

Chicago Can Company Aervoid Jet Can Washer

Mfg: Chicago Can Company

Model: Aervoid 5-B

Stock No. 152

Serial No. 6591

Chicago Can Company Jet Can Washer.

- Model Aervoid 5-B,
- S/N 6591.
- Unit is foot pedal operated and washes up to a five gallon pail or bucket.



**RECOMMENDATION FOR INSTALLATION, OPERATION AND MAINTENANCE
FOR
"AERVOID"
CAN WASHER-SANITIZER MODELS 5-B**

Non-electrical

Covered by One Or More Of The Following Patents: U.S. Pat. Nos. 2,993,246
& 3,069,094; Canada 1983; Other Patents Pending

SHIPPING PROCEDURE

This model has been pressure tested, carefully inspected and packed, completely assembled, ready for installation when shipped, except attachment of Nozzle, Nozzle Guard (on Model 5-B only) Drain Screen.

INSPECTION WHEN RECEIVED

Upon delivery a complete inspection should be made. If any damage has occurred in transit, the transportation company is responsible, and its local agent should be requested to immediately inspect, make notations on the receipt, and file claim.

GENERAL INFORMATION

Establish a Regular Cleaning Program

Empty and clean all refuse or waste containers in service, including those only partially filled, daily, or at least once a week. The more they are cleaned, the longer they last. Clean food containers promptly after each use. The speed, ease and savings in cost with which this can be done with this model fully justifies it. It is a "Must" if good housekeeping and the best sanitary conditions are to be maintained. When foul and odorous containers are allowed to accumulate, they attract and provide breeding places for rodents, flies and other vermin.

Location

This Can Washer should be located in an enclosed area sufficiently heated to prevent freezing, as close as practical to supply lines and floor or other suitable drain, and where most convenient for use. A cement or tile floor is most desirable.

Pressures

This model is adaptable for use with various water pressures from 15 lbs. and up, depending on the size of the container. Its efficiency increases as the water pressure increases up to 50 lbs. P.S.I. Higher pressures atomize the spray, which reduces the force of impact, speed, and effectiveness. However, if the Fountain Brush Attachment is used for cleaning exterior surfaces, higher water pressures should be used. If the pressure is less than desired, secure a booster pump from your supplier.

With a water pressure of 25 lbs. P.S.I. or even less, there may be a knock in the water line, and we recommend that every installation be provided with a Shock Arrestor consisting of a 1 inch pipe 18 inches long (min.) installed on each water supply line as shown in Fig. No. 1.

BASIC INSTALLATION

(See Fig. 1)

WE DO NOT MAKE THE INSTALLATION. The responsibility for the installation and compliance with your local Code is that of the licensed plumber or whoever makes the installation.

Position the Can Washer in the location selected on a level floor. Make sure the floor is level, as this is necessary for complete drainage. To do this, place a spirit level on the floor, not on the bowl. If necessary, use shims of water-proof corrosion resisting material under the base to make the floor level. Note that the bowl is set on the pedestal with a 1/2 inch slant towards the drain.

Fasten the base firmly to the floor to prevent loosening of pipe connections. To do this, mark the position of each bolt on the floor, using the base as a pattern. If the floor is concrete or tile, drill a hole 7/8 inch in diameter and 1 1/2 inches deep at each marked location and use 1/2 inch Ackerman-Johnson expansion screw anchors. If the floor is wood, drill pilot holes 5/16 inch in diameter and 2 inches deep and use rust-proof square head lag bolts 1/2 inch in diameter by 2 inches long. Connect the drain to a grease trap, or in such a manner as required by your local Code.

If your Code requires a vacuum breaker, it should be installed on the water supply line between the nozzle and spring valve (See figure 1). It may be any distance from the Can Washer, but it must be at least 18 inches above the highest container.

SELECTION OF PLUMBING INSTALLATION

You can adopt any installation for cleaning containers which best fits in with your plumbing and meets local Code regulations and whichever you adopt, this model will cut the time, reduce labor cost and do a better job. It can be easily changed to any other installation selected. If you wish maximum efficiency and sanitation, you should conform to the following recommendations of the U.S. Public Health Service and the American Society of Sanitary Engineering, even if necessary to alter some of your plumbing and provide such other facilities as required, especially that of providing an ample supply of hot water at sanitizing temperature, (180 deg. F.) — a basic requirement for a complete sanitary system.

WATER CONSUMPTION

The quantity of hot water consumed in cleaning containers depends on their sizes and the water pressure. The consumption per minute of operation, at various pressures, is approximately as follows:

| | | |
|----------------|--------|---------|
| 15 lbs. P.S.I. | 7 | gallons |
| 25 lbs. P.S.I. | 10 | " |
| 35 lbs. P.S.I. | 12 1/4 | " |
| 50 lbs. P.S.I. | 14 1/2 | " |

This consumption is not continuous, as there is an interval after the cleaning of each container while the operator replaces it, and during that time no water is used, as it is shut off automatically.

When this model is installed and the cleaning is done according to the following recommendations, the largest standard garbage container can be thoroughly cleaned and sanitized in thirty (30) seconds, and the consumption of hot water per container is only one-half of the above gallonage.

RECOMMENDATIONS

We recommend that the cleaning be done daily, or at least once a week; that the hot water has a minimum temperature of 180 deg. F.; that the hot water has a pressure of 15 to 50 lbs. P.S.I., (depending on the size of the container) and the use of the Fountain Brush for cleaning outer surfaces.

PARTS FOR INSTALLATION SELECTED

The extra parts required for the following installations are underlined. They are standard and usually furnished by the plumber who makes the installation.

No. 1. Installation for Hot Water

Connect the hot water supply line to the check valve on the right side of the Can Washer and cap the valve on the left side. Install a Hand Valve and (if required) a Line Pressure Regulator, and a Shock Arrestor, on the water supply line, all as shown in Fig. No. 1.

No. 2. Installation for Cold Water and Hot Water

Connect the cold water supply line to the check valve on the left side of the Can Washer and the hot water supply line to the check valve on the right side. Install a Hand Valve on each line; and (if required) a Line Pressure Regulator and a Shock Arrestor on each line, all as shown in Fig. No. 1.

PLUMBING CONNECTIONS

(See Fig. No. 1)

Bring the pipe supply lines to the Can Washer from the rear, leaving the front and sides clear for work space. Pitch the pipes towards the Can Washer to permit their drainage, and insulate their entire lengths. Don't waste heat. If old pipes are used for supply lines, remove all foreign matter, by flushing them thoroughly before making connections. After installing this model, and before attaching the nozzle, flush it. Do this by placing a pail over the riser nipple (be sure to hold it) and step on either or both pedals. Apply pipe compound only to male fittings for connections. All pipe connections are $\frac{3}{4}$ inch I.P.S. and drain connection $1\frac{1}{2}$ inch I.P.S.

HOW TO OPERATE

If necessary regulate the water pressure with the pressure regulators. Shake out all loose refuse and heavy, greasy deposits from the container and center it over the nozzle in an inverted position (open end down) and be sure to hold it during the operation, especially if it is a small container (it is best to use water-proof canvas gloves).

Step on right pedal for hot water and left pedal for cold water or in the middle on both pedals with one foot for lukewarm water.

MAINTENANCE

- A. **CLEANING (ALL PARTS EXCEPT NOZZLE):** We recommend any good cleaning compound. Avoid steel wool, all abrasives and acid solvents.
- B. If any rust or stain appears on the bowl, nozzle or any of their parts, it is scale or mineral deposits from supply lines or steel from abrasives used for cleaning which is imbedded in the base metal, or failure to install the Can Washer on a level floor for complete drainage contrary to instructions.
- C. **NOZZLE:** If the nozzle does not rotate with a minimum water pressure of 15 lbs. remove the entire nozzle and flush it with clean water. If this does not cure the fault, flush the Can Washer and supply lines as instructed in Plumbing Connections. Never take the nozzle apart, but keep the spray slots open. Do not lubricate it. It has no parts requiring replacement or adjustment.
- D. **GENERAL REPAIR:** All parts are replaceable and repair should be made by a licensed plumber. See Fig. No. 2 for replaceable parts. (In ordering use both number and name of part). For further information write the Company at the address given below, explaining any complaint; for emergency information call our Service Engineer and explain circumstances fully.

DETAIL SPECIFICATION

"AERVOID" JET CAN-WASHER AND SANITIZER ALL NEW DELUXE MODEL NO. 5-B "IT KILLS BACTERIA"

Covered By One Or More Of The Following Patents: U.S. Pat. Nos.
2,993,246 & 3,069,094; Canada 1963; Other Pats. Pending.

All Materials Corrosion Resistant — Especially Desirable for Humid Climates, Ships, and Similar Installations Using Salt Water. Complete with Cyclonic Rotary Jet Nozzle, Safety Locks, Check Valves, Vacuum Breaker, Etc.

IT IS NON-ELECTRICAL

IT PRE-RINSES — IT WASHES — IT SANITIZES — IT RINSES — IT DISPOSES — IT DEODORIZES
IT ALSO PRE-HEATS INSULATED CONTAINERS

ITS ABILITY TO DO THE "WHOLE JOB" IS REVOLUTIONARY COMPARED TO ORDINARY
CABINET AND OTHER SO-CALLED "WASHERS" OR "MULTI-WASHERS" THAT MERELY RINSE

The purpose of this model is to clean and sanitize all small or large, round, square or oblong, garbage, refuse, waste and food cans, drums, barrels and other containers with overall diameters or diagonal dimensions up to 25 inches (without limitations of height) and with open ends or center openings having diameters not less than 4 inches, also to pre-heat all "AerVoid" and other insulated food and beverage containers.

"IN FULL COMPLIANCE"

(Equipment That Is Insanitary Cannot Create Sanitary Conditions)

It shall be "In Full Compliance" with the design, construction and performance requirements of the U. S. Public Health Service (Food Service Sanitation Manual Pub. No. 934) and its Inter-State Quarantine Regulations; the sanitary requirements of the American Society of Sanitary Engineering; and the applicable State and local plumbing laws, Ordinances and Codes throughout the United States, when installed and operated in accordance with them. It should be installed by a licensed plumber familiar with such local regulations.

DIMENSIONS & WEIGHTS

| | |
|---|-------------|
| HEIGHT, Overall (Without Vacuum Breaker) | 29-1/4" |
| HEIGHT, Bowl, Overall (Excl. Nozzle) | 24" |
| HEIGHT, ROTARY NOZZLE (Above Rim of Bowl) | 5-3/16" |
| DIAMETER, Overall | 27" |
| DIAMETER, BOWL, Inside (Without Roto Table) | 25" |
| DIAMETER, BOWL, Inside (With Roto Table) | 24-1/4" |
| DIAMETER, ROTARY NOZZLE, Overall | 3-5/8" |
| DEPTH, BOWL | 4-3/8" |
| WEIGHT, NET | 50 lbs. |
| WEIGHT, CRATED FOR DOMESTIC SHIPMENT | 77-1/2 lbs. |
| WEIGHT, CRATED FOR EXPORT (Approx.) | 140 lbs. |

The above weights do not include Accessories or Extra Plumbing Parts. The unit is shipped completely assembled except attachment of nozzle, nozzle guard, drain screen.

This model shall be designed, as herein illustrated, for fast foot pedal operation for pre-rinsing, washing, sanitizing, deodorizing and final rinsing of the interiors of containers and disposal of fluid residues, (depending on the installation and the temperature of the hot water supply) also for pre-heating all "AerVoid" and other insulated containers.

It shall include all parts necessary for these operations, as shown in Fig. No. 4; (This excludes the extra parts required for plumbing installations, listed under "Plumbing Installations," which are optional) see figures 2 and 3; it shall have the dimensions and weights as shown on page 1, subject to manufacturing tolerances; be capable of delivering hot water at the required sanitizing temperature on contact with all inner surfaces of containers, when installed as recommended; have provisions for the attachment of accessories necessary for cleaning exterior surfaces of containers and all surfaces of appendages as herein specified. Electricity shall not be required to operate this model or any of its accessories so specified.

PARTS, MATERIALS AND CONSTRUCTION

BOWL ASSEMBLY

The bowl assembly shall include a round bowl of seamless 14 gauge construction, with deep, self-rinsing contour; a 1½ inch drain connection with standard male pipe threads; an open safety rim formed by a cleanable outward roll; a spoke hub and four (4) cross spokes of ½ inch (heavy duty) rod stock for attachment and elevation of the nozzle above the rim of the bowl (to prevent backflow, and elevate containers to prevent their re-contamination); a removable tubular drain screen; a 3-directional rotary jet spray nozzle; and a nozzle guard. All of these parts (excepting the nozzle, which shall be made as herein specified) shall be made of corrosion resisting steel (stainless steel), series 302, 303 or 304 (18-8). The drain connection and spoke hub shall be attached to the bowl, and the cross spokes to the hub and the bowl, by welding. The bowl shall be attached to the pedestal assembly by the riser tube and three (3) stud bolts and be replaceable. An acceptable type ¾ inch vacuum breaker, made of bronze, shall be furnished with the assembly.

PEDESTAL ASSEMBLY

The pedestal assembly shall include a pedestal with a round conical base having scalloped openings (to permit cleaning and aerating under surfaces) and a provision for floor attachment; two (2) pedal arms suspended from the pedestal, each with non-skid tread and an automatic safety lock, all made of cast aluminum, with springs made of 1/16 inch corrosion resisting steel wire stock; also a riser tube of corrosion resisting steel; two (2) ¾ inch self-closing, compression type, spring valves rated at 125 lbs. P.S.I. made of bronze, with replaceable composition seats and heavy duty springs made of 5/64 inch corrosion resisting steel wire stock (designed to permit replacement of the packing glands under pressure); two (2) ¾ inch check valves rated at 125 lbs. P.S.I. each with a swing type disc made of bronze. All parts shall be attached with hex head cap screws or bolts of corrosion resisting steel. All parts directly connected to aluminum parts shall be of corrosion resisting steel to minimize galvanic action. All aluminum shall be prime A-356 with pedals and pedal locks aged (for greater strength). All corrosion resisting steel (stainless steel) shall be series 302, 303 or 304 (18-8); all brass and bronze 85-5-5-5. All parts of the pedal assembly shall have a baked, grey epoxy (glossy) finish, which withstands the salt spray test, resists cracking, peeling, chipping and discoloration.

NOZZLE

The nozzle shall be the cup and cone bearing system, with body of precision machined parts made of brass and bronze, and include a double tier of races and cones, each with fifteen (15) ¼ inch ball bearings (tempered), all of corrosion resisting steel (stainless steel), series 302 (18-8). The nozzle shall be elevated above the rim of the bowl (to prevent backflow). It shall rotate with a minimum water pressure of 15 lbs. P.S.I. without lubrication or vibration and be relatively noiseless. It shall propel water sprays in a 210 degree (3 directional) arc and cause them to make direct physical contact with all interior surfaces of containers, with a centrifugal scouring action, and be self-draining. A rotary nozzle of the same design but made entirely of stainless steel is optional.

All surfaces of this model, including welds, shall be smooth and free of burrs, sharp angles and edges to permit proper cleaning, and prevent injury. All parts subject to water or steam pressure shall be tested.

See drawing for description and location of all parts (Fig. No. 4); Recommendations for Installation, Operation and Maintenance (including roughing-in drawing — Fig. 6) furnished with each shipment, or in advance, if requested.

HOW TO ORDER

We furnish as a one price package all parts included in this specification as shown in Fig. No. 4. In ordering specify "AerVoiD Jet Can-Washer and Sanitizer Model No. 5-B as illustrated and described in the specification of the Vacuum Can Company". Do not include details or attempt to condense or alter the specification unless any of the modifications hereinafter referred to is desired.

Add to your order any accessory desired, also any extra parts needed for the plumbing installation selected (listed under "Plumbing Installations to Select From" following). WE DO NOT MAKE THE INSTALLATION. This is very simple as this model is delivered ready to install, and its light weight permits handling by one man, but it should be installed by a licensed plumber familiar with your local Ordinance and Code Requirements and the plumber usually furnishes these extra plumbing parts as they are standard, but we will quote on any of them except such common parts as pipe, fittings, etc.

SELECTION OF PLUMBING INSTALLATION

For cleaning you can adopt any of the following installations which best fits in with your plumbing and meets local regulations, except No. 5 Installation, (for steam alone) and whichever you adopt, this model will save time, reduce labor and do a faster and better job, but if you wish to gain maximum efficiency and sanitization, the installation should conform to the following recommendations of the U. S. Public Health Service and the American Society of Sanitary Engineering, even if necessary to alter your plumbing or provide such additional facilities as a booster heater or booster pump.

Recommendation: We recommend that the cleaning be done daily, or at least once a week, and that Plumbing Installations Nos. 1, 2 or 3 be adopted, providing the hot water has a minimum temperature of 170 deg. F. on contact and a pressure of 15 to 50 lbs. P.S.I., (depending on the size of the refuse container and the use of the Fountain Brush for cleaning outer surfaces) also provided that steam is needed with No. 3 Installation for the exclusive purpose of preheating "AerVoiD" or other insulated containers.

Contrary to widespread public opinion, experienced Sanitarians agree that, regardless of any equipment used, steam alone has no value for cleaning or sanitizing refuse or any other containers which have open ends, are not air-tight and do not confine the steam, nor do they approve of No. 4 Installation for cold water and steam for thorough cleaning and sanitizing, as it is impossible, by this mixture, to obtain a continuous flow of hot water at the required sanitizing temperature of 170 deg. F. By avoiding the use of steam for cleaning, there is no necessity for a ventilating system in a small room and the air will not become humid with clouds of steam.

PLUMBING INSTALLATIONS TO SELECT FROM

And Extra Parts (Other Than Pipe, Fittings, Etc.) Required For Each

NO. 1 — INSTALLATION FOR HOT WATER: (See Fig. No. 2) 1 Cap for steam line; 1 Hand Valve; (if required) 1 Line Pressure Regulator; and 1 Shock Arrestor.

NO. 2 — INSTALLATION FOR COLD WATER AND HOT WATER: (See Fig. No. 2) 2 Hand Valves; (if required) 2 Line Pressure Regulators; and 2 Shock Arrestors.

NO. 3 — INSTALLATION FOR COLD WATER, HOT WATER AND STEAM: (See Fig. No. 3) 1, 3-way Cock or Valve; 3 Hand Valves; (if required) 1 or 2 Line Pressure Regulators; and 1 Shock Arrestor.

NO. 4 — INSTALLATION FOR COLD WATER AND STEAM: (See Fig. No. 3) 2 Hand Valves; (if required) 1 Line Pressure Regulator; and 1 Shock Arrestor.

NO. 5 — INSTALLATION FOR STEAM ONLY: (For pre-heating exclusively — See Fig. No. 3) 1 Cap for water line; 1 Hand Valve and (if required) 1 Line Pressure Regulator.

SPECIFICATION

"AERVOID" CAN WASHER-SANITIZER DE LUXE MODEL NO. 5-B

U.S. Patent Nos. 2,993,246 and 3,069,094; Canada Pat. 1963

The purpose of this Can Washer-Sanitizer is to clean both large and small, round, square or oblong, garbage or food cans, recycling bins, drums, barrels, or any other containers with overall diameter or diagonal dimension up to 25 inches (without limitation of height) and with an open end or center opening having a minimum diameter of not less than 4 inches.

The Can Washer-Sanitizer is designed as illustrated herein for fast pedal operation in pre-rinsing or washing, and shall have the indicated dimensions and weights, subject to manufacturing tolerances. It shall be capable of delivering jets of hot water, at a minimum recommended temperature of 180° F., to all interior surfaces of a container. It shall also have provision for attachment of accessory necessary for the cleaning of exterior surfaces of a container, its cover and appendages. Electricity is not required to operate the Can Washer-Sanitizer.

IT IS AUTOMATION IN SANITATION IT IS NON-ELECTRICAL

It is "in compliance" with the sanitary construction requirements (Bulletin 934, Ordinances and Codes regulating eating and drinking establishment equipment) and the interstate quarantine regulations of the U.S. Public Health Service; also the applicable state and local plumbing laws, ordinances and regulations throughout the United States, when installed and operated in accordance therewith. It meets U.S. Military Specification MIL-R-19038E.

DIMENSIONS AND WEIGHTS

| | APPROX. |
|--|---------|
| Height, Overall | 29-1/4" |
| Height, Bowl, Overall (Excluding Nozzle) | 24" |
| Height, Rotary Nozzle (Above Bowl Edge) | 5" |
| Diameter, Overall | 27" |
| Diameter, Bowl, Inside | 25" |
| Diameter, Rotary Nozzle, Overall | 3-5/8" |
| Depth Bowl | 4-3/8" |
| Weight, Net | 49 lbs. |
| Weight, Packed for Shipment | 56 lbs. |

The unit is shipped completely assembled except for attachment of nozzle, nozzle guard, drain screen.

PARTS, MATERIALS AND CONSTRUCTION Bowl Assembly

The bowl assembly shall include a round bowl of seamless stainless steel, with deep self-rinsing contour, slanted down toward the drain to afford complete drainage when the Can Washer-Sanitizer is installed on a level surface; a 1 1/2" standard male threaded connection of stainless steel; an open safety rim formed by a cleanable outward roll; a stainless steel spoke hub and four (4) cross spokes of 1/2" heavy duty stainless steel rod stock to elevate container, prevent its recontamination and increase the rigidity of the bowl; a removable tubular stainless steel drain screen; a nozzle guard of bronze; and a 3-directional rotary jet spray nozzle described below. The drain connection and spoke hub shall be attached to the bowl by welding. The bowl shall be attached to the prime aluminum pedestal by the stainless steel riser tube and three (3) stainless steel bolts, and be replaceable. An acceptable type 3/4" vacuum breaker made of brass, is sold as an option.

Pedestal/Operating Assembly

The pedestal assembly shall include two (2) brackets, suspended pedals and two (2) spring operated safety locks, all with non-skid tread, made of aluminum. Safety lock springs shall be made of stainless steel. Assembly shall also include a round, conical base of aluminum, having scalloped openings to permit cleaning and ventilation under surfaces, and a provision for floor attachment.

Pedestal shall be attached to base by three (3) stainless steel bolt. All parts of the pedestal-base assembly shall have a glossy, baked epoxy finish that withstands the salt spray test, resists cracking, peeling, chipping and discoloration. All surfaces of the Can Washer-Sanitizer, including welds, shall be free of unevenness, cracks, crevices, burrs, sharp angles and edges which would prevent proper cleaning or possibly cause injury.

Nozzle

The nozzle shall be of the cup and cone bearing type, with a body of precision machined parts made of brass and bronze, and include a double tier of races and cone, each containing fifteen (15) 1/4" temperature ball bearings, all made of stainless steel. The nozzle shall be elevated above the rim of the bowl to prevent backflow. It shall rotate with a minimum water pressure of 15 lbs. P.S.I. and require no lubrication, be relatively noiseless and vibration free. It shall propel jet water sprays in a 210 degree, 3-directional arc and cause them to make direct physical contact with all interior surfaces of containers with a centrifugal scouring action, and be self-draining.

Reservation

The right is reserved to manufacture, sell and deliver this product according to any change in this specification which preserves its adaptability, durability, efficiency and sanitation, providing that no such change shall be applicable to the product when purchased by the U.S. Government, or any of its agencies, under and in violation of any requirement of any U.S. Government Specification relating to this product.

HOW TO ORDER

We furnish, as a one price package, all parts included in this specification and shown in the solid lines of drawing, Fig. 2. Select the installation you wish and that is allowed under your local Code.

No. 1-Installation for Hot Water

(See Fig. 1) Cap for one line, 1 Hand Valve and (if required) 1 Standard Line Pressure Regulator and 1 Shock Arrestor.

No. 2-Installation for Hot Water and Cold Water

(See Fig. 1) 2 Hand Valves and (if required) 2 Standard Line Pressure Regulators and 2 Shock Arrestors.

(WE DO NOT SUPPLY THE ABOVE PARTS)

GENERAL INFORMATION

Based on the opinions of the U.S. Public Health Service and other responsible sanitation authorities, we recommend that all refuse containers, including those only partially filled, be cleaned daily and that hot water (at a minimum temperature of 180° F.) be used. The efficiency of the Can Washer-Sanitizer increases as the water pressure increases, up to 50 lbs. P.S.I., but should be proportionate to the size of the container. For large containers it is most efficient at a water pressure of 30 to 50 lbs. P.S.I. Higher pressures will atomize the spray and reduce the force of impact, cleaning quality and effectiveness.

We do not make the installation. Responsibility for the installation and compliance with your local Code is that of the plumber or engineer who installs the Can Washer-Sanitizer.

Complete recommendations (with drawings) for installation, operation and maintenance are furnished with each shipment, or in advance if desired.

SPECIAL MODIFICATIONS

We will quote on this modified model, by providing a special nozzle to accommodate a drum with a standard bung hole, at an extra charge.