

DO NOT THROW AWAY!

Important Safety and Operational Information

Read the Installation and Service Manual carefully before
UNPACKING, INSTALLING, SERVICING or USING the Hammerall Unit



Hammerall Disposer Company

By Purchasing this product, the user agrees to all disclaimers, instructions and contents of this Manual.

Installation and Service Manual



WARNING

To avoid serious injury or even death, never put hands inside the Hammerall Grinding Chamber.

Power to The Hammerall Unit must be terminated at BOTH the *starter switch* and the *main electrical panel*, and the *drive belt must be removed* prior to any service on the Hammerall disposer.

Never introduce non-food material into the grinding chamber. Keep face, hair, body parts, clothing, jewelry, etc., away from sink hole opening when The Hammerall disposer is operating, and never put hands or other body parts below sink hole opening.

The Hammerall Disposer must never be operated without its splash guard (safety baffle), and its protective cabinet enclosure securely fastened in place.

Failure to follow the warnings, safety precautions, instructions, or any other contents of this Manual, may result in serious injury or even death.

This equipment is intended for use by trained foodservice professionals only as an undersink commercial food waste disposer. Residential, or any other use, is unauthorized and prohibited, and contrary to Manufacturer's intent

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DISCLAIMER: Hammerall Disposer Company makes no representation or warranties regarding the contents of this Manual. We reserve the right to revise this document at any time or to make changes to the product described within it without notice or obligation to notify any person of such revisions or changes.

Hammerall Commercial Foodservice Disposer Installation and Service Manual

SAFETY

Read the Installation and Service Manual before unpacking, installing, servicing or using the disposer.



WARNING: Serious injury or even death could occur if these safety precautions are not observed:

Operator and Facility Safety Precautions

DO NOT use the disposer if it is not set up and located on a solid level surface.

Read the Installation and Service Manual, heed all cautions/warnings, and obtain proper instruction on use of the Disposer prior to using.

Keep face, head, limbs, fingers, hair, clothing and jewelry clear of all moving parts and away from sink hole opening.

NEVER put hands or other body parts below sink hole opening.

DO NOT wear loose or dangling clothing, hair, jewelry, etc., while using the disposer. Keep away from all moving parts.

Inspect the disposer prior to use. **DO NOT** use if damaged or inoperable.

DO NOT attempt to fix a broken or jammed disposer. Notify fully licensed and qualified service professionals.

Use the Disposer only for its intended use. Obtain instruction and **DO NOT** modify the disposer.

Non-foodservice professionals must not be allowed to operate the disposer.

DO NOT use if splash guard/safety baffle or cabinet enclosure is missing or damaged.

DO NOT remove any labeling from the Disposer. Replace any missing or damaged labels.

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Facility Safety Precautions

NOTE: Hammerall Disposer Company is not responsible for installation. Consult with a professional contractor.

Make sure that each Hammerall Disposer is set up and operated on a solid level surface. **DO NOT** install Disposer on an uneven surface.

Make sure that all users are properly trained on how to use the Hammerall Disposer.

Make sure there is enough room for safe access and operation of the Hammerall Disposer.

Perform regular maintenance checks on the Hammerall Disposer. Also pay close attention to all areas most susceptible to wear.

Immediately replace worn or damaged parts/components with genuine Hammerall O.E.M. replacements. If unable to immediately replace worn or damaged parts/components then remove the Hammerall Disposer from service until the repair is made.

Use only Hammerall supplied parts/components to maintain/repair the Hammerall Disposer.

Keep a repair log of all maintenance/repair activities.

Inspect all swing hammers, rotorshaft, bolts/hardware, seals, end plates, bearings, pulleys, screen, boot, and splash guard (safety baffle) prior to use. **DO NOT** use if any parts/components are worn or damaged.

NOTE: It is the sole responsibility of the user/owner or facility operator to ensure that regular maintenance/repair is performed.



WARNING: The warning placard included with each Hammerall Disposer must be permanently posted in full view of the operator of the Hammerall Disposer.

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Maintenance Checks for Hammerall Disposers

To avoid serious injury or even death, never put hands inside the Hammerall Disposer Grinding Chamber

Power to the Hammerall unit must be terminated at **BOTH** the *starter switch* and the *main electrical panel*, and the *drive belt must be removed* prior to any service on the Hammerall Disposer.

Daily maintenance:

- ☒ Remove any plastic wrap, straws or plastic containers in the grinding chamber
- ☒ Remove any stainless steel scrubbing pads
- ☒ Remove any flatware immediately
- ☒ If any noise is heard from the machine while in operation, inspect immediately

Every 6 Months:

- ☒ Check for proper belt tension (less than 1" of deflection), or signs of belt wear
- ☒ If bearing noise has been heard, add a small amount of high temp grease (1 pump from a handheld grease gun). DO NOT FLUSH GREASE FROM BEARING
- ☒ Inspect rubber boot for any tears or punctures. Replace if any are found
- ☒ Make sure all swing hammers are present and none have been broken off by non-food items (flatware, dishes or other non food items entering the grind chamber). If any hammers are missing, replace the entire rotor shaft.

Every 12 Months:

- ☒ Inspect swing hammer clearance. If hammers contact any surface (screen retaining bars or screen), replace the entire rotor shaft assembly.
- ☒ Inspect Splash Guard for sagging or deterioration. Replace immediately if any "fingers" are found to be sagging or missing
- ☒ Check that the wiring conduit is tight to the wiring box on motor - tighten as needed.

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UNPACKING THE HAMMERALL DISPOSER

All Hammerall units are shipped in high strength corrugated cartons. Remove the unit from the carton, and check contents against the enclosed Packing List/Quality Control Sheet.

Note: Hammerall is not responsible for installation. Installation must be performed by a fully licensed and qualified professional contractor. Hammerall is not responsible for injuries sustained due to the failure to hire a fully licensed and qualified professional contractor to perform installation according to installation instructions herein.

INSTALLATION INSTRUCTIONS

1. Carefully place unit on its side, and install a PVC threaded adapter into the two-inch NPT drain on the bottom of the grinder.

Note: Side discharge models are furnished with a two-inch PVC sleeve for connection to the drain.

2. Install the four legs packed in the corrugated lid into the openings provided at the corners of the disposer's base. Note that each opening contains a locking collar allowing the disposer's height to be adjusted. Once adjusted for the installation, tighten all locking set screws.
3. Position the disposer with its opening directly beneath the sink drain. This will facilitate the installation of the rubber boot connector. (See Figure 1)
4. The drain piping should now be installed. A Tee with a cleanout plug should be installed under the unit rather than an elbow. This will simplify maintenance to the drain, should that ever be required. The drain should be installed to comply with all applicable plumbing regulations.
5. Water supply to the disposer should be through the 1/2-inch NPT threaded adapter at the neck of the unit, and may be supplemented by swirl jet(s) in a bowl sink. To ensure an optimum supply of water to the unit under all load conditions, it is highly recommended that water be supplied at both locations.

CAUTION: Water **MUST** be supplied to the disposer whenever waste is being processed. Introducing food refuse to the disposer without an adequate water supply will cause the refuse to be ground into a thick paste which will be forced into the drain line, possibly causing the line to clog. Water should be supplied to the unit through a shutoff valve, vacuum breaker, and an electrically operated solenoid valve. Supply installation must comply with all applicable plumbing regulations. (See Figure 1).

6. The disposer's motor must be wired for proper voltage upon installation. Wiring instructions are contained on the motor. All electrical work must be performed by licensed electrical professionals ONLY. The unit **MUST** be wired through a starting switch with thermal overload protection sized according to the operating amperage of the motor. The solenoid valve should be wired to this switch to ensure that water is supplied to the unit during operation. All wiring must be run in watertight conduit. Electrical installation should comply with all local, state and federal regulations.

Note: Disposer's rotor shaft must rotate in accordance with the rotation arrow labels located on the disposer's end plates. Proper rotation is always toward the motor. Improper rotation may cause a high degree of splash back from the disposer sink hole opening, and reduced grinding performance.

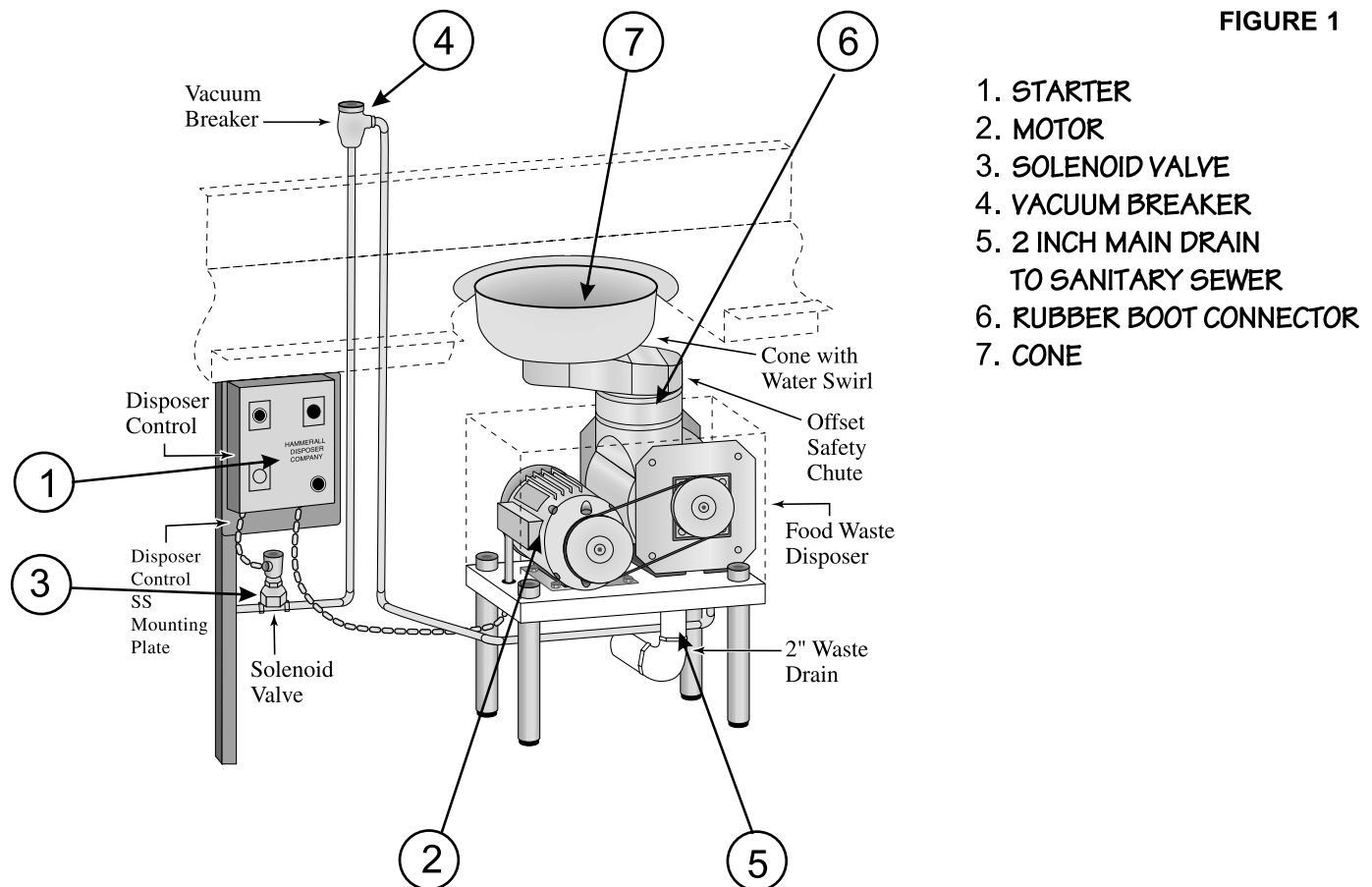
CAUTION if this is a replacement unit, installer must ensure that the proper thermal overload protection is furnished at the starter. Failure to do so may lead to motor failure not covered by Manufacturer's Warranty. For current rating, see motor rating plate.

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7. The rubber boot connector is made from a specially formulated gum rubber. This material is very resistant to abrasion from food refuse, but can be cut with metallic objects. To attach the rubber boot connector to the unit, carefully measure the distance between the bottom edge of the sink, and the top edge of the disposer; add three inches to the measurement for overlap. The boot may be cut to this length using a razor knife and straight edge. Attach the boot to the unit by sliding it over the opening to the grinder body. The disposer is shipped from the factory with the boot installed on the grinder body. Slide the other end over the sink flange. Attach each end with the stainless steel clamps supplied with the unit.

CAUTION: If the unit is offset or if there are other extenuating circumstances, be sure to add extra length to the measurement before cutting the rubber boot connector. The rubber boot connector should never be crimped, pinched or otherwise obstructed.

8. With the water valve turned off, start the unit and ensure that the rotation of the pulley, belt and shaft is in the **counterclockwise** direction (toward the motor) when viewing the motor pulley straight on. Only fully licensed and qualified electrical professionals should correct the rotation
9. Turn water supply valve on and test piping for leaks. The unit is now ready for use.



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REPAIR DISASSEMBLY INSTRUCTIONS

(Refer to Figure 2 unless otherwise indicated). The following instructions apply to Models C-300 and C-500. Model C-1000R Units contain parts unique to that Model and their part numbers are listed in parenthesis. The procedures are the same.

Hammerall is not responsible for service, maintenance or repairs. All such work must be performed by fully licensed and qualified service professionals. Hammerall is not responsible for injuries sustained due to the failure to hire fully licensed and qualified service professionals to perform service, maintenance and repairs according to service, maintenance and repair instructions herein.

Hammerall Disposers are designed so that virtually all maintenance may be performed without removing the Unit. The Unit can be completely dismantled on-site and a major overhaul completed in approximately two hours by most qualified service personnel. Refer to the drawings for clarification of instructions. **The following instructions are for the installation of Rebuild Kit # CP-101 which includes the Rotor Shaft, 2 Seals and 2 Bearings (C-1000R Rebuild Kit is # CR-101). Refer to figure 2 unless otherwise indicated.**

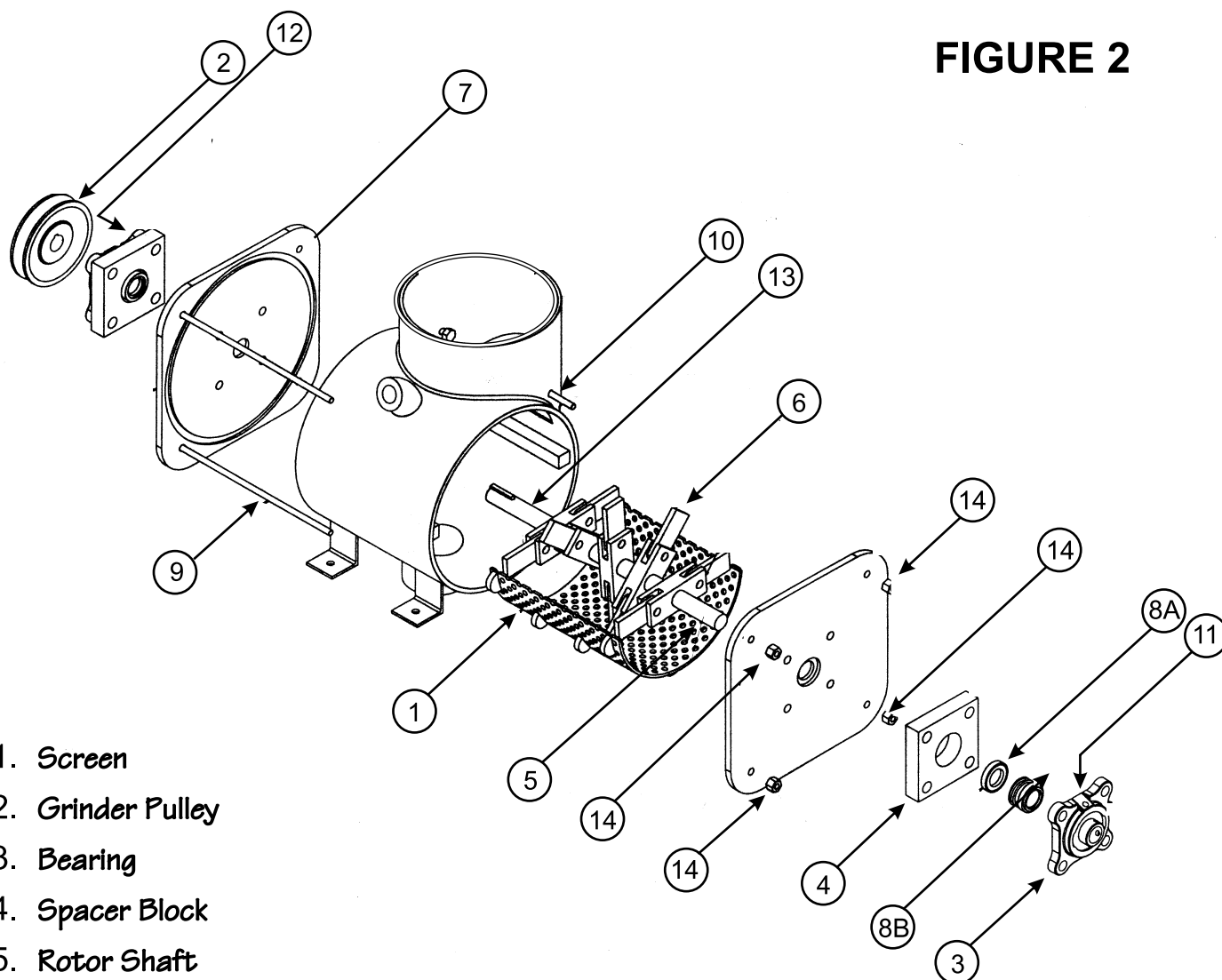
1. Remove the drive belt #CP-105 (C-1000R belt is #CR-105). Loosen the 5/32 Allen head screw (**11**) securing the grinder pulley #CP 111 (**2**) (C-1000R grinder pulley is #CR-111) to the rotor shaft(**5**). Remove the grinder pulley using a gear puller (4" to 5"size).
2. Loosen the two Allen screws which secure the bearing (**3**) to the rotor shaft.
3. Remove the four 9/16 bolts (**9**) securing the bearing and spacer block (**4**) to the end plate (**7**). Using the gear puller, remove the bearing.
4. Remove the seal assembly from the pulley end of the rotor shaft as follows: Remove the stationary rubber sealing ring (**8A**) from the seal assembly. This rubber seal has an inner ceramic ring (**8A**). Remove the seal spring assembly (**8B**).
5. Remove the two 5/16-inch nuts from the neck bolt (**10**) which secure the end plates to the body of the grinder. Remove the remaining three 5/16ths-inch nuts and three 9-inch long bolts (**9**) to the end plate (**7**), Part # CP-110 (C-1000R end plate is #CR-110), can now be removed. Repeat steps 2 - 4 above for the opposite end. Thoroughly clean the seal assembly relief on the outside of each end plate, and the body channel on the inside of each end plate.
6. Examination of Stainless Steel Screen (**1**), Part # CP-108. Examine for wear or damage. Replace if any break or excessive wear is found. To remove the screen, tap the screen on one end and slide it out the other end.
7. Rotor shaft, seals and bearings are designed to operate as a unit and **MUST be** replaced as a unit via Rebuild Kit #CP-101 (C-1000R Rebuild Kit #CR-101) . This provides a complete rebuilding of the grind chamber. Disassembly is now complete. Carefully examine the rotor shaft, seals and bearings for wear or damage. Immediately replace worn or damaged parts/components.



WARNING: Failure to immediately replace a worn or damaged Rotor Shaft, or other worn or damaged part/component, or remove the Hammerall Disposer from service until the repair is made, may result in serious injury or even death.

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FIGURE 2



1. Screen
2. Grinder Pulley
3. Bearing
4. Spacer Block
5. Rotor Shaft
6. Swing Hammers
7. End Plate
8. A) Rubber/Ceramic part of seal that inserts into End Plate relief
B) Seal Spring Assembly
9. Long Bolts
10. Neck Bolts
11. 5/32 Allen head screw on Bearing
12. 9/16 Bolt (Attaches Bearing & Spacer Block to End Plate)
13. Key (on Shaft)
14. Nuts for Long Bolts and Neck Bolts

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REASSEMBLY (Refer to Figure 2 unless otherwise indicated)

1. Begin assembly by installing the screen (10) into the body.
 2. Apply a generous bead of a good grade of RTV silicone sealant to the thoroughly cleaned out body channel relief on the inside of each endplate. Position the endplate/shaft assembly against the body on the side opposite the motor pulley (2).
 3. Continue assembly with Endplate (7), and shaft (5). Locate seal assembly (A and B). Install Rubber End Seal with Ceramic Ring (8A) in relief in center of Endplate (7). Slide shaft (5) through Rubber End Seal (8A). Insert the shaft end without the keyway (13) through the seal. Slide assembly (8B) onto the shaft. Press the rotary seal assembly. Ensure that the sealing ring is uniform and smooth when positioned in the seal assembly.
 4. Position the bearing (3) over the shaft and secure to the endplate with spacer block (4) (and four 9/16 bolts (12)). When tightened, the bearing and spacer will properly compress the seal assembly and ensure a proper seal.
 5. Place the remaining endplate (7), less bearing and seal (8A, 8B and 3), over the keyed end of the shaft (left side in above Figure) and insert the three long bolt (9). (Secure the end plates (7) with three nuts (14). Insert the two neck bolts and secure with nuts (14). Torque the four corners to 8 foot-pounds to ensure a leak free fit.
 6. Install the seal (8A & 8B) on the keyed end of the shaft (left end on above figure) as instructed in step 2. Attach the remaining bearing (3) and spacer (4) and tighten.
 7. Make certain that the swing hammers (6) of the rotor shaft (5) are centered inside the unit before tightening the bearing (3) set screws. Viewing the shaft (5) from the top of the disposer throat enables you to easily center it. If the shaft is displaced to one side, gently tap the opposite side with a rubber mallet to even the shaft.
 8. Once shaft (5) is set, tighten the two set screws in each bearing (3). **You MUST use a high quality threadlock product to secure set screws. Failure to do so may result in severe damage to the rotor shaft (5), bearings, and end plates (7), and may void your warranty.**
 9. Install the drive pulley (2) and key (13) onto the shaft. You must align the grinder pulley with the motor pulley by adjusting the grinder pulley and/or the motor pulley on their respective end of the motor shaft. Use a straight edge to ensure alignment. The Motor and Grinder are belt driven. The base of the unit allows for tensioning of the belt via the bolting hole slots for the motor and grind chamber.
 10. Install drive belt Part #CP-105 (C-1000R #CR-105).
- CAUTION: Installer should replace any belt exhibiting wear or in questionable condition. If belt tension requires adjustment, the motor should be loosened at the base and moved away from the grinder housing.**
11. Assembly is now complete and testing can begin.
 12. Before proceeding, check condition of the splash guard and rubber boot connector, and replace if deteriorated. Discard old splash guard and rubber boot connector.

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13. With water off, turn unit on and check for smooth, quiet operation.
14. Start water flow into the unit and check for leaks.
15. Check grinding action of the unit by introducing food refuse.
16. Reassembly is complete. The unit can now be returned to service.



WARNING: Failure to immediately replace a worn or damaged Rotor Shaft, or other worn or damaged part/component, or remove the Hammerall Disposer from service until the repair is made, may result in serious injury or even death.

MAINTENANCE SCHEDULE



WARNING

To avoid serious injury or even death, never put hands inside the Hammerall Grinding Chamber.

Power to The Hammerall Unit must be terminated at BOTH the *starter switch* and the *main electrical panel*, and the *drive belt must be removed* prior to any service on the Hammerall Unit.

Never introduce non-food material into the grinding chamber. Keep face, hair, body parts, clothing, jewelry, etc., away from sink hole opening when The Hammerall Unit is operating, and never put hands or other body parts below sink hole opening.

The Hammerall Unit must never be operated without its splash guard (safety baffle), and its protective cabinet enclosure securely fastened in place.

Failure to follow the warnings, safety precautions, instructions, or any other contents of this Manual, may result in serious injury or even death.

This equipment is intended for use by trained foodservice professionals only as an undersink commercial food waste disposer and/or collector. Residential, or any other use, is unauthorized and prohibited, and contrary to Manufacturer's intent

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Maintenance Notes: The Hammerall grind chamber, together with its component rotor shaft, is protected from corrosion and lubricated by virtue of fat levels naturally present in mixed food waste. In the event of a waste stream other than conventional mixed food waste, or an extended shutdown of the disposer, the rotor shaft should be sprayed as needed with a lubricating, anti-corrosive product.

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Daily Maintenance

1. **Strictly follow** ALL warning and safety instructions on pages 1 and 2, terminate power to the machine at both the starter switch and main electrical panel, and remove the drive belt.
2. Carefully remove all non-food material from grinding chamber. **This must be done only by fully licensed and qualified service professionals.**
3. **Ensure that disposer splashguard (safety baffle) and protective cabinet are securely fastened in place.**

Quarterly Maintenance (every three months)

1. Check condition of rotor shaft swing hammers - replace entire rotor shaft, bearings and seals (rebuild kit) when swing hammers are less than 2-1 /4 inches in length or if severe wear is noted on one or more individual rotor shaft swing hammers.
2. Check condition of drive belt - Replace if cracked or deteriorated.
3. Ensure that all set screws are coated with a high quality thread lock product.
4. For best results feed fibrous waste into grinding chamber with a mix of other wastes.
5. Ensure that disposer splash guard (safely baffle) and protective cabinet are securely fastened in place.

**Hammerall Disposer Company is not responsible for injuries sustained
due to the failure to conduct maintenance.**

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TROUBLESHOOTING GUIDE

Unit does not consume refuse	Shaft does not rotate	Ensure enough water to flush refuse and connect water supply to inlet provided at base of grind chamber's neck.
	Motor does not run	
	Insufficient or improperly connected water supply to grinder	
Shaft does not rotate	Drive belt missing or broken	Replace as necessary.
	Debris lodged against rotor shaft at startup	After terminating electrical power to both the starter switch and the main electrical panel, and removing the drive belt, remove large pieces of debris and restart. Always allow grinder sufficient time to digest refuse before stopping.
	Bearing frozen	Replace if necessary. Grease bearing periodically to prevent recurrence. (Maintenance Schedule)
Motor not running	No power to switch	Check / reset / replace circuit breaker.
	No power to motor	Overload tripped – reset.
		Replace defective switch.
	Motor defective	Repair or replace.
Unit consumes refuse slowly	Insufficient water to grinder	Increase water flow.
	Rotor shaft worn	Replace rotor shaft to restore efficiency. (Maintenance Schedule)
Unit drains slowly	Unit damaged or severely worn, allowing food to pass through	Replace screen. This condition is normally caused by metal object introduced into the machine. Prevent the introduction of flatware or other metal into the grinder. When introduced, a fully licensed and qualified service professional should remove the drive belt, terminate the power to the machine at both the starter switch and the main electrical panel, and remove object.
High degree of splashback at disposer sink hole	Improper rotor shaft rotation	Licensed electrical professional should re-wire unit so that rotor shaft rotates in accordance with rotation arrow labels on unit's end plates. Proper rotation is toward motor.
	Operator not using splash guard (safety baffle); no splash guard installed in sink hole opening.	Install splash guard (safety baffle) in sink hole opening.

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PARTS LIST

Parts Available Through Authorized Service Centers. Call 1.800.818.5797

PART #	DESCRIPTION	C-300	C-500	C-1000R
CP-101	Rebuild Kit	●	●	
CP-105	Belt	●	●	
CP-106	Rubber Boot	●	●	●
CP-107	SS Clamp	●	●	●
CP-108	SS Screen	●	●	●
CP-109	Splash Guard	●	●	●
CP-110	End Plate	●	●	●
CP-110	Grinder Pulley	●	●	
CP-112	Motor Pulley	●	●	
CP-114	Bolt Set	●	●	
CP-115	SS Mounting Ring	●	●	●
CP-116	Sink Adaptor	●	●	●
CP-117	Solenoid (expect 460)	●	●	●
CP-118	Solenoid (460 to 110)	●	●	●
CP-119	Vacuum Breaker	●	●	●
CP-120	Prison Package	●	●	●
CP-121	SS Offset Chute	●	●	●
CP-122	Custom Adaptor Boot	●	●	●
CP-123	15" SS Cone	●	●	●
CP-124	18" SS Cone	●	●	●
CP-132	Mounting Bracket	●	●	●
CP-140	SS Safety Cover	●	●	●
CR-101	Rebuild Kit			●
CR-105	Belt			●
CR-110	End Plate			●
CR-111	Grinder Pulley			●
CR-112	Motor Pulley			●
CR-114	Bolt Set			●

MOTORS:

C-300	CM-300	CM-301
C-500	CM-500	CM-501
C-1000R	CM-1000	

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HAMMERALL COMMERCIAL DISPOSER WARRANTY

Hammerall's Assurance Of Quality Warrants Its Commercial Disposers As Follows:

What Equipment is Covered By This Warranty?

All Hammerall Commercial Disposers and Accessories produced and furnished by Hammerall.

What is the Hammerall Disposer and Accessories Warranted Against?

Against defects in workmanship or material only. **Parts wear is not considered a defect.**

How Long Are the Disposer and Accessories Warranted?

The Disposer and accessories are warranted for one year from date of installation.

Are Service Labor Charges Included In This Warranty?

Yes, during the first year following installation, in the extended areas of established commercial service, Hammerall will provide service labor necessary to repair or replace defective parts, providing such labor is performed by a Hammerall Factory Authorized Service Center.

How To Obtain Service?

For the location of your nearest factory authorized service center call (770) 448-2540

What Conditions are Not Covered By This Warranty?

This warranty does not apply if failure of commercial Disposer to operate is due to parts wear, faulty or improper plumbing installation, tripped starter overloads, abuse, accidental damage, grinding elements jammed by foreign objects, clogged drain lines, unity improperly sized for application according to factory recommendations, or Disposer being in storage longer than 18 months from date of manufacture.

**This Warranty is Valid in the 50
States and Canada Only, and
as Written, is in its Entirety and
no Other Warranty Applies.**

**For Quality and Safety Purposes
ALWAYS SPECIFY GENUINE HAMMERALL PARTS**