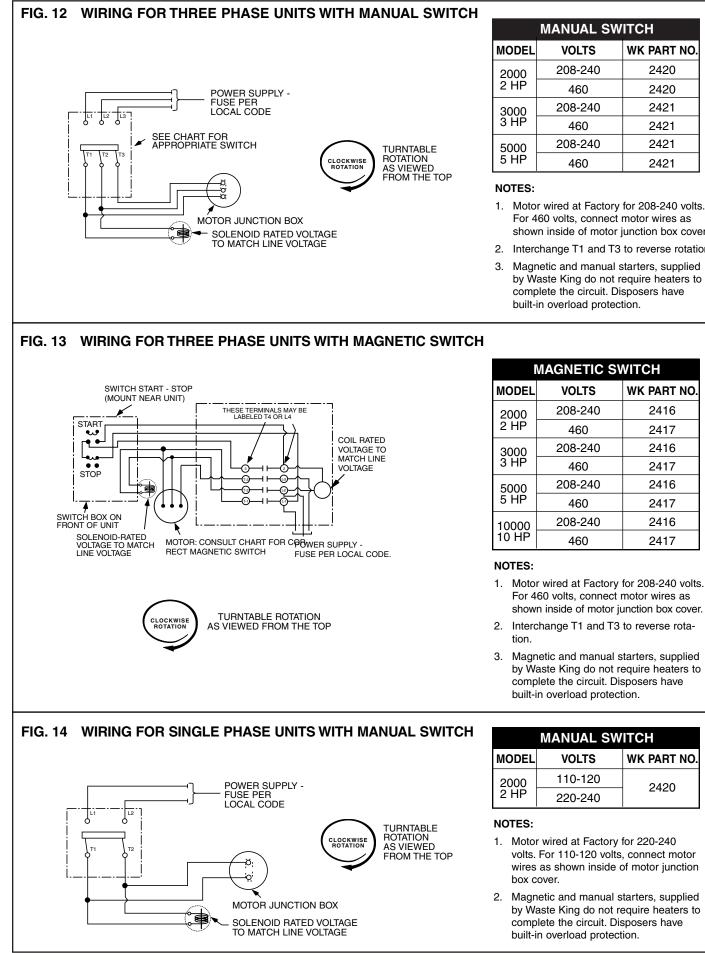
# IMPORTANT! Do not test or run disposer without minimum water flow (see Plumbing Installation) as this will damage the seal and void the warranty.

- 1. Push "start" button. Be sure unit is running and water is flowing before any waste is fed into the disposer. Do not pack food waste into unit. Do not dump garbage can loads directly into unit. Feed waste in gradually.
- 2. DO NOT ALLOW GLASS, METAL OR CROCKERY TO ENTER. IF THIS OCCURS, STOP THE UNIT AND REMOVE SUCH MATERIAL.
- 3. IF THE MOTOR STOPS, push stop button. Remove any waste material which caused stoppage. Check the turntable to see that it will turn freely. Wait three minutes, push red reset button firmly (LOCATED ON JUNCTION BOX OF MOTOR). Then push "start" button.
- 4. If the motor hums and the turntable does not rotate freely, there is usually a jamming obstruction, such as metal. STOP UNIT. With a suitable bar or stick, pry against one of the impellers and rotate the turntable in a counterclockwise direction. When the turntable is free, REMOVE THE BAR AND THE OBSTRUCTION MATERIAL BEFORE RESTARTING UNIT. CAUTION LOSS OF ONE PHASE IN THREE PHASE UNITS (if one fuse blows while running) WILL CAUSE MOTOR TO LABOR AND HEAT. PROLONGED OPERATION WILL DAMAGE THE MOTOR.
- 5. If the motor remains silent after resetting the overload protector (as instructed in item 3 above) and the turntable rotates freely, check the electric fuses and complete electrical circuit.
- 6. ALWAYS ALLOW THE DISPOSER AND THE WATER TO RUN FOR THREE MINUTES AFTER EACH OPERATION to keep the unit clean and to flush all food waste out of the drain lines. THIS IS IMPORTANT!

**CAUTION**: ALWAYS TURN THE DISPOSER OFF AND LET IT COME TO A STANDSTILL BEFORE PUTTING YOUR HAND INTO THE HOP-PER OR NEAR THE GRINDING CHAMBER. **DO NOT** LOOK FOR CAUSE UNTIL STARTING CONTROL IS TURNED **OFF**.

# **ELECTRICAL INSTALLATION**

- 1. Use waterproof conduit and make all electrical connections according to local codes.
- 2. Wire three phase units using manual switches as shown in wiring diagram, Figure 12.





4240 E. La Palma Avenue, Anaheim, CA 92807 • (800) 454-4423 • fax (800) 246-3245 • www.wasteking.com

# MANUAL SWITCH

MODEL	VOLTS	WK PART NO.
2000 2 HP	208-240	2420
	460	2420
3000 3 HP	208-240	2421
	460	2421
5000	208-240	2421
5 HP	460	2421

### NOTES:

- 1. Motor wired at Factory for 208-240 volts. For 460 volts, connect motor wires as shown inside of motor junction box cover.
- 2. Interchange T1 and T3 to reverse rotation.
- Magnetic and manual starters, supplied by Waste King do not require heaters to complete the circuit. Disposers have built-in overload protection.

**MAGNETIC SWITCH** 

WK PART NO

2416

2417

2416

2417

2416

2417

2416

2417

VOLTS

208-240

460

208-240

460

208-240

460

208-240

460

For 460 volts, connect motor wires as shown inside of motor junction box cover.

by Waste King do not require heaters to complete the circuit. Disposers have built-in overload protection.

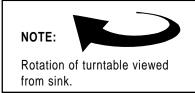
#### MANUAL SWITCH MODEL VOLTS WK PART NO 110-120 2000 2420 2 HP 220-240

### NOTES:

tion.

- 1. Motor wired at Factory for 220-240 volts. For 110-120 volts, connect motor wires as shown inside of motor junction box cover.
- 2. Magnetic and manual starters, supplied by Waste King do not require heaters to complete the circuit. Disposers have built-in overload protection.





IMPORTANT OPERATING INSTRUCTIONS NOTICE: These operating instructions should be permanently mounted in an easy-to-read location. Proper operation can greatly improve the life and efficiency of your equipment.

# **READ ALL INSTRUCTIONS CAREFULLY BEFORE OPERATING**

- 1. THE WASTE KING COMMERCIAL DISPOSER OPERATES EFFICIENTLY ONLY WHEN SUFFICIENT WATER FLOWS INTO IT. IMPORTANT - Do not test or run disposer dry as this will damage the seal and void the warranty. Open globe valves so that water swirls around cone just below rim. Leave globe valves in this position. (Check water flow in cone with cover off.)
- 2. Push "START" button or SWITCH and be sure unit is running before any waste is fed into it. Feed food waste in gradually. Do not pack food waste into unit. Do not dump garbage can loads directly into unit.
- 3. DO NOT ALLOW GLASS, METAL, WOOD, TABLEWARE, CROCKERY OR ANY OTHER NON-FOOD WASTE MATERIAL TO ENTER. If this occurs, STOP THE UNIT AND REMOVE SUCH MATERIAL.
- 4. IF MOTOR STOPS, PUSH "STOP" BUTTON OR SWITCH. Remove any waste material which caused stoppage. Check the turntable to see that it will turn freely. Wait fifteen minutes, push "RED RESET BUTTON" firmly (located on the top of junction box). Motor will start when "START" button or Switch is pushed.
- 5. If the motor hums and the turntable does not revolve freely, there is usually an obstruction. PUSH "STOP" BUTTON or Switch. With a suitable bar or stick, pry against one of the impellers and rotate the turntable in a counterclockwise direction. When turntable is free, REMOVE THE BAR AND OBSTRUCTING MATERIAL BEFORE PUSHING "START" BUTTON OR SWITCH.
- 6. If motor remains silent after resetting the red reset button ("overload protector" as instructed in Item 4 above) and the turntable rotates freely, check the electric fuse and the complete electrical circuit.
- 7. ALWAYS ALLOW THE DISPOSER AND THE WATER TO RUN FOR 3 MINUTES after each disposer operation to keep the unit clean and to flush all food waste out of the drain lines. THIS IS IMPORTANT. A Time Delay Kit to automatically continue water flow for a given period of time after the unit is turned off is available through authorized Waste King Service Agencies.
- 8. ALWAYS DISCONNECT POWER BEFORE PUTTING YOUR HAND INTO THE GRINDING CHAMBER.
- 9. DO NOT HOSE DOWN DISPOSER.

If you should require service call your authorized WASTE KING service agency.

# **PROPER USE OF ALL PURPOSE ASSEMBLIES**

 LOCAL SERVICE AGENCY
 For those who prefer a scrap block type of operation.
 Minimum Silver Guard protection.

 View of operation
 View of operation
 View of operation

 Soiled Dishes
 Soiled Dishes
 View of operation

 Scrap Ring
 Silver Guard
 Scrap Ring only



# INSTALLATION INSTRUCTIONS

GUIDELINES FOR FIELD CONSTRUCTED ENCLOSURES

# **BEFORE INSTALLING, READ ENTIRE INSTRUCTIONS CAREFULLY**

(PER U.L. 430)

# FOR UNREINFORCED FLAT SURFACES:

CAST METAL:	NOT LESS THAN 1/8" (3.2 mm) THICK
MALLEABLE IRON:	NOT LESS THAN 3/32" (2.4 mm) THICK
DIE-CAST METAL:	NOT LESS THAN 5/64" (2.0 mm) THICK

Metal of lesser thickness but not less than 3/32 inch (2.4mm), 1/16 inch (1.6mm) and 3/64 inch (1.2mm) respectively, may be acceptable provided that the surface under consideration is: curved, ribbed, or otherwise reinforced to provide mechanical strength or of a size or shape that provides mechanical strength equivalent to that required.

Metal of lesser thickness may be acceptable when the following factors are taken into account:

- A. MECHANICAL STRENGTH
- B. RESISTANCE TO IMPACT
- C. MOISTURE-ABSORPTION PROPERTIES
- D. COMBUSTIBILITY
- E. RESISTANCE TO CORROSION, AND
- F. RESISTANCE TO DISTORTION AT TEMPERATURES TO WHICH THE ENCLOSURE MAY BE SUBJECTED UNDER CONDITIONS OF NORMAL OR ABNORMAL USE.

# FOR A NON-METALLIC ENCLOSURE, ALL OF THESE FACTORS ARE TO BE CONSIDERED WITH RESPECT TO THERMAL AGING.

# SHEET METAL:

In addition to the above factors an enclosure of sheet metal shall be determined with respect to size and shape, thickness of metal, and acceptability for the application, considering the intended use of the disposer.

Generally, the use of sheet steel, having a thickness less than 0.0026 inch (0.66mm) if uncoated or 0.029 inch (0.74mm) if galvanized, or of nonferrous sheet metal having a thickness less than 0.036 inch (0.91mm) is not acceptable other than for the relatively small areas or for surfaces that are curved or otherwise reinforced.

Sheet metal to which a wiring system is to be connected in the field shall have a thickness not less than 0.032 inches (0.81mm) if uncoated steel, not less than 0.034 inches (0.86mm) if galvanized steel, and not less than 0.045 inches (1.14mm) if nonferrous.



# DISPOSER LEG ADJUSTMENT AND MODIFICATION INSTRUCTIONS



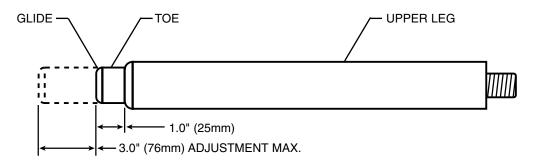
# **BEFORE INSTALLING, READ ENTIRE INSTRUCTIONS CAREFULLY**

Waste King disposers are shipped with the legs fully adjusted (minimum "G" dimension in the chart below). Please follow adjustment procedure to increase unit height. For installations where the disposer is too tall, disposer legs may be modified with no loss of range.

Note: minimum of 2" (51mm) clearance beneath the motor must be allowed for proper motor ventilation.

## ADJUSTMENT PROCEDURE

1. Unscrew toe to achieve the desired unit height (3" (76mm) screw adjustment max).

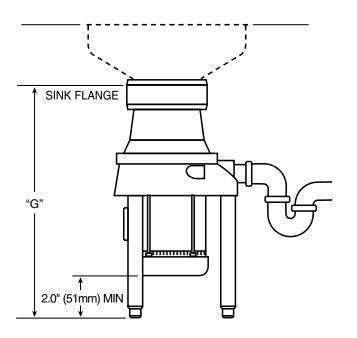


## **MODIFICATION PROCEDURE**

- 1. Remove the plastic glide from the toe section.
- 2. Measure the desired cut-off distance from open end and mark the toe.
- **3.** Using a pipe cutter or hacksaw make a square cut-off at the mark.

"G" Inch	Maximum Cut-off	
Unmodified	Modified	Inches(mm)
25.7 (653) to 28.7 (729)	25.2 (640) to 28.2 (716)	0.5 (13)

4. Deburr the cut and reinstall the plastic glide.





# DISPOSER LEG ADJUSTMENT AND MODIFICATION INSTRUCTIONS

MODELS: 5000-3, 5000-38 and 10000-3

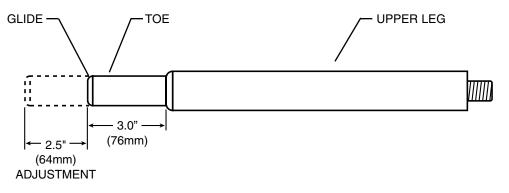
# **BEFORE INSTALLING, READ ENTIRE INSTRUCTIONS CAREFULLY**

Waste King disposers are shipped with the legs fully adjusted (minimum "G" dimension in the chart below). Please follow adjustment procedure to increase unit height. For installations where the disposer is too tall, disposer legs may be modified with no loss of range.

Note: minimum of 2" (51mm) clearance beneath the motor must be allowed for proper motor ventilation.

# ADJUSTMENT PROCEDURE

1. Unscrew toe to achieve the desired unit height (2.5" (64mm) screw adjustment max).



## **MODIFICATION PROCEDURE**

- 1. Remove the plastic glide from the toe section.
- 2. Measure the desired cut-off distance from open end and mark the toe.
- 3. Using a pipe cutter or hacksaw make a square cut-off at the mark.
- 4. Deburr the cut and reinstall the plastic glide.

	"G" Inche	es(mm)	Maximum Cut-off	] r
Model	Unmodified	Modified	Inches(mm)	rent in the second s
5000-3	26.25 (667) to 28.75 (730)	24.75 (628) to 27.25 (692)	1.5 (38)	
5000-38	26.38 (670) to 28.88 (733)	24.88 (632) to 27.38 (695)	1.5 (38)	
10000-3	26.38 (670) to 28.88 (733)	25.88 (657) to 28.38 (721)	0.5 (13)	2.0" (51mm) MIN