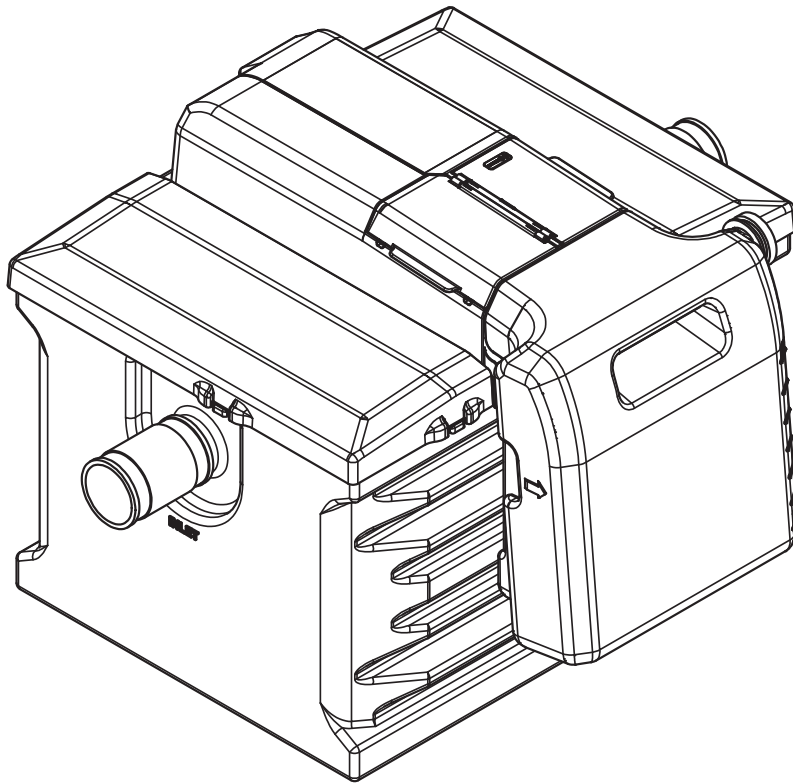


BIG DIPPER[®] **ESSENTIAL**

Installation & Operation Instructions For Big Dipper Essential 51K Series

**Essential Models W-250-IS-T & W-350-IS-T
(Including 230 VAC Units)**



** Please consult Thermaco, Inc. for specific models tested, certified and/or listed by these organizations.*

**Copyright ©2022 Big Dipper[®] Thermaco, Incorporated • P.O. Box 2548 • Asheboro, NC 27204
Toll Free: (800) 633-4204 • V: (336) 629-4651 • F: (336) 626-5739
info@thermaco.com • www.big-dipper.com**

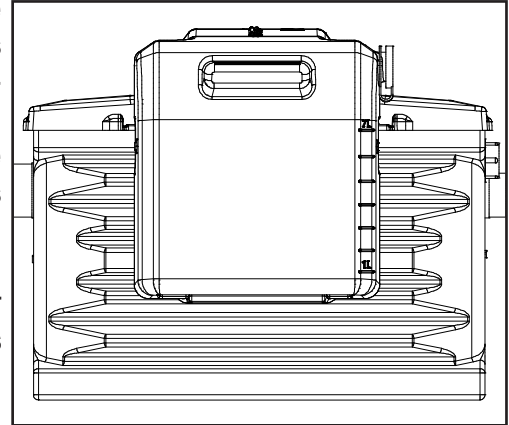
Table of Contents

Overview	3
Maintenance	4
Timer Operation	5
Troubleshooting	6
How To Reverse System Operation	7
Plumbing Installation	8
Vented Flow Control Installation	11
Electrical Installation	12
Safety Instructions	13
Grounding Instructions	13
Wiring Diagram	15
Component Identification	16
Replacement Parts	20
Limited Warranty	21

Big Dipper Essential® System Overview

The **Thermaco, Inc. Big Dipper Essential®** Automatic Grease and Oils Removal System removes free-floating grease & oils from kitchen drain water flows. As most food service facility managers already know, grease buildup within a building's plumbing drainage system is a major cause of problems due to drain line blockages. These problems jeopardize normal operations as well as create health and safety hazards within the facility itself.

The proper installation of a Big Dipper system can reduce or eliminate grease problems. Use of the Big Dipper assures minimization and/or elimination of costly sewer surcharges and fines through efficient separation and removal of free-floating grease & oils. In addition, the Big Dipper System also helps reduce or eliminate pumping and disposal costs associated with conventional grease separators or interceptors. The recovered grease & oils are substantially water-free and are suitable for recycling by local rendering and/or biodiesel companies.



The Big Dipper system is an automatic, self-cleaning device. As greasy kitchen effluent drains from kitchen fixtures, the unit contains the grease & oils. These separate from the effluent and rise to the surface of the separator tank. The unit automatically skims the contained grease & oils and transfers the grease & oils to a collection container. A digital control maintains the self cleaning operation, activating the skimming wheel periodically based on the setting chosen. Only the "cleaned" water exits the unit and flows into the facility drain lines. The Big Dipper systems operate most efficiently when servicing single fixtures such as a 1 to 3-compartment sink or a pre-rinse station.

The Big Dipper system's compact footprint allows installation directly at the source where grease problems originate. The system design also allows easy maintenance and operation requiring only a minimal amount of daily and weekly maintenance to maintain peak operating performance.

The Big Dipper system design allows for maximum installation flexibility. Reversing the system operation is as simple as rotating the cover assembly of the unit.

Hydromechanical grease interceptors (formerly referred to as grease traps), grease separators, automatic recovery units, grease removal devices and other similar plumbing devices receiving kitchen flows from sinks, floor drains, woks and other food bearing sources may generate odors. The 51K Series Big Dipper Essential has been designed to reduce odors and limit them from leaking into the kitchen through the tank lids. It does not prevent odors related to the rest of the plumbing system including but not limited to: open floor drains, air gaps, external solids straining devices, improper venting, and odors generated elsewhere in the plumbing system. These odors are usually prevented by good area ventilation, frequent fluid inputs, good product maintenance practices and proper product installation. Additional pretreatment steps not performed by the Big Dipper automatic grease interceptor, including aeration, chlorination, improved area ventilation and additional maintenance control, may be needed at some sites.



51K Series

Big Dipper Essential® System Maintenance

Caring for Your Big Dipper Essential®

Daily Maintenance:

(A) Empty the clear plastic grease/oils collection container (located beside the unit) prior to its becoming full once each day. The Big Dipper recovers grease and oil virtually water-free so that they can be recycled. The collector container should be washed periodically so as to maintain the easy viewing translucent characteristic of the collector. Contents may be disposed of in rendering barrel with permission of rendering company or as solid food waste. To dispose in this manner, empty grease into plastic bucket lined with trash bag and allow contents to solidify at room temperature or in cooler before throwing into garbage.

(B) The internal strainer basket should be removed and emptied into a garbage container by shaking briskly. Wash the inside and outside surfaces of the strainer after emptying.

Weekly Maintenance:

(A) Check the collection trough and the wiper blades for any solids build-up. Wipe off any accumulated deposits and assure that the wiper blade assembly is re-placed properly.

(B) Check the Timer to be sure it is set and operating correctly.

(C) Check the thickness of the grease layer at the top of the System. There should be no appreciable amount of grease or oil left in the tank immediately after the daily automatic skimming cycle. If there is more than a 1/2" (13 mm) thick layer of grease after the skimming cycle, this indicates a need to increase the skimming time. Increase the timer settings accordingly until a clean System appearance is obtained after the automatic skimming cycle (A simple guide is to increase the "on" time by 30 minutes for each 1" (25 mm) of grease layer observed after the skimming cycle).

Quarterly Maintenance:

(A) The internal strainer basket in the unit is designed to remove incidental solids from kitchen drain flows. Over a period of time, sediment consisting of very fine particles may begin to accumulate on the bottom of the unit. If this build-up is allowed to continue, it may eventually block the outlet baffle. To prevent this from occurring, remove the lid and stir the bottom of the unit with a long handled spatula while water is flowing to flush out the sediment. When necessary to remove blockages, remove the baffle cleanout plug and flush the outlet baffle with water. Occasionally drain and clean the unit thoroughly. Properly used, a wet-vac may be appropriate for this purpose.

***CAUTION! DISCONNECT POWER TO UNIT BEFORE CLEANING
to prevent damage to the unit and personal injury**

***NOTE: Before energizing unit after cleaning, fill tank with water
to protect wipers and heater from damage**

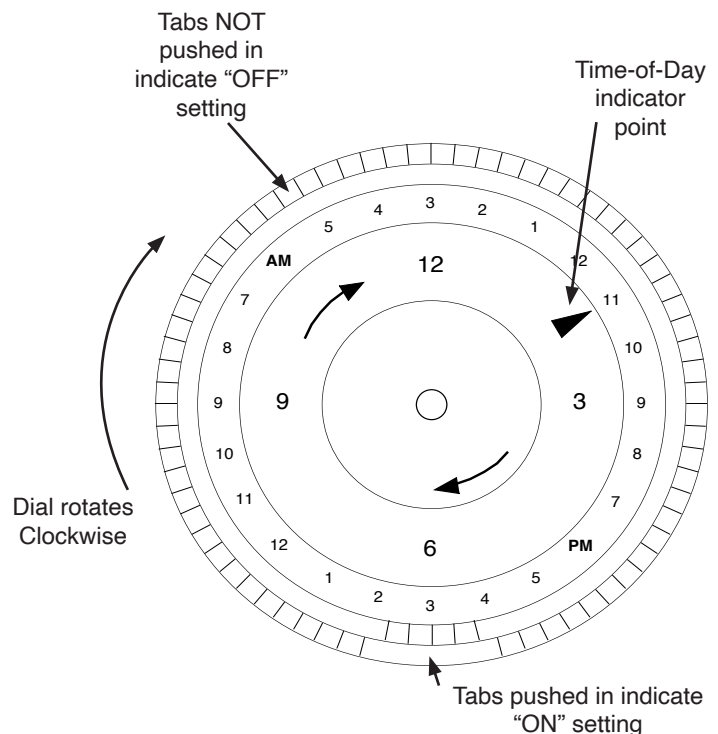
TO SET THE TIMER

1. Push on/off tabs on the outer ring of the timer inward on dial at desired "ON" times. Each tab in the "ON" position is 15 minutes of skim time for the Big Dipper. **1 Tab = 15 Minutes of skimming time.** Ensure there is a minimum of one (1) tab in the "ON" position. **DO NOT EXCEED 2 HOURS (8 tabs) IN A 24 HOUR PERIOD.**

2. Turn dial **CLOCKWISE** one or more complete revolutions until the present time is aligned with the time-of-day indicator.

3. Fill the unit with water by turning on the connected sink water taps, then plug the Big Dipper unit into grounded electrical outlet. Do **NOT** energize while the Big Dipper is empty.

4. Once powered, the timer should begin operating. If the timer needs to be reset: **ONLY TURN THE DIAL CLOCKWISE**
Tabs pushed IN = Skimming
Tabs pushed OUT = No Skimming



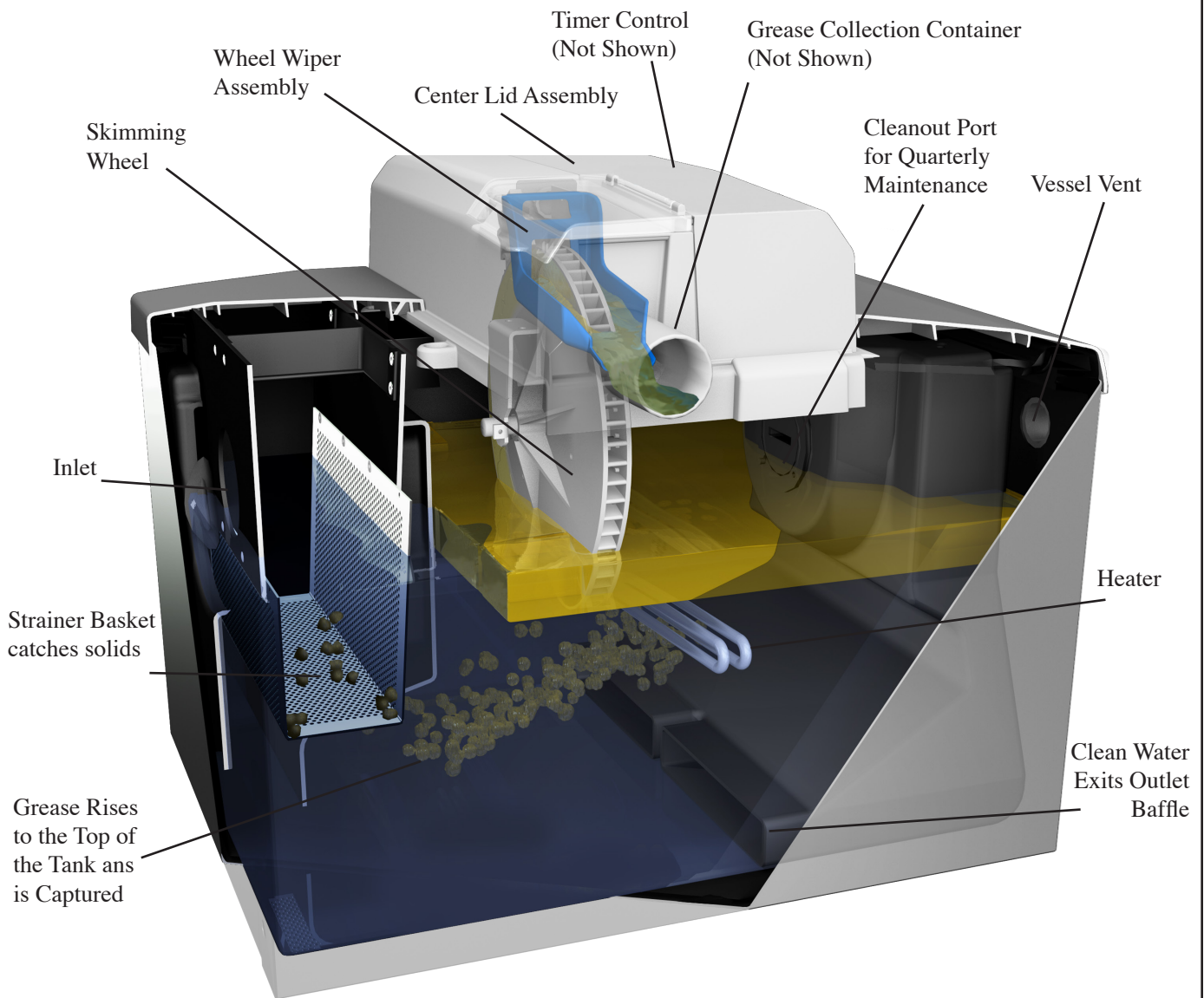
NOTE: IN CASE OF POWER FAILURE, RESET TIMER.

Setting the Correct Skim and Run Time

Set the Big Dipper to run for one (1) consecutive hour as outlined above. We recommend setting for a time the kitchen is not in use such as 4:00 to 5:00 AM. Allow the Big Dipper to run at this setting for two to three (2 to 3) days. After each skim cycle occurs, check the grease collector and observe the amount of grease and water in the collector. Ideally there should be little to no water in the grease collector. If there is a significant amount of **WATER** in the collector, **DECREASE** the run time by 15 minutes by moving **ONE (1)** tab to the outer "OFF" position. If there is **ONLY GREASE** in the collector, **INCREASE** the run time by 15 minutes by moving **ONE (1)** tab to the inner "ON" position. Repeat this process until the grease collector contains little to no water, this is the optimal runtime for your kitchen. Should cooking practices or restaurant size change, these settings may need to be revised by repeating the above steps.

Heater and Skimming Operation

During run time the heater will operate under thermistor control with settings of 130°F heater off point, 120°F heater on point for the duration of the skim cycle. The skimming wheel will turn during the entire runtime. Grease may not start to accumulate in the grease collector until several minutes into the runtime as it take a few moments for the heater and surrounding grease to heat and the grease to liquify.





51K Series

Big Dipper Essential® Troubleshooting

Big Dipper unit overflows

(1) Check to see that the outlet pipe is not reduced to a smaller size, the outlet piping is vented, has as few 90 degree outlet turns as possible, and that no "P" trap is installed on the outlet. Re-plumb the piping, if necessary. Check outlet piping for clogs. Have a plumber clean the line, if necessary.

(2) Ensure solids strainer is in place and emptied daily.

(3) Check the bottom of the grease chamber for excessive solids and silt buildup which may be blocking the outlet baffle. Disconnect the power and use a long handled spatula or similar instrument to stir the bottom while water flows through the unit. If necessary, drain and clean the sediment from the unit. When necessary to remove blockages, remove the baffle cleanout plug and flush the outlet baffle with water. To prevent recurrence, schedule this cleaning to be done on a regular basis (properly used, a wet-vac may be appropriate for this purpose.)

(4) Make sure the flow rate to the unit does not exceed the maximum flow rate, which is shown on the nameplate. If necessary, have a plumber install an approved flow control to restrict the inlet flow to the specified level or install a properly sized Big Dipper for the application.

Excessive water in the grease collection container

(1) Check Timer Control for excessive run time. Unit will pick up incidental water after all grease is removed. If necessary, reduce the setting by 15 minutes (one tab) until no water is observed in the grease collection container.

No grease is collected in the container

(1) Verify the power is on and the correct setting is chosen. The power indicator light should be illuminated. If the power indicator light is not illuminated the unit is not powered.

(2) Lift the wheel cover and remove the grease collector and clean away any buildup that may be present on the wiper blades and collection trough. Make sure the wiper blade(s) are properly in place on the skimmer wheels. Replace wiper blades when worn or warped.

(3) Turn the timer clockwise until the time-of-day indicator points to inner tabs to ensure the skimming wheel turns.

CAUTION: Keep your hands away from moving parts to avoid possible injury. If the skimmer motor does not come on, the motor assembly may need to be replaced.

(4) Check for congealed grease in the unit. If the Big Dipper's heating element is not warming the unit, the heating element may need to be replaced.

(5) Some sites do not generate enough grease to be captured by the skimming process. Set Control for minimum operation - 30 minutes per day.

Objectionable odor

(1) Clean the solids strainer and grease collection container more frequently.

(2) Ensure grease/oil is being skimmed from the unit.

(3) Verify internal cleanout plug is in place and vents were installed as described on page 10 in "Big Dipper Essential Plumbing Installation."

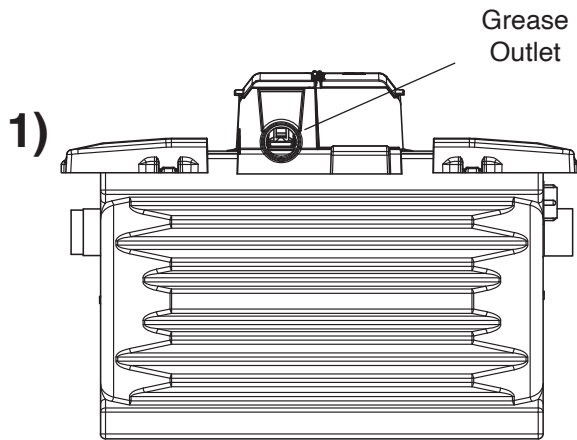
(4) Check timer control for excessive run time. Unit will pick up incidental water after all grease is removed. If necessary, reduce the skimming time until no water is observed in the grease collection container.

(5) If excessive sediment has collected on the bottom of the unit, clean the unit as described in item 3 in "Big Dipper unit overflows."

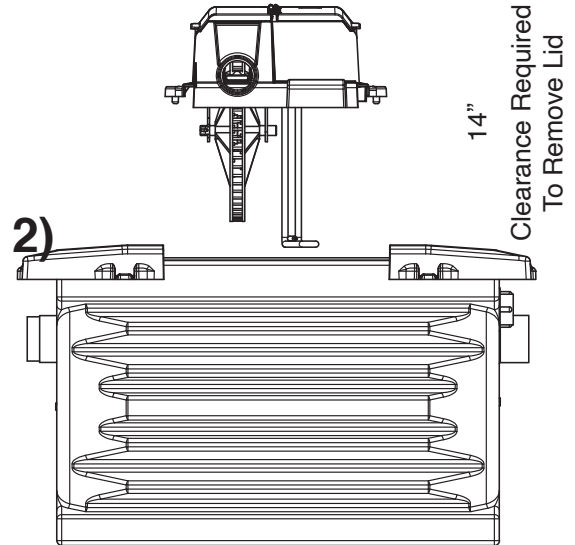
(6) Hydromechanical grease interceptors and other similar plumbing devices receiving kitchen flows from sinks, floor drains, woks and other food bearing sources may generate odors. While your Big Dipper Essential is designed to reduce odors from escaping the lid, there may be other factors influencing odor dissemination. These include room ventilation, kitchen menu, ambient temperatures, ware washing practices, grease/oil input, daily input fluid volume, sanitizers, installation plumbing design and product maintenance/upkeep. Odors are usually prevented by good area ventilation, frequent fluid inputs, good product maintenance practices and proper product installation. Additional pretreatment steps not performed by the Big Dipper automatic grease interceptor, including aeration, chlorination, improved area ventilation and additional maintenance control, may be needed at some sites.

How To Reverse Big Dipper Essential® System Operation

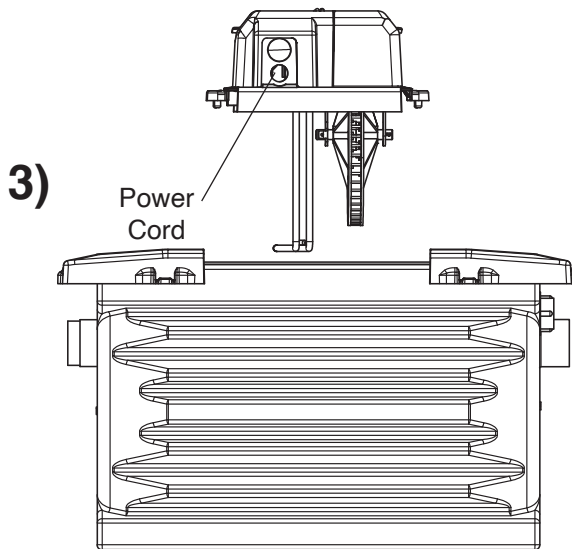
***ALWAYS UNPLUG UNIT BEFORE REMOVING LID**
***SYSTEM WILL NOT OPERATE UNLESS CENTER MODULE IS IN PLACE**



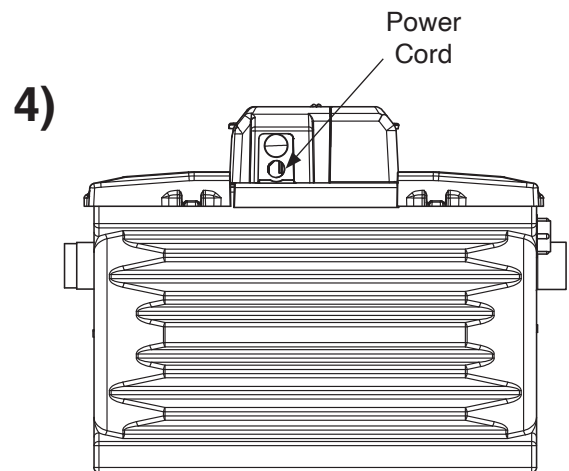
1) Pull the side wings outward.



2) Lift the center module up off of the unit, ensuring clearance for the heater.



3) Rotate the center module 180°.



4) Lower the center module back down on top of the unit. Move the two side wings back into place.



51K Series

Big Dipper Essential® Plumbing Installation

Big Dipper Essential® Plumbing Installation

Locating the Unit

To minimize grease build-up in piping, a Big Dipper system should be located as close as possible to the fixture it is serving. The system should be visible and easily accessible for maintenance and inspection. The unit must be in a level position. **Be sure to check the Specification Sheet for your model for the exact clearances needed for installation.** If the system is located directly on the floor, the bottom should be sealed to the floor with an approved silicone type sealant. Make sure the height above the Internal Strainer access cover is enough to remove the strainer basket.

Inlet/Outlet Piping

The inlet and outlet piping connections require flexible sleeve pipe couplings. Keep outlet piping as straight as possible. Use only “sweep” connections. **Do not reduce the pipe sizing on the outlet piping.** Do not install “P” trap on outlet connection of system. (Note: The system already has an internal gas trap). Failure to install to these instructions voids Thermaco’s Warranty.

Flow Controls

Big Dipper Systems are tested and rated with an external flow control. We caution against any installation that does not use an external flow control. Each Big Dipper comes with the recommended flow control device.

Fill Unit With Water Before Powering Big Dipper systems, equipped with an electric heating element, **MUST be filled with water before energizing the power to the system.** Failure to do so may damage the electric heating element. These elements will NOT be replaced under Thermaco’s Warranty.

Venting the Outlet

An outlet vent or approved vacuum breaker of at least 1/2 the diameter of the system’s outlet connection must be present as close as possible to the Big Dipper outlet to prevent possible siphonage problems. Failure to provide a vent for the system voids Thermaco’s Warranty for the system.

For High Head Height Applications Over Six (6) Feet (1.95 m)

Big Dipper systems are equipped with an internal flow regulator located inside the inlet end of the system. Verify its location and placement prior to connecting the inlet piping. If your code requires a vertical type flow regulator, an approved control with a flow rating matching the system’s flow rate should be used. Note: When a Big Dipper is servicing multiple fixtures, some codes require separate flow controls for each fixture. See following pages for suggested high head height flow regulation installation.

Do Not Use With Food Grinders, Potato Peelers or Waste Disposal Units

If the system is connected to a Waste Disposal Unit, Garbage Grinder or Potato Peeler, Thermaco’s Warranty will be void.

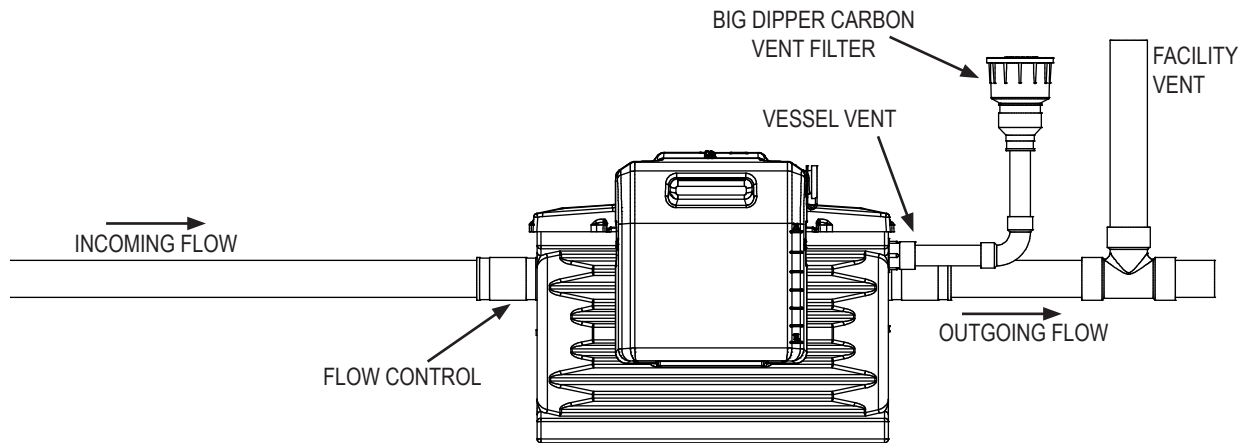
Fill Unit With Water and Disconnect During Periods of Kitchen Inactivity

Big Dipper systems **MUST** be filled with water and the power must be disconnected during any inactivity lasting longer than two (2) weeks. Failure to do so may damage the unit. Thermaco’s Warranty will be void if proper precaution is not taken for extended periods of kitchen inactivity.

The following drawings show proposed venting for Big Dipper units in various situations. **Check state or local plumbing code to determine proper installation for your facility.**

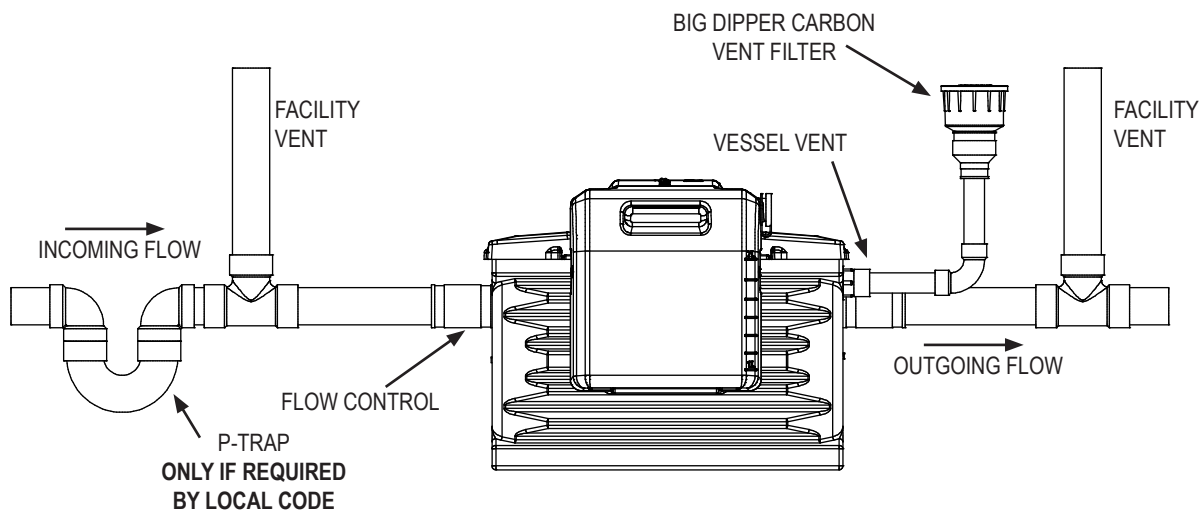
Sites without Upstream Facility Vents or Other Air Relief

Installations without Upstream Facility Vents or other Air Relief require the use of the vessel vent (also referred to as a chamber vent) to prevent air bound conditions. Thermaco provides a 1" NPT connection by which this **vessel vent may be connected from the unit** via a Big Dipper Carbon Vent Filter *Sold Separately* (preferred) or independently vented to atmosphere. Do not connect vessel vent to air admittance valve or facility vent.



Sites with Upstream Facility Vents

Sites using facility vents upstream of the Big Dipper unit do not require the use of a vessel vent, though use of a Big Dipper Carbon Vent Filter is strongly recommended. In this case, the open inlet design of the unit works in conjunction with the facility vent and upstream P-trap to facilitate air movement into and out of the interior grease interceptor air space and prevents air bound conditions from occurring. P-trap is only required in certain districts, and is not recommended by Big Dipper.



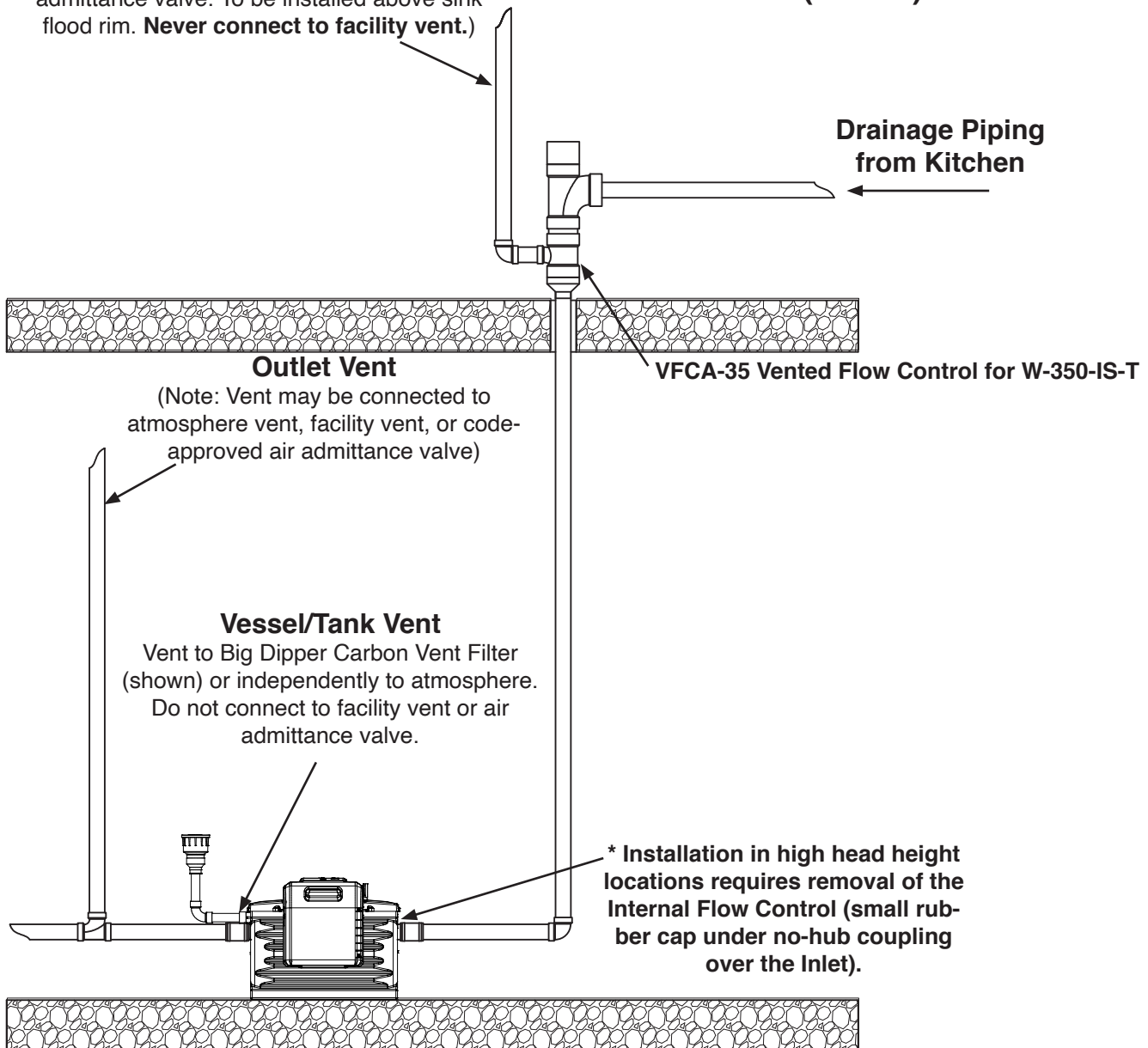
NOTE: Drawing for reference only. Equipment must be installed in compliance with all applicable laws, regulations and codes, including plumbing codes. Installation should be performed by a qualified plumber.

Sometimes space restrictions require the installation of Big Dipper units in basement locations where significant head pressure becomes a factor. The **Big Dipper® VFCA Vented Flow Control** *Sold Separately* module provides an option for use with installations where a significant amount of head pressure is present (greater than 6 ft./1.95 m) or where applicable regulations require vented flow controls. A Vented Flow Control helps reduce problems associated with high head pressure and helps slow the drainwater flow down. The VFCA kit contains an appropriate fitting and flow control orifice. **Only units 35 gpm and higher should be installed in this fashion.**

Flow Control Vent/Air Intake

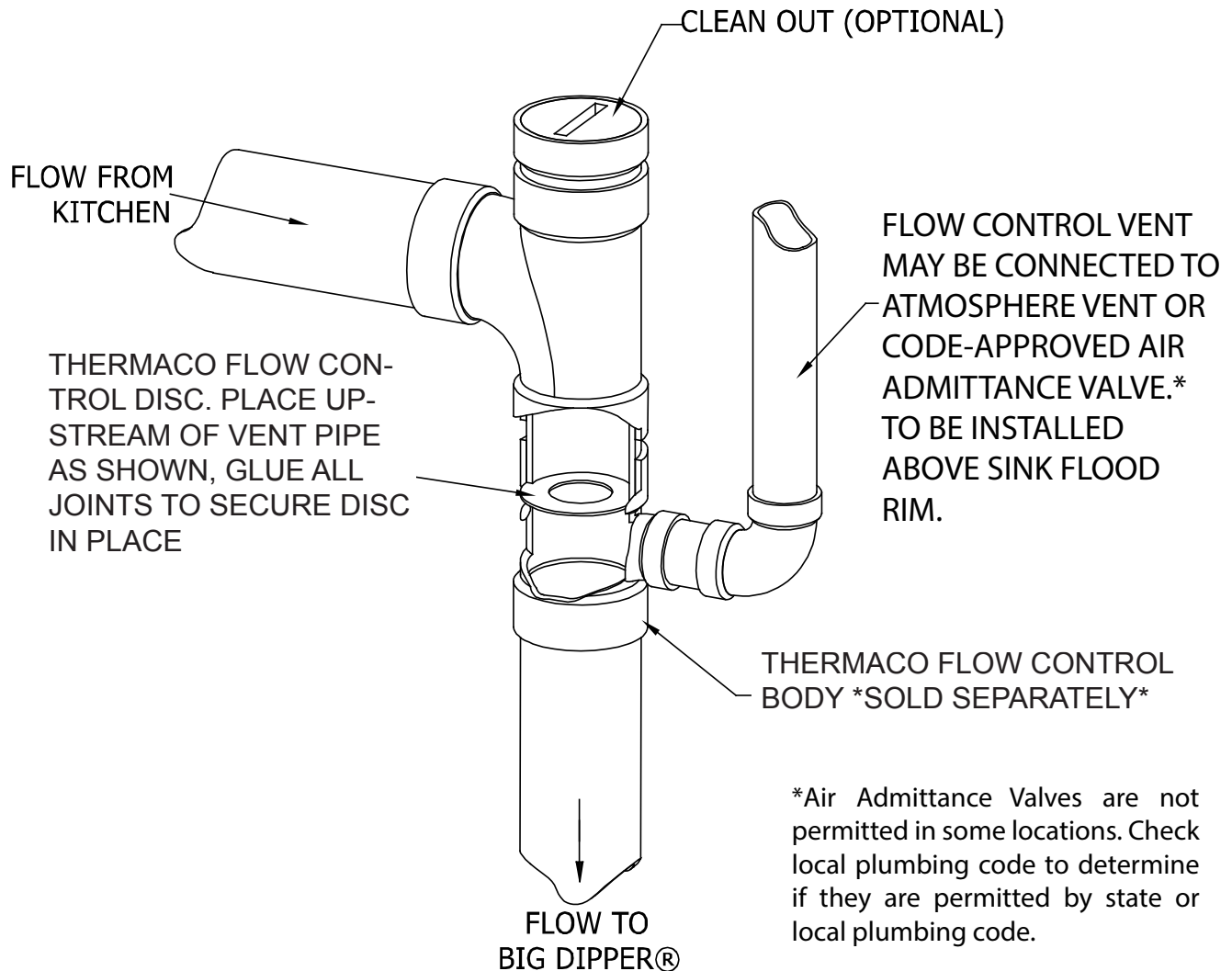
(Note: Flow Control Vent may be connected to atmosphere vent or code-approved air admittance valve. To be installed above sink flood rim. **Never connect to facility vent.**)

Installations where head height is greater than 6 feet (1.95 m)



NOTE: Drawing for reference only. Equipment must be installed in compliance with all applicable laws, regulations and codes, including plumbing codes. Installation should be performed by a qualified plumber.

©2022 Thermaco, Incorporated All rights reserved • Patented/Patents Pending • Specifications subject to change without notice



IMPORTANT!

The flow control should be installed after the last fixture as close as possible to the under side of the lowest fixture. If the flow control is installed more than 2 feet below the lowest fixture consult the manufacturer for a more restrictive disc. Remove the rubber flow control from the Big Dipper system.

Note: This equipment must be installed to comply with all applicable national, state, and local plumbing codes for your area. Installation should only be performed by a qualified plumber.

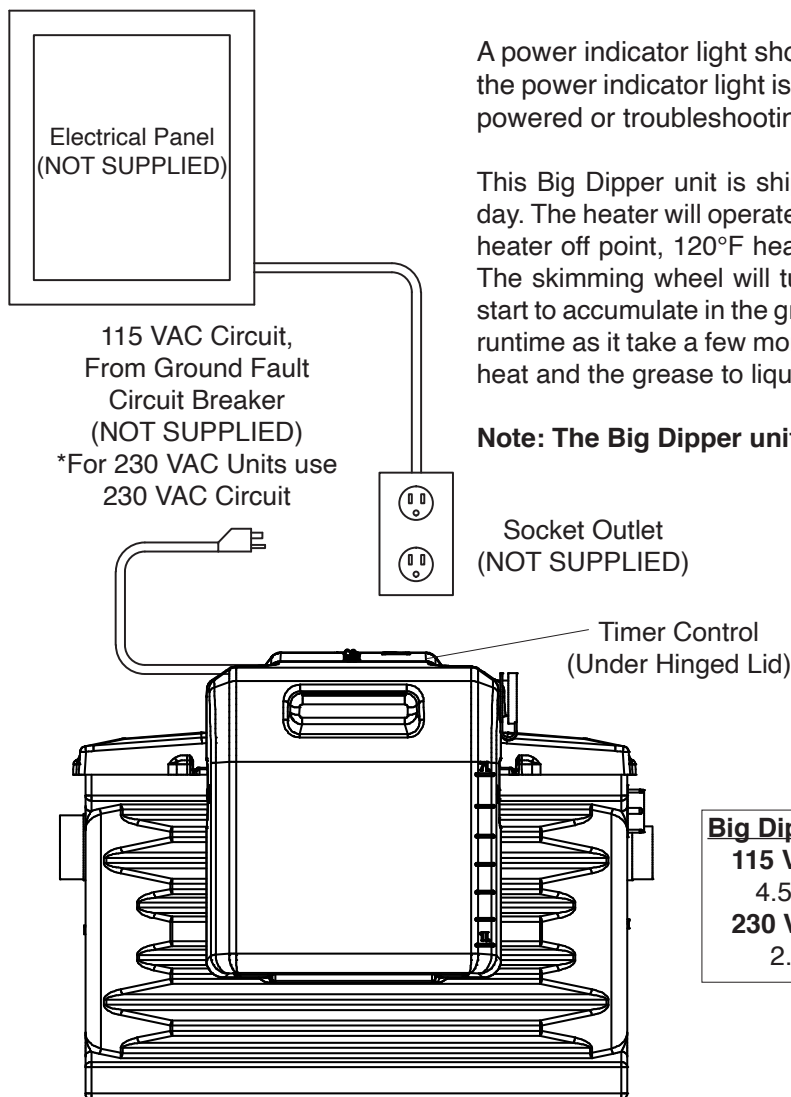
Big Dipper Essential® Electrical Installation

Big Dipper Essential Models utilize precision analog timers. The timer is located under the hinged lid of the motor enclosure on top of the lid of Big Dipper (See Timer Operation Instructions). **The Big Dipper should only be plugged into a properly grounded 3-prong 115 VAC or 230 VAC outlet.** If possible, the power supply outlet for the Big Dipper should be connected to an electrical circuit controlled by a ground fault circuit breaker.

A power indicator light should illuminate to show the unit is powered. If the power indicator light is not illuminated when expected, the unit is not powered or troubleshooting should be performed.

This Big Dipper unit is shipped from the Factory set to run 1 hour each day. The heater will operate under thermistor control with settings of 130°F heater off point, 120°F heater on point for the duration of the skim cycle. The skimming wheel will turn during the entire runtime. Grease may not start to accumulate in the grease collector until the several minutes into the runtime as it take a few moments for the heater and surrounding grease to heat and the grease to liquefy.

Note: The Big Dipper unit will not operate when the lid is removed.



Big Dipper Electrical Requirements

115 VAC Models:

4.5 Amps @ 115 VAC 50/60Hz (510 Watts)

230 VAC Models:

2.25 Amps @ 230 VAC 50/60Hz (510 Watts)

Note:

Timer Control Supplied with system.

Drawing for reference only. Equipment must be installed in compliance with all applicable laws, regulations and codes, including electrical codes. Installation should be performed by a qualified electrician.



51K Series

Big Dipper Essential® Safety & Grounding Instructions

Important Safety Instructions

WARNING

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

- a) Read all instructions before using the appliance.
- b) Do not contact moving parts.
- c) Only use attachments recommended or sold by the manufacturer.
- d) Do not use outdoors.
- e) Do not unplug by pulling on cord. To unplug, grasp the plug, not the cord.
- f) Unplug from outlet when not in use and before servicing or cleaning.
- g) Connect to a properly grounded outlet only. See Grounding Instructions.

Save These Instructions

Grounding Instructions

This appliance must be grounded. In the event of malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This appliance is equipped with a cord having an equipment-grounding conductor and a grounding plug. The plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.

DANGER- Improper connection of the equipment-grounding conductor can result in a risk of electric shock. The conductor with insulation having an outer surface that is green with or without yellow stripes is the equipment-grounding conductor. If repair or replacement of the cord or plug is necessary, do not connect the equipment-grounding conductor to a live terminal. Check with a qualified electrician or serviceman if the grounding instructions are not completely understood, or if in doubt as to whether the appliance is properly grounded. Do not modify the plug provided with the appliance - if it will not fit the outlet, have a proper outlet installed by a qualified electrician.

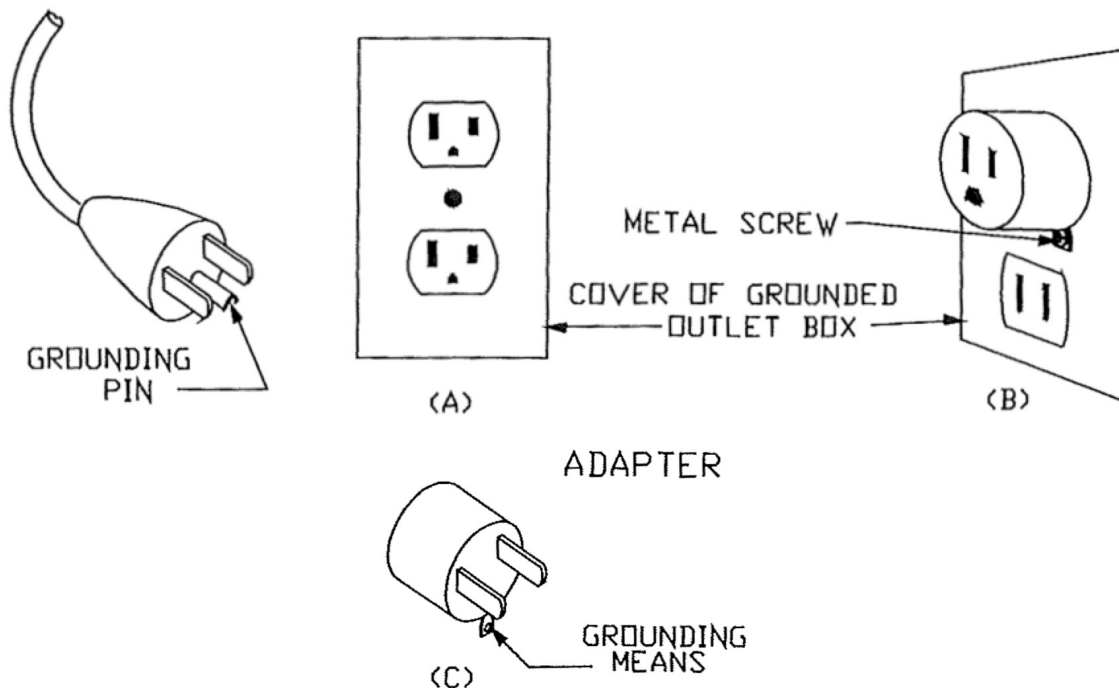
Grounding Instructions

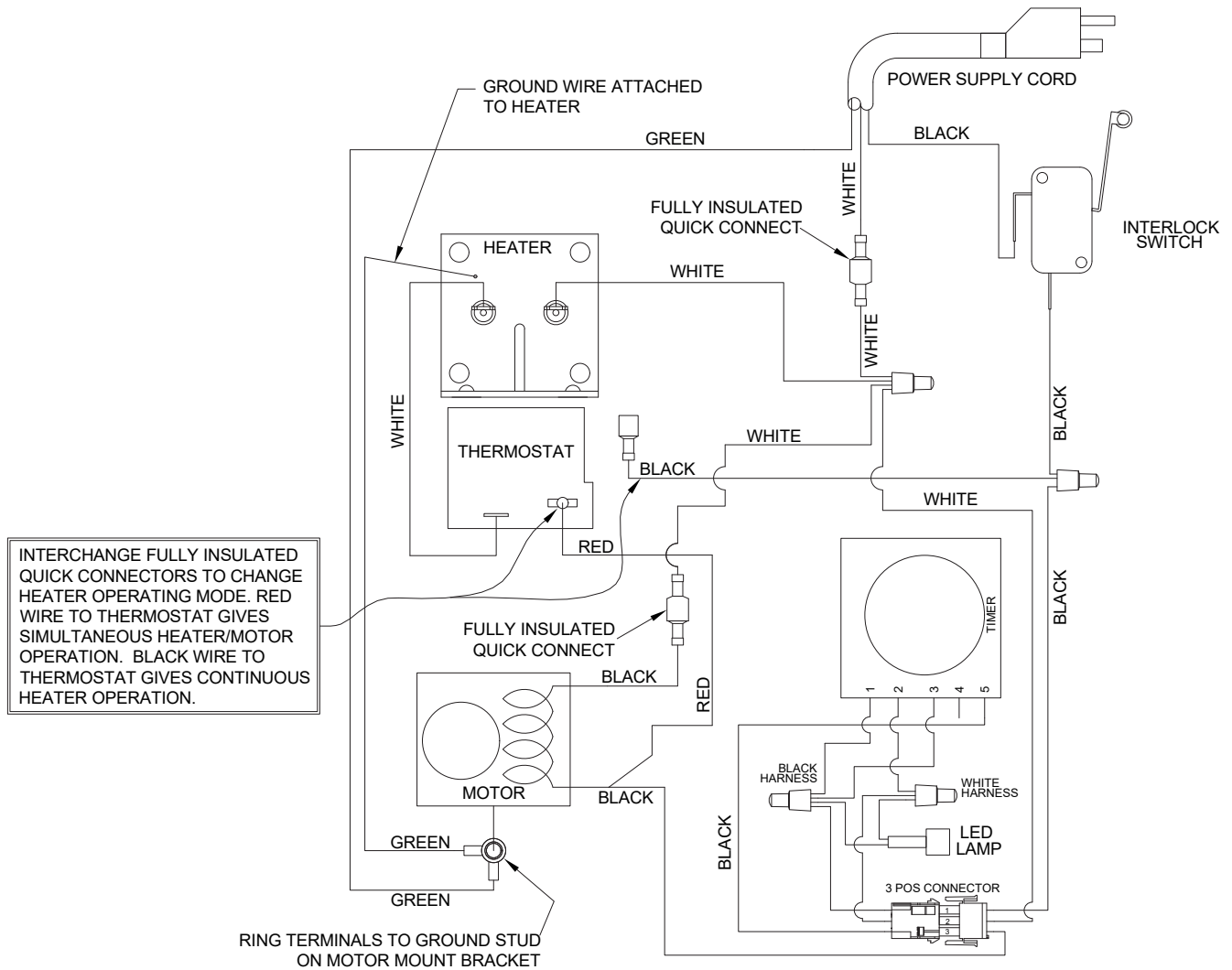
115 V Units

This appliance is for use on a nominal 115 V circuit, and has a grounding plug that looks like the plug illustrated in drawing A below. A temporary adapter, which looks like the adapter illustrated in drawing B and C, may be used to connect this plug to a 2-pole receptacle as shown in sketch B if properly grounded outlet is not available. The temporary adapter should be used only until a properly grounded outlet can be installed by a qualified electrician. The green colored rigid ear, lug, and the like, extending from the adapter must be connected to a permanent ground such as a properly grounded outlet box cover. Whenever the adapter is used, it must be held in place by the metal screw.

230 V Units

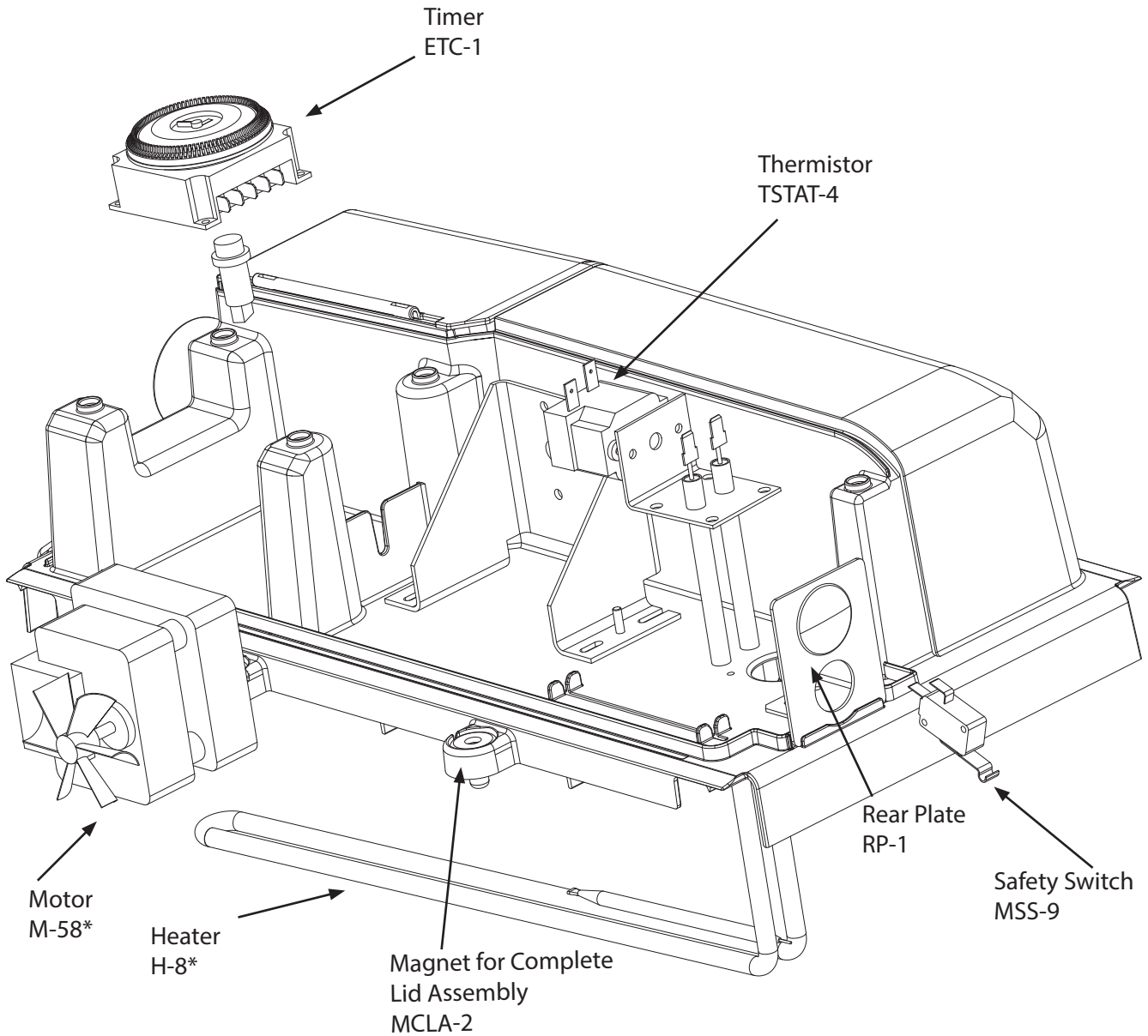
This appliance is for use on a circuit having a nominal rating more than 120 V and is factory equipped with a specific electric cord and plug. No adapter should be used with this appliance. If the appliance must be reconnected for use on a different type of electric circuit, the reconnection should be made by qualified service personnel; and after the reconnection, the appliance should comply with all local codes and ordinances.



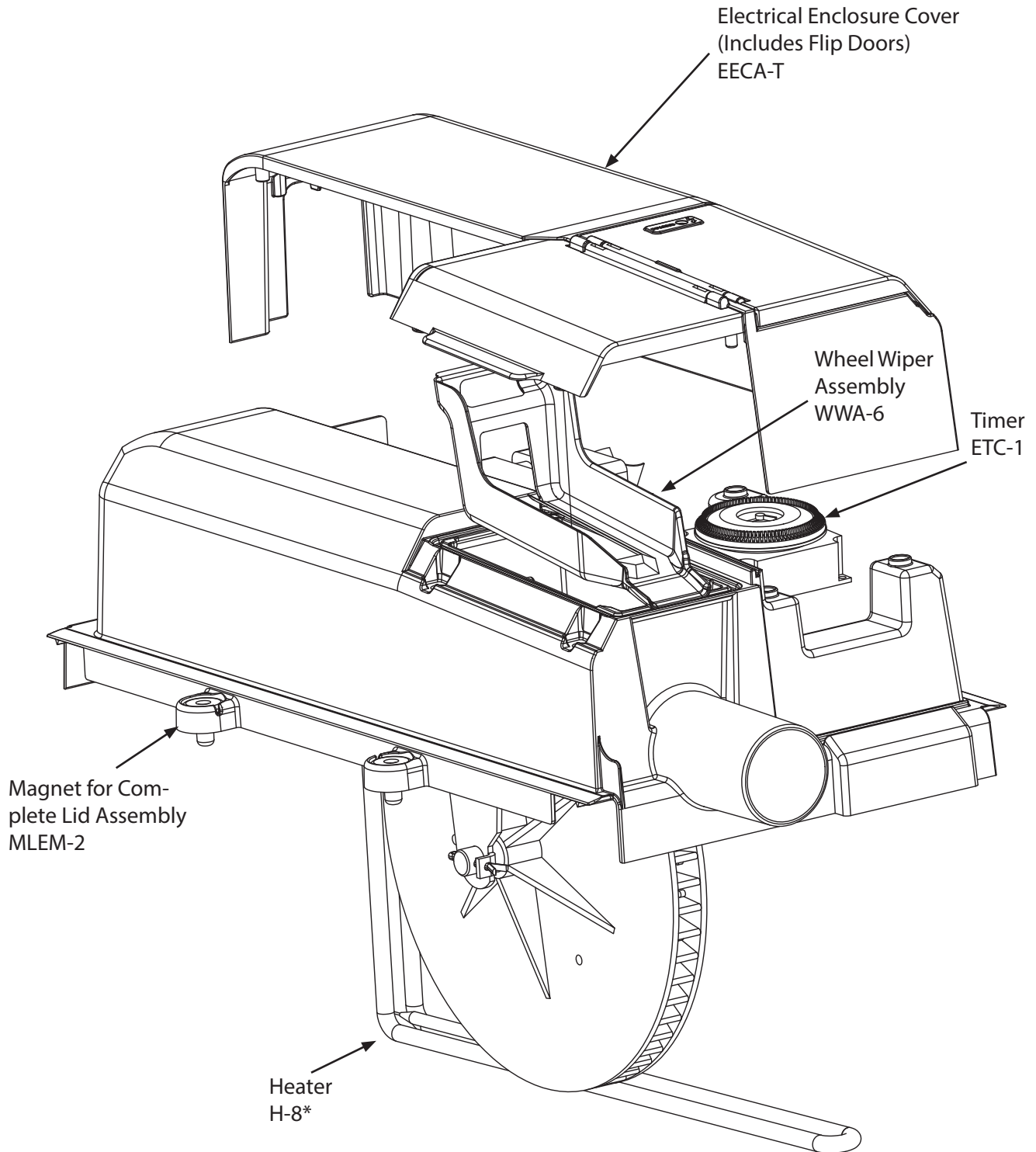


INTERCHANGE FULLY INSULATED QUICK CONNECTORS TO CHANGE HEATER OPERATING MODE. RED WIRE TO THERMOSTAT GIVES SIMULTANEOUS HEATER/MOTOR OPERATION. BLACK WIRE TO THERMOSTAT GIVES CONTINUOUS HEATER OPERATION.

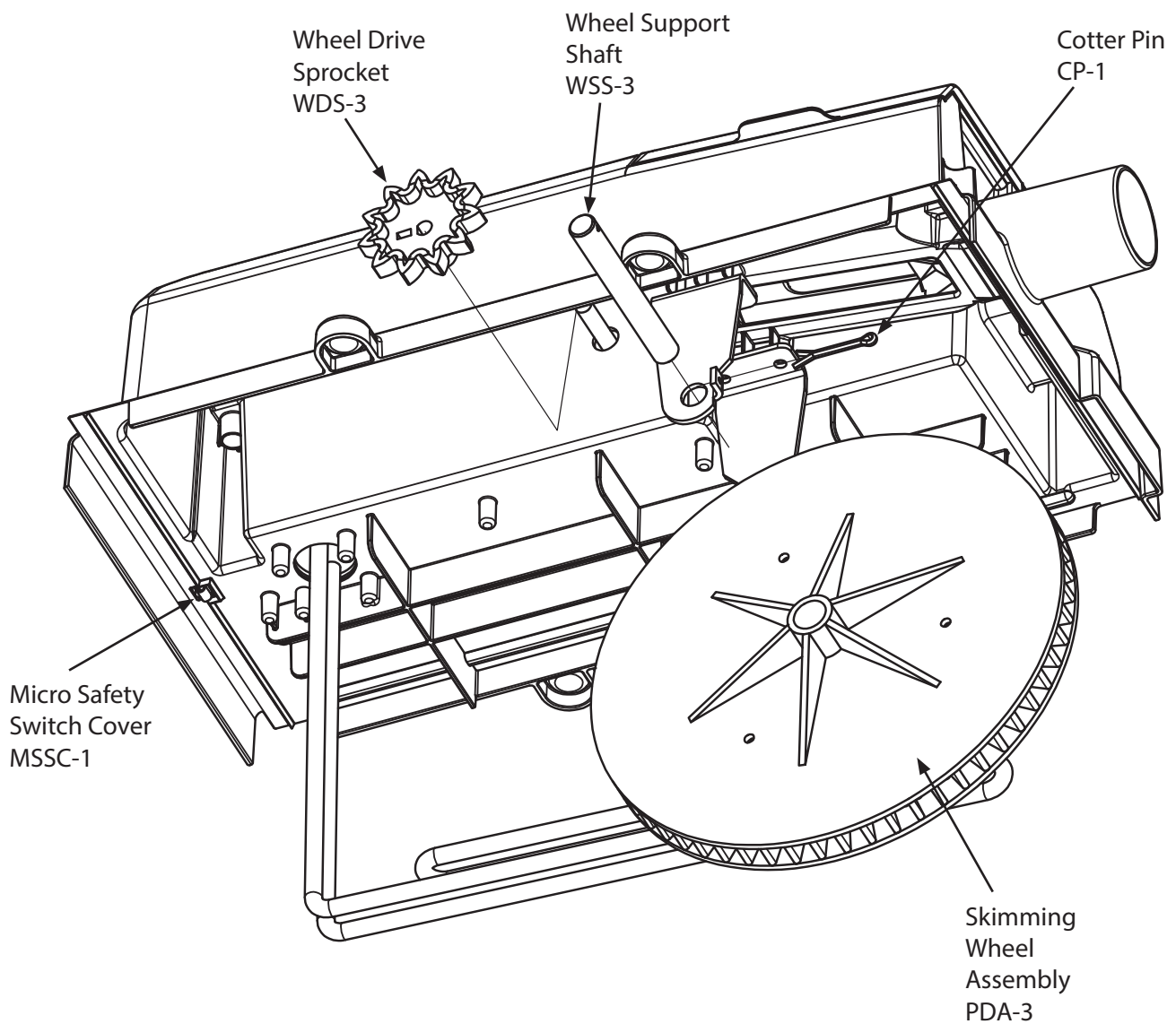
NOTE:
220-240V Units (International Units) have the following wire color changes:
On the POWER SUPPLY CORD:
The Black Wire becomes Brown
The White Wire becomes Blue
The Green Wire becomes Yellow/Green



***230 VAC Units use M-58-230
and H-12-230**



***230 VAC Units use
M-58-230 and H-8-230**

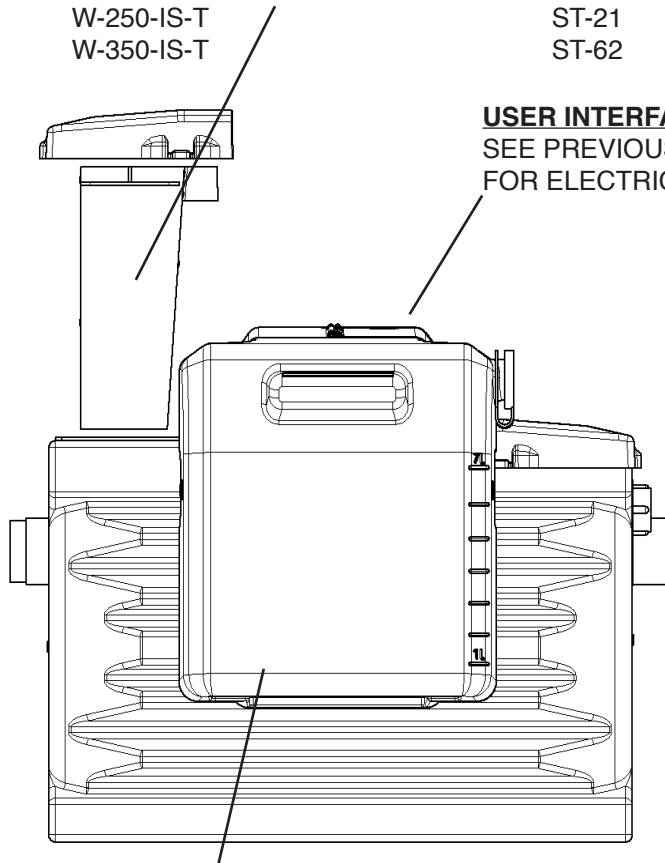


Big Dipper® Essential Replacement Parts

SOLIDS STRAINER BASKET

FOR MODEL#
W-250-IS-T
W-350-IS-T

USE PART#
ST-21
ST-62



USER INTERFACE (Under Cover)

SEE PREVIOUS PAGES REGARDING REPLACEMENT PARTS
FOR ELECTRICAL ASSEMBLY

NOT SHOWN:

MOTOR (1 per unit)

PART# M-58
M-58-230 in 230 VAC Units

HEATER (1 per unit)

PART# H-8
H-8-230 in 230 VAC Units

INTERNAL FLOW CONTROL (1 per unit)

PART# MFC-25 FOR W-250-IS-T
PART# MFC-35 FOR W-350-IS-T

TANK GASKET

PART# RGA-14-PS

WHEEL WIPER ASSEMBLY (1 per unit)

PART# WWA-6

WHEEL DRIVE SPROCKET (1 per unit)

PART# WDS-3

SKIMMING WHEEL ASSEMBLY (1 per unit)

PART# PDA-3

SAFETY SWITCH

PART# MSS-9

HEATER GASKET

PART# HTG-300

FLIP DOOR MAGNETS (2 per unit)

PART# FDM-2

GREASE/OILS COLLECTION CONTAINER

PART# GC-10

NOT SHOWN:

CARBON VENT FILTER

PART# CF-VENT-1



51K Series

Big Dipper Essential® Limited Warranty & Remedy

Thermaco Incorporated (“Thermaco”) warrants to the original user that (i) the tank, wrap, lid ends, grease collector, and internal strainer assembly of the product manufactured by Thermaco and delivered with this warranty (the “Product”) shall be free from material defects in workmanship and materials during the lifetime of the plumbing system in which such Product is initially installed, subject to the terms and conditions of this warranty and (ii) the electrical assembly delivered with this warranty shall be free from material defects in workmanship and materials for a period of twelve (12) months from the date of original invoice to the distributor (if sold by an authorized Thermaco distributor) or the date of invoice to the purchaser (if sold directly by Thermaco). Notwithstanding the foregoing, this warranty shall not cover, and Thermaco shall have no obligation to repair or replace, any of the following component parts of the Product: gaskets, wiper blades, flip door gaskets, magnets, and flow control.

Any and all warranty claims must be made in writing to Thermaco at 646 Greensboro Street, Asheboro, NC 27203, promptly after discovery of the warranted defect and within the applicable warranty period. Following and subject to Thermaco’s preliminary approval of a warranty claim, the warranted Product must be delivered, prepaid, to Thermaco, together with proof of purchase (which must be dated), the Product’s serial number, and a return authorization number issued by Thermaco. If Thermaco determines upon examination that the Product is defective and that the warranty conditions are satisfied, Thermaco’s sole obligation under this warranty, and the original user’s sole and exclusive remedy, is the repair or replacement, at Thermaco’s sole discretion, of the defective equipment, component, or parts. Any replacements will be furnished F.O.B. point of shipment. Thermaco reserves the right to ship the user replacement parts with installation instructions. If Thermaco determines that the part, component, or the Product is not defective or that any condition of this warranty is not satisfied, then Thermaco shall have no obligation to the original user to repair or replace any such part, component, or the Product, and any return of such part, component, or the Product shall be at the original user’s cost.

This warranty shall not cover any defect in an otherwise covered Product resulting directly or indirectly from (and the occurrence of any of the following shall void any otherwise applicable warranty claim): (i) failure to install, operate or maintain the product in accordance with Thermaco’s instructions and procedures, including, without limitation, use in excess of rated flow, improper electrical service, use to remove emulsified fats and oils or use that fails to comply with applicable laws, regulations or codes, use outside or outdoors, or failing to disconnect power to the Product during any inactivity lasting longer than two consecutive weeks; (ii) damage in transit, handling or installation; (iii) modifications, adjustments, repairs, or alterations made by persons other than Thermaco representatives or certified plumbers or electricians (with respect to the electronic components); (iv) any change in the original installation or change to the original use of the Product; or (v) other causes not arising out of defects in workmanship or materials. Thermaco shall not be responsible for damage to products resulting from vault flooding, sewer line back-up, pumping or lift station failure, ambient water flow or other sources of water damage. This warranty does not cover equipment or parts not manufactured by Thermaco. Original user’s costs relating to any service, adjustment, removal, repair, packing, or otherwise incurred with respect to the defect prior to submission for warranty are the responsibility of the original user. No distributor, sales person or other person is authorized to make any warranty statements on behalf of Thermaco regarding Thermaco products other than as set forth in this warranty. This statement of warranty supersedes and replaces any quote, brochure, or other statement or document with respect to warranty of the Product.

EXCEPT AS EXPRESSLY SET FORTH ABOVE, THERMACO MAKES NO REPRESENTATIONS, WARRANTIES OR GUARANTEES, EITHER EXPRESSED OR IMPLIED, INCLUDING, WITHOUT LIMITATION, AS TO MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WHETHER OR NOT THERMACO HAD KNOWLEDGE OF THE ORIGINAL USER’S PARTICULAR REQUIREMENTS OR NEEDS, OR WITH RESPECT TO ODOR GENERATION OR OTHER INCIDENTALS RELATING TO USE OF THE PRODUCT.

The sole and exclusive remedy with respect to this warranty any other claim relating to defects or any other condition or use of the Product, however caused, and whether such claim is based upon warranty, contract, tort, strict liability or any other theory, is LIMITED to the repair or replacement of the effected Product, component, or parts, in each case excluding labor or any other cost to remove or install the Product, at Thermaco’s sole option, refund of the original purchase price. IN NO EVENT SHALL THERMACO BE LIABLE, WHETHER IN CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE), STRICT LIABILITY, INDEMNITY OR ANY OTHER LEGAL THEORY, FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES, OR FOR ANY OTHER LOSS OR COST OF A SIMILAR TYPE. UNDER NO CIRCUMSTANCES WILL THE AGGREGATE LIABILITY OF THERMACO FOR ANY CAUSE OF ACTION RELATED TO THE PRODUCTS COVERED HEREBY EXCEED THE NET PURCHASE PRICE RECEIVED BY THERMACO FOR THE PRODUCTS. Any action or suit by the initial user against Thermaco relating to the Product must be brought within one (1) year of the date of the invoices referenced above in cases pertaining to the electrical assembly. This Warranty is made only for the benefit of the original user and is void upon any transfer of ownership.

©2022 Thermaco, Incorporated All rights reserved • Patented/Patents Pending • Specifications subject to change without notice