

INCINOLET

ELECTRIC TOILET SYSTEM

INSTALLATION / MAINTENANCE MANUAL

Models TR and WB - 240 volts (SN 41000 →)
Models CF, RV, and WB - 120 volts (SN 57200 →)



NSF Protocol P157
Electrical Incinerating Toilets - Health and Sanitation
(replaces 1983 edition of NSF Standard 41)

Model _____
Serial # _____
Voltage _____
Date installed _____
Please have this information handy when ordering parts. In can be found on ID plate on back of toilet.

WARNING: Do not operate INCINOLET until you have read thoroughly and understand completely all instructions and safety rules contained in this manual. Save this manual and review frequently for continuing safe operation, and instructing possible third-party users.

For questions or assistance call 1-800-527-5551

Thank you...

for purchasing INCINOLET electric toilet. We have manufactured your toilet with the finest materials and workmanship to give you many years of dependable service.

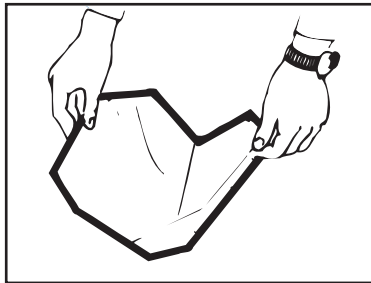
Manufacturer's Statement

INCINOLET toilets provide sanitation without pollution when used by persons familiar with its operation and responsible for its proper installation, use and maintenance. Not recommended for use by general public or in some rental properties.

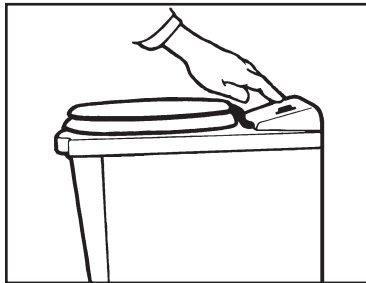
Warranty Information

A copy of the warranty will be furnished free of charge upon request.

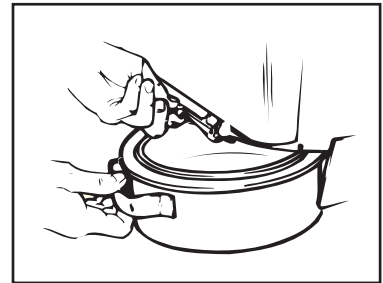
Tips for Success



Use a bowl liner for each and every use.



Push button to start after each use.



Empty ashpan OFTEN – when ash is 1/2 inch deep

Fig. 1

Read all instructions carefully.



This is the safety alert symbol. It is used to alert you to potential personal injury hazards.

To avoid shock hazard:

1. Always unplug INCINOLET before doing any electrical maintenance.
2. Do not operate toilet if cord is damaged or you suspect electrical malfunction.
3. Competent personnel should do all tests or repair work. While many tests and repairs can be done by the owner, we recommend an electrician for anything you are not comfortable doing.

During incineration there is flame and high heat in the burn chamber. It is safe to use INCINOLET during the cycle and safe to push the pedal while standing, to drop waste into what is already burning.

To avoid burn hazard:

1. **Never** depress foot pedal while seated on toilet.
2. Do not remove ashpan until toilet has cooled completely.
3. Young children must be supervised when they use INCINOLET.
4. Do not install toilet in an explosive atmosphere.
5. Never burn trash or garbage in INCINOLET as it may produce a high flame that could damage the toilet or injure a person.

INCINOLET is designed to incinerate human feces, urine, tampons, and toilet paper only. Using INCINOLET to burn items of household trash or food scraps will void your warranty and could cause damage to the INCINOLET and possibly cause property damage or even personal injury.

Save These Instructions

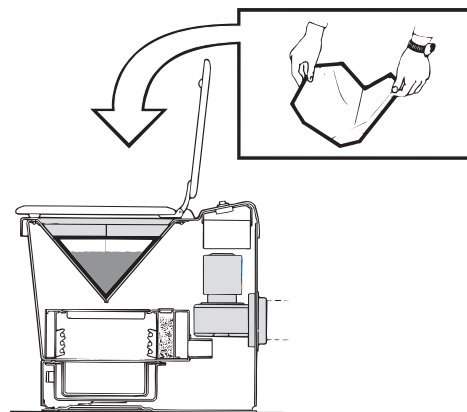
HOW TO USE INCINOLET

1 Place liner in bowl before each and every use.

(Using without a liner will cause urine to run out on the floor, damage to the unit, and odor.)

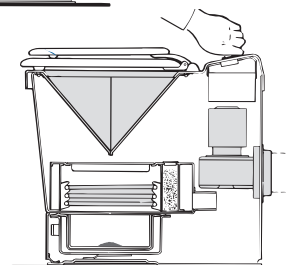
After use, face toilet, step on foot pedal to open bowl and allow waste to drop into incineration chamber.

Make certain that top edges of liner are below lid when lid closes.

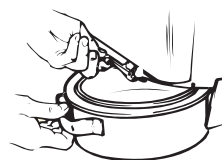


2 Push start button after each use. (Accumulated waste will cause odor.)

Unit may be used at any time, even while incinerating a prior deposit.



3 Empty ashpan frequently – usually when ash is no more than 1/2” deep. (Ash build-up shortens heater life.)



Note: Capacity of ashpan is about 1 gallon. Accumulating waste or allowing excessive ash build-up causes overload that can cause early heater failure, odor, and overflow of waste inside the toilet and onto floor.

Fig. 2

How INCINOLET Works

When you push the start button, heater and blower both come on. Heater alternates off and on for 1-1/4 hours. Blower stays on for an additional 10 to 45 minutes. **YOU CAN USE INCINOLET ANY TIME DURING THE INCINERATION CYCLE.** Push start button after each use.

YOU SHOULD INCINERATE WASTE AFTER EACH USE. ACCUMULATED WASTE, PARTICULARLY SOLIDS, RESULTS IN ODOR AND CAN REDUCE LIFE OF THE HEATER.

If INCINOLET is used primarily in the morning, with little or no use during the day, then reset the timer to 1-1/2 or 2 hours to insure complete incineration. (See page 8.)

Ash is germ-free and safe to handle when it has burned to a light color. If ash is dark or burn is incomplete, run an extra cycle to assure safe handling of ash. Ash is not suitable to use as fertilizer or compost. It should be disposed of in household trash in accordance with state and local codes.

Party Stress For times when you are having a party or house guests, when the INCINOLET may have to serve more than the stated capacity for a short time, follow these tips:

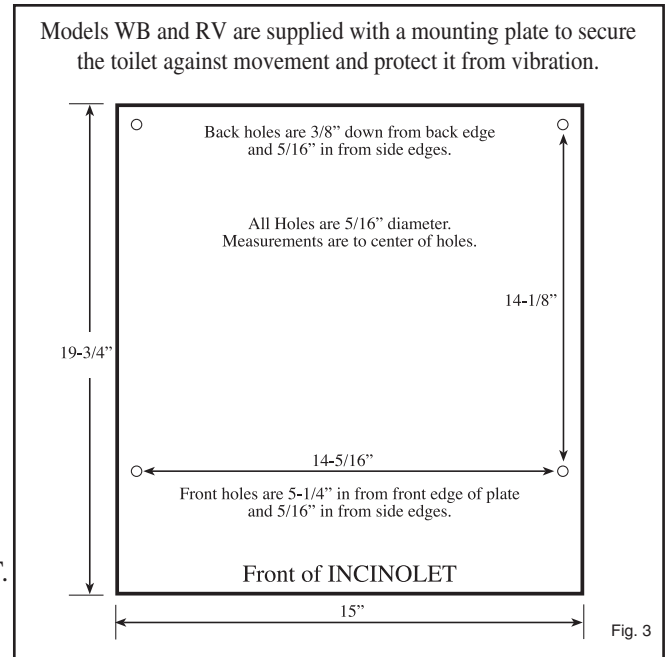
1. Empty the ashpan before guests arrive.
2. Be sure guests are instructed as to proper use and that a **bowl liner is required for each and every use.**
3. Push button after each use and check occasionally to be sure it's not over filled.
4. You may need to run an extra cycle or two to insure complete burn.

HOW TO INSTALL INCINOLET

1. Remove all packing materials.
2. Set unit on level floor in desired position:
Allow clearance at rear for wiring and vent-line connection. Allow at least 4" on left side and plenty of room on the right side to operate foot pedal.
3. Prepare electrical supply within 4 feet of toilet location.
(see instructions below)
4. Install mounting plate to floor (RV and WB only - Fig. 3).
5. Connect vent-line.
6. Plug INCINOLET into the proper receptacle on a 20-amp circuit. Dedicated circuit recommended.

⚠ Do not install in an explosive atmosphere.

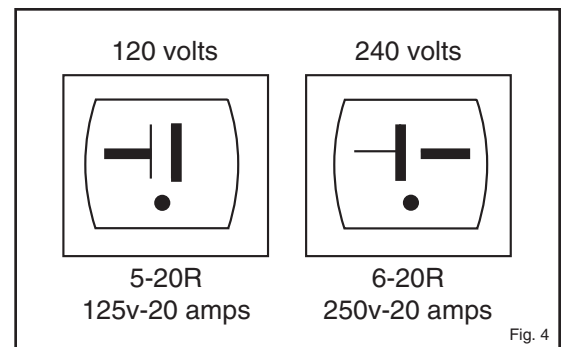
NOTES: Vinyl floors and some synthetic carpets may discolor. In such installations, you may want to put a sheet of aluminum under INCINOLET to dissipate heat. Keep bedding, curtains and other flammable materials away from contact with the INCINOLET.



Electrical Preparation

This appliance has a 20-amp plug and is meant to fit **only** into a 20-amp receptacle. (Fig. 4) If the outlet you intend to use for the INCINOLET is not the proper type, then change the receptacle. You must have a circuit suitable for 20 amps, headed by a 20-amp circuit breaker. Do not attempt to defeat this safety feature by modifying the plug in any way. Power cord is 4 feet long.

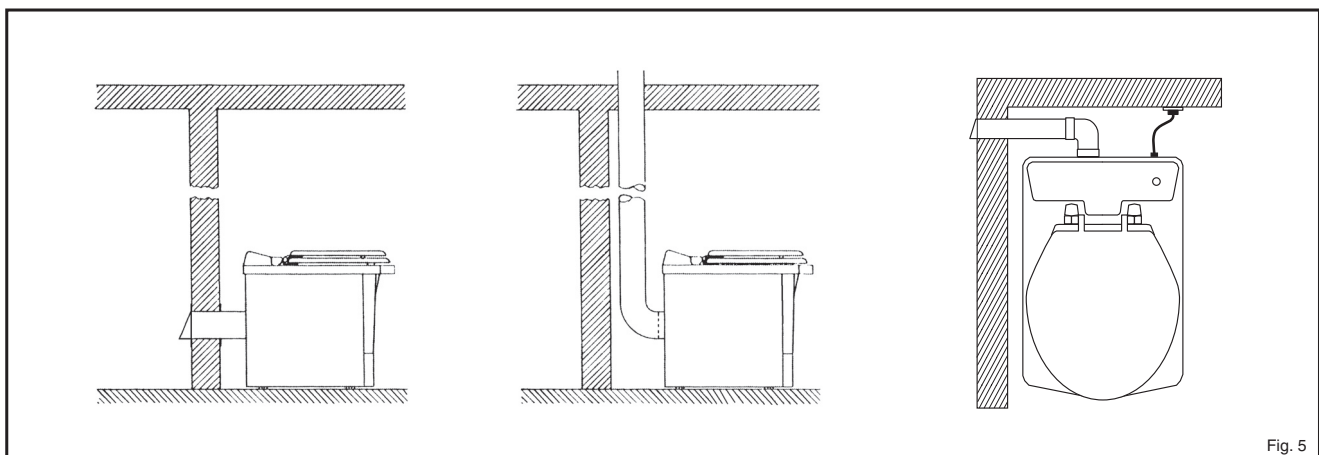
⚠ Extension cords should not be used with this appliance.



Preparing Vent-Line

Vent pipe can run horizontally or vertically. Venting materials can be placed within a wall and INCINOLET can be placed close to a wall at the back. Allow 6 to 8 inches on the right side (facing the toilet) to operate the foot pedal.

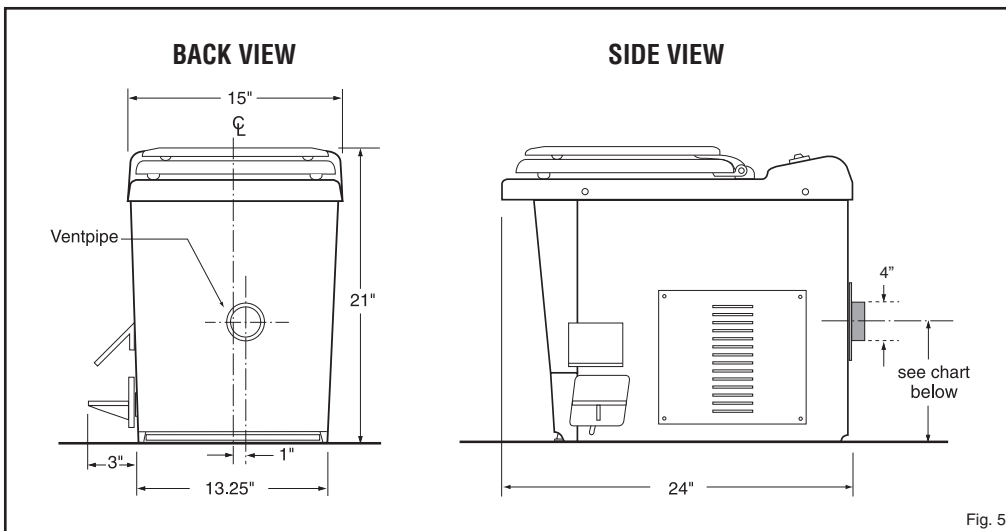
Vertical vent-line should terminate with a rain cap. For horizontal venting use a dryer flap or add a PVC elbow turned downward to prevent back-drafting.



Tips for Best Venting

1. Allow for plenty of make-up air into toilet room with door louvers or an air gap along bottom of room door.
2. **NEVER USE AN OVERHEAD EXHAUST FAN WHILE INCINOLET IS RUNNING.**
It might overpower the exhaust fan within the unit and cause smoke and odor to come into the room.
3. **DO NOT** cover the end of the vent-line with fine mesh window screen. Use 1/4 inch mesh (“hardware cloth”) if you must use something to keep “critters” out of the vent-line.
4. Increase diameter of vent pipe if 2 elbows or more than 10 feet of vent-line is required.

**Center of vent collar on the back of INCINOLET varies by model.
Use this chart to find the correct measurement for your toilet.**



For proper operation, vent-line must be as straight as possible with a minimum of elbows. Maximum length of pipe at the 4" diameter is 10 feet plus 2 elbows. Use larger diameter pipe for longer runs. Contact factory if you have questions about special installations.

Improper venting can cause odor within the room and overheating of the unit. This unit is equipped with an exhaust blower, which draws air from the room into the unit for cooling. The blower also draws smoke from the incinerator through the catalyst to remove odors. If the vent line is too small, too crooked or too long, the blower cannot push enough air through the vent-line to do its function. Overheating and odor will result.

For best performance, use the shortest possible run and a minimum number of elbows. Do not vent into an attic or crawl space. Assemble vent pipe pieces securely, gluing or taping all connections. Connect coupling and pipe to vent collar at the rear of the unit. To prevent animals entering vent pipe, you may use hardware cloth with 1/4" mesh. To prevent back drafting, use a 90 degree elbow turned down or a rain cap if vented vertically.

START-UP PROCEDURE - Once Incinolet is connected to vent line and plugged into a 20 amp receptacle on a 20 amp circuit of the appropriate voltage, it's a good idea to run a test cycle using a cup of water poured into a bowl liner.

UNDERSTANDING ELECTRICAL OPERATION

1. Pushing the Start Button closes the Start Switch which engages a timer. Timer begins a new cycle each time start switch is closed. Timer doesn't accumulate time, merely starts over again.
2. Timer is set to 75 minutes at factory. Timer activates temperature controller. Controller output is connected to the coil of a Relay, which controls the electric current to the heater.
3. Temperature Controller responds to the output from a Thermocouple, which measures Heater temperature. When the temperature of the lower coil of the heater reaches approximately 1000+ degrees F., controller shuts down the relay, which cuts off the heater. When heater temperature falls to about 960 degrees F., controller again activates relay and heater comes on. Heater is off, then on, about twice a minute.
4. Timer also controls exhaust blower. Blower and heater come on and both stay on for 75 minutes together. After heater cuts off, blower continues on until incinerator area has cooled to about 130 degrees F.
5. Blower Thermostat (ITS) closes when it senses a temperature of 130 degrees F., and stays closed after the heating cycle is over, until incinerator temperature falls below 130 degrees F., about 10 to 45 minutes later.

Power Consumption

One complete cycle uses about 1 1/2 to 2 kilowatt hours of electricity. Because you can use INCINOLET any time during the cycle, your "per use" cost is lower.

During a Power Failure

If waste is burning in the INCINOLET when the electric service is interrupted, you may get smoke and odor in the room. Open a window to ventilate as best you can. When power comes back on, the fan should start automatically, if needed, and run until unit is cool enough. Heater does not come on until you push the button. You can push foot pedal to check contents of ashpan then start a cycle if needed.

To Interrupt an Incineration Cycle

In normal use, it is never necessary to stop a cycle to add waste. (See "How to Use", page 3.) However, on rare occasions (doing repairs, etc.), you may want to stop a cycle in progress. Turn the circuit breaker off momentarily (or unplug INCINOLET) to cancel the cycle. Then turn the circuit breaker back on (or plug in INCINOLET) so that the toilet is ready for use. If unit is hot enough to need it, the blower should come back on automatically to cool it. **NOTE:** If blower does not come on, smoke and odor may come directly into room. In this case, you may want to start the cycle again for a few minutes to finish burning off the waste remaining in the ashpan.

Thermostats

Your INCINOLET is equipped with three thermostats.

1. SAFETY THERMOSTATS (STS) shuts heater off if air temperature inside toilet reaches about 140°F. It is located on the front surface of the control box at the upper right rear of the unit. To replace, disconnect voltage, remove top of unit, disconnect lead wires to old thermostat, and replace. (Fig. 9)
2. BLOWER THERMOSTAT (ITS) turns fan off when outside skin of chamber cools to 130°F and will turn fan on again if temperature increases. It is accessible through access panel opening, just to the left of the heater terminals. To replace, follow same procedure as for STS above. (Fig. 12)
3. LIMIT THERMOSTAT (TS) turns heater off if skin of chamber reaches a temperature of 300°F. It is located below the ITS blower thermostat and heater terminals, outside ashpan compartment. To replace, follow same instructions as for other thermostats. (Fig. 12)

CARE AND CLEANING

Keep your INCINOLET clean to prevent odors.

- Empty ashpan when ash is about 1/2 inch deep. **EXCESSIVE ASH BUILD-UP CAUSES ODOR, SHORTENS HEATER LIFE, AND DECREASES EFFICIENCY.** If ash is caked and hard to remove, just soak insert pan for a few minutes in warm water.
- Wipe up urine spills as they happen.
- Every 3 to 6 months – clean blower wheel and inside of INCINOLET.
 1. Unplug toilet and remove top. (See instructions below.)
 2. Clean inside with a detergent or a spray cleaner such as Formula 409. (Do not use pine oil cleaners.)
 3. Remove blower wheel and clean. (See page 10.)
 4. **DO NOT STEAM CLEAN.**
 5. Stainless steel polish can be used on outside surfaces to keep INCINOLET's finish lustrous.

TIP: If blower becomes noisy or vibrates, clean or replace blower wheel. (See page 10.)

Bowl Liners

BE SURE that the top edges of the liner are below the lid when it closes. Otherwise, paper will burn outside the chamber and cause momentary smoke and odor. CAUTION: Failure to use bowl liner for each and every use will always cause odor and urine on the floor.

Bowl liners are made of a special paper coated with polyethylene film. This liner is necessary to catch and contain the waste, then convey it into the incineration chamber. **USE A BOWL LINER FOR EACH AND EVERY USE.** Liner protects the bowl and prevents urine from draining to the floor.

How to Remove Ashpan

⚠ Remove ashpan only when pan is cool and toilet is not operating.

	<p>TO REMOVE ASHPAN Remove ashpan panel. Raise camloc handle and unhook it from ashpan handle. Pull ashpan out. Empty ash in garbage.</p>		<p>TO REPLACE ASHPAN Push ashpan firmly into place. Lift up on ashpan handle and engage hook of camloc under ashpan handle. Push down on camloc handle. Replace ashpan panel.</p>
<p>CAUTION: ASHPAN MUST BE SECURELY IN PLACE FOR PROPER OPERATION.</p>		<p>Fig. 7</p>	

Removing the Top (Seat, Lid, Bowl Halves)

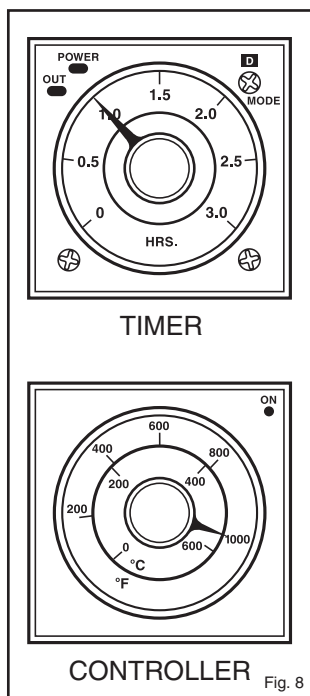
Top is held in place with four screws, two per side and a rubber boot which protects the start button. Remove them, and then lift top up.

To replace top: With incinerator lid closed, hold bowl halves together and lower top into position. Replace four screws and rubber boot over start button. **Tip:** If you have trouble holding bowl halves in closed position while placing it back on toilet, just use a small piece of masking tape to hold them together, then slice through it from the top later.

Access Panel

Four screws hold on Access Panel, located on the right side of toilet (same side as foot pedal). Remove panel to expose blower thermostat, limit thermostat, thermocouple, and heater terminals. (Fig. 12)

TROUBLESHOOTING



TIMER & TEMPERATURE CONTROLLER THE KEY TO TROUBLESHOOTING

Timer limits heating cycle, Controller limits heater temperature. Timer and temperature controller are within control box in upper right corner of housing, accessible with top removed. Timer has two lights: **green** and **red**. Temperature controller has one **red** light. A **steady green light** on timer indicates unit has power and is ready for operation. When start button is pushed, **green light begins blinking** and the **red** light comes on and stays on for a timed interval, during which time temperature controller is activated and its **red** light is on. Controller **red** light means that the relay is activated and supplying power to heater. Controller **red** light stays on until timer cuts off after the timed interval, or heater reaches maximum allowed temperature and thermocouple signals controller to open relay. In actual operation, when timer reaches end of timed

interval, its **red** light goes off, and **blinking green light turns steady** again. During the timed interval, controller **red** light will be on constantly until heater reaches about 1200 degrees F, at which point controller red light goes off and the relay opens. Controller **red** light comes on again after 30 seconds or so, stays on for about 40 seconds, then goes off again, and so on until the end of timed interval.

TIMER ADJUSTMENT: (See Fig. 8.)
Timer dial reads 0 to 3 hrs. Timer pointer is set to 1-1/4 hrs. If INCINOLET is used primarily for solids deposits in rapid succession and incineration is incomplete, move pointer to 2.0 hrs. If used throughout the day, both for urine and solids, timer would be best set at 1-1/4 to 1-1/2 hr. To adjust timer, remove top of toilet and turn dial so timer reads new setting. (See p. 7.) Replace top. **DON'T MAKE ANY ADJUSTMENT REQUIRING SCREWDRIVER.**

⚠ Unplug toilet before doing repairs. Shock hazard present when toilet is plugged in for testing.

BLOWER COMES ON BUT HEATER DOESN'T HEAT

Remove top, examine timer and controller as above. If both timer and controller lights are on, then heater has failed. To verify, remove access panel, measure voltage directly across heater terminals, not from terminal to ground. If voltage appears, **REPLACE HEATER**. If no voltage appears, check circuit further.

TIMER LIGHTS WORK BUT CONTROLLER RED LIGHT IS NOT ON

Test thermocouple. Unplug toilet, remove side access panel. Remove wire nuts from thermocouple leads (#6 & #7). Twist the gray and purple wires together, then plug unit in and push start button. If controller red light comes on, **REPLACE THERMOCOUPLE**.

CIRCUIT BREAKER OPENS WHEN START BUTTON IS PUSHED

This indicates heater may be shorted to ground. Unplug toilet, remove access panel. Remove orange lead wires to heater terminals. Plug toilet in, push start button. If blower comes on and circuit breaker does not open, heater is shorted. **REPLACE HEATER**.

Unplug toilet, examine all wiring which might be grounded by touching housing. **REPLACE OR TAPE ANY BARE WIRES**.

NOTHING COMES ON, BUT TIMER GREEN LIGHT IS ON

Inspect timer lights as you push start button. Red lights should come on, green light should begin blinking. If not, **CHECK START SWITCH OR REPLACE TIMER**.

BLOWER, HEATER WON'T STAY ON

If timer, blower and heater come on when start button is pushed but turn off as soon as start button is released, **REPLACE TIMER**.

BLOWER STOPS AT END OF HEATING CYCLE

Blower should be on from 10 to 45 minutes after heater cuts off. Unplug toilet, remove access panel, inspect, tighten any loose wires. **REPLACE BLOWER THERMOSTAT**.

BLOWER DOES NOT OPERATE

Blower must come on immediately when start button is pushed and should not stop while heater is on. If not, check blower wheel to be sure it's not binding. Listen to blower motor for a humming sound (like motor is trying to start). This would indicate bad motor bearings. **REPLACE BLOWER MOTOR**

BLOWER OFF & ON AT CYCLE END

It is normal for blower to stop for 4 or 5 minutes, then start again for a few minutes, a couple of times at end of cycle. If, however, blower stops and starts rapidly, blower (ITS) thermostat is faulty. **REPLACE ITS THERMOSTAT**

BOWL HANGS OPEN: PEDAL WON'T RETURN

1. Closing mechanism may be out of adjustment.
2. Foot pedal goes too far down and locks up. Place block under foot pedal to prevent excess travel.

EXCESSIVE NOISE, VIBRATION CLEAN OR REPLACE BLOWER WHEEL.

INCOMPLETE INCINERATION

Can be any one of several causes:
1. Start button not pushed after each use.
2. Ashpan too full. Empty more often. (Empty when ash is 1/2 inch deep.)
3. Too many people using toilet.
4. Burn cycle too short. Add more time to the timer.

ODOR WITHIN ROOM

Can be any one of several causes:
1. **Failure to use bowl liner each and every time or careless use of liner.**
2. Solids not completely incinerated. May need more time on timer or additional incineration cycles.
3. Ashpan too full. Empty more often. (Empty when ash is 1/2 inch deep.)
4. Back-drafting. Use back-draft preventer on horizontal vent-line or run the vent vertically with a rain cap at the top.

ODOR OUTSIDE

Causes same as above, plus:
1. Catalyst port perforations are clogged. Clean chamber wall behind heater coil with small brush.
2. Catalyst has "set". Stir with small rod to loosen. (See catalyst p. 11.)
3. Incinerator lid hanging open, allowing odor to escape.

RESIDUE BLACK, LIKE CHARCOAL

Ash should be gray. Black lumps means insufficient air is being drawn into chamber. There may also be soot around ashpan lip at front and on inside of ashpan panel. Remove ashpan and use small brush to clean perforations in inner incinerator wall back of heating coils.

*For help with troubleshooting
or to order parts, call*

1-800-527-5551-USA

*From other countries,
call agent shown on front cover.*

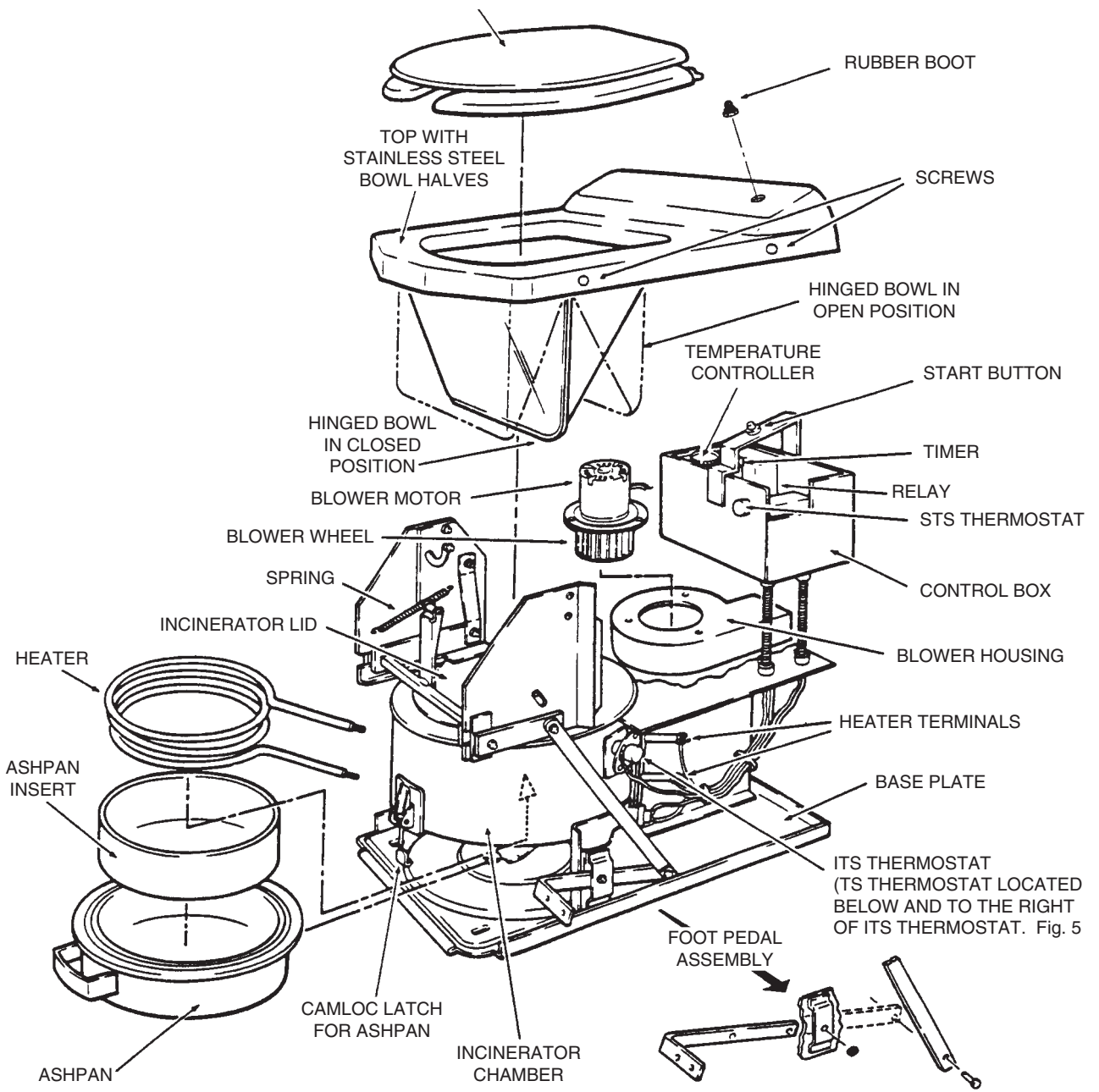
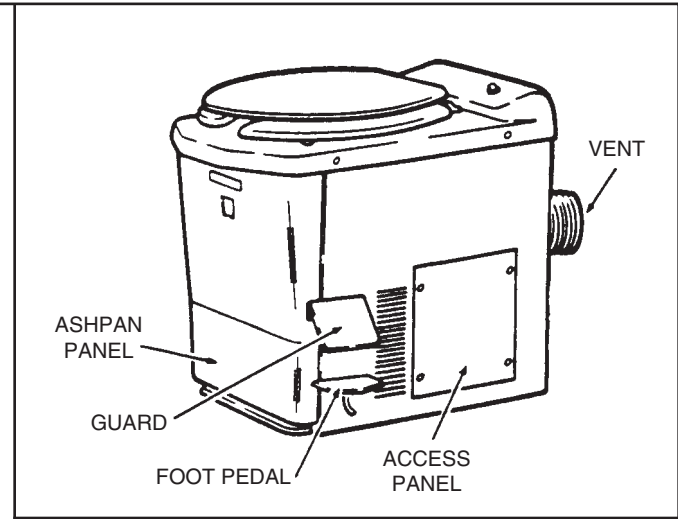
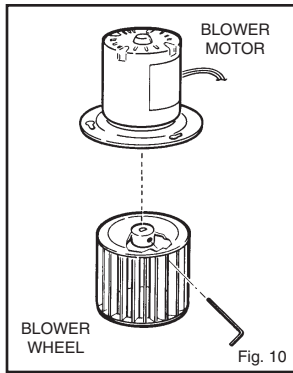


Fig. 9

MAINTENANCE AND REPAIRS

Clean Blower Wheel



Blower draws fresh air into toilet to provide oxygen for the burn, carries smoke and odor into the catalyst, then exhausts moist air outside. Clean blower wheel and housing every 3 - 6 months, or any time excessive noise and vibration occur.

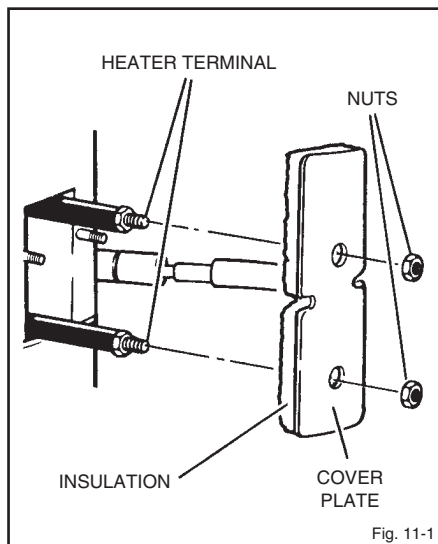
1. ⚠ Unplug INCINOLET and remove the top.
2. Disconnect two wires on side of control box to free motor.
3. Loosen (no need to remove) 3 screws holding blower motor plate. (Fig. 10). Twist and lift motor over screw slots to remove it.
4. Use 1/8" Allen wrench to remove set screw in wheel hub.
5. Clean grease and dirt from wheel with hot soapy water or a degreasing cleaner.
6. Replace wheel if corroded or if vibration indicates it is out of balance.
7. Clean inside of blower housing occasionally.

Replace Heater

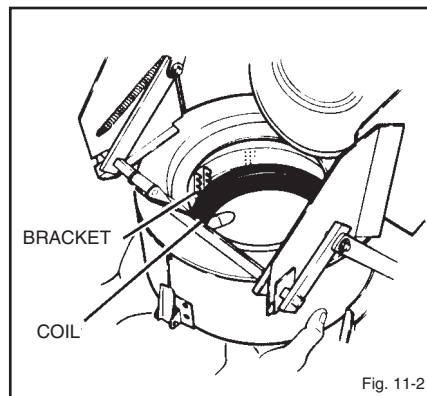
Note: For maximum heater life incinerate after each use, and keep ash level down to no more than 1/2 inch.

To Remove Old Heater:

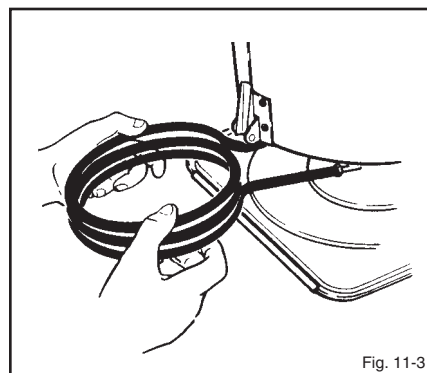
- ⚠ Unplug INCINOLET. Remove ashpan. Remove access panel. Remove top. Hold incinerator open either by wedging down the foot pedal or blocking flushing mechanism in open position.
- Remove thermocouple but do not disconnect. (Fig. 12)
- Disconnect wiring to heater terminals. Remove cover plate and insulation around heater terminals. (Fig. 11-1)



- Push up on heater coils to clear heater brackets. (Fig. 11-2)



- Remove heater through ashpan opening. (Fig. 11-3)
Note: Brackets may be wedged tightly in slots in wall. It is okay to remove brackets, but not absolutely necessary.



To Install New Heater:

- Reverse above procedure. Locate heater in brackets, making sure brackets are seated in slots in the incinerator wall. (Fig. 11-2)
IMPORTANT: Locate heater at lowest position in heater bracket. Coils must not touch each other.
- Replace insulation and cover over heater terminals. (Fig. 11-1)
- New heater coils are furnished with a hex nut, already firmly tightened against the mica insulation, washers, and a lock nut or 2 nuts. Attach wire terminals (on the orange wires) to heater studs in this order: one washer against the stationary hex nut, wire terminal, one washer, 2 nuts. Use a 3/8" nut driver or end wrench to tighten the 2 nuts against the washer. Hold the orange wire in one hand while tightening the 2 nuts, with the other hand. Continue tightening until the orange wire terminal is quite secure and cannot be turned.
- Replace thermocouple. Push knurled cylinder to compress spring. Turn to engage stud, then release. Spring must be compressed to insure that tip of thermocouple contacts outer surface of heater. (See p. 11.)
- Replace access panel, ashpan, top. Close circuit breaker.
- Plug INCINOLET in. Start cycle to test heater and total operation.

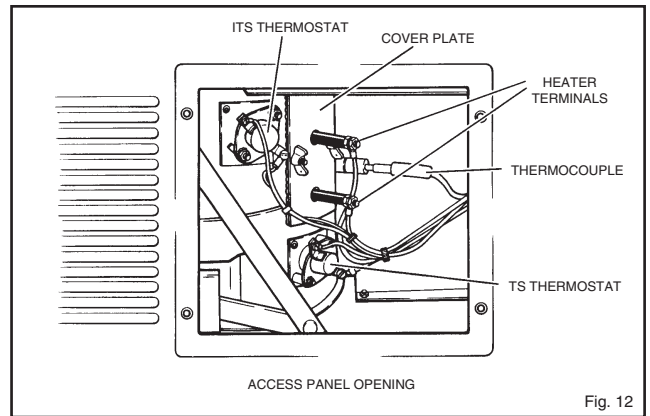
Thermocouple

Thermocouple, in combination with the temperature controller, limits temperature of the heater and prevents overheating.

Thermocouple, Type K, develops a small voltage proportional to the temperature of the heater. Thermocouple is located to the right of and midway between heater terminals. (Fig. 12) Tip of thermocouple makes contact with the lower heater coil.

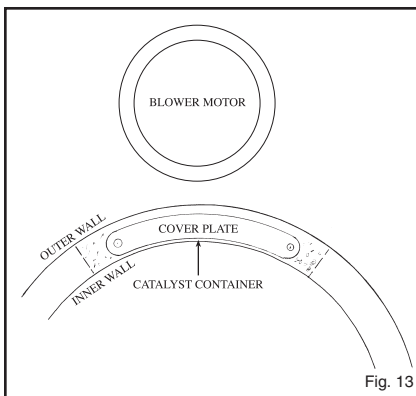
Thermocouple leads are color-coded. Wire with red core must be connected to purple lead #7 within the “F” wire nut. Wire with yellow core must be connected to gray lead #6 in “E” wire nut.

IMPORTANT: EXACT PROCEDURE MUST BE FOLLOWED TO PREVENT OVERHEATING AND HEATER FAILURE:



1. To replace thermocouple, ⚠ unplug INCINOLET and remove side access panel. Disconnect wire leads with “E” and “F” wire nuts. Then push in knurled rod, turn to disengage, pull out thermocouple.
2. To install new thermocouple, reverse procedure. Make sure that wire with red core is connected to purple #7 and yellow core wire is connected to gray #6.
3. After inserting thermocouple, be sure that the tip is making contact with lower heater coil along outer surface of coil.

Catalyst



INCINOLET uses a heat-activated, platinum type catalyst pellets to suppress smoke and odor. Pellets are contained in a chamber within the incinerator walls near the blower, and do not normally need to be replaced. Inner and outer walls of the chamber are perforated to allow the blower to draw odor through catalyst pellets. A crescent shaped cover is held on with two small nuts.

In time, pellets may become too closely packed to allow proper flow of odor through the catalyst. Dust and ash may clog the chamber perforations, forcing smoke and odor out through the front of the ashpan, through the blower, and on to the outside.

If exterior odor is bad and inside of toilet is clean, clean the catalyst. To do this, open catalyst container by removing two nuts and cover plate. Use a small, hand-held vacuum to pull out pellets. **SAVE PELLETS!** Gently rolling pellets in a flat pan facilitates removal of dust. Brush chamber walls to clean perforations. Put cleaned pellets back and attach cover. Catalytic action should now be fully effective.

Replace Relay

Relay acts as a switch that controls electric current to the heater within the time constraints of the Timer and the temperature constraints of the Controller. Relay is located in the control box beside the timer and controller.

1. ⚠ Unplug INCINOLET and take the top off.
2. Remove six lead wires to relay terminals. Carefully mark so you can reattach in the proper positions.
3. Hold back spring clips that hold relay in place.
4. Pry relay out. Replace and rewire.

Safety Features

1. Timer limits heating cycle.
2. Temperature Controller limits heater temperature.
3. Safety Thermostat (STS) prevents overheating if blower were to fail.
4. Limit Thermostat (TS) limits temperature if controller were to fail.

PARTS LIST

Please furnish serial number with your parts order.

PART	240 VOLT UNITS (S/N 41000 and UP)	120 VOLT UNITS (S/N 57200 and UP)
ASHPAN, Composite, SS	PAN 023	PAN 023
ASHPAN INSERT, SS	PAN 027	PAN 027
BLOWER HOUSING, SS	HOU 004	HOU 004
BLOWER MOTOR	MOT 010	MOT 006
BLOWER WHEEL	WHE 002	WHE 002
BRACKET SET, for heater	BRA 009	BRA 009
CATALYST, 1/4# BAG	CAT 003	CAT 003
CONTROLLER, Temp., Omron	CON 018	CON 017
HEATER - for Models CF, RV, WB (120v)	— — —	HEA 040
Models TR, WB (240v)	HEA 007	— — —
RELAY, Omron	REL 008	REL 007
SEAT & LID	SEA 001	SEA 001
SPRING, 1/4" diameter x 4" long	SPR 003	SPR 003
THERMOSTAT, TS – L-300	THE 012	THE 012
THERMOSTAT, ITS – F-130	THE 014	THE 014
THERMOSTAT, STS – L-140	THE 013	THE 013
THERMOCOUPLE	THE 009	THE 009
TIMER, Omron	TIM 016	TIM 016

208v units use 240v parts except: 208v heater HEA009 and 120v Blower Motor MOT006.

Wiring Instructions

This unit is furnished with an electric cord and plug. It requires a circuit protected with a 20 amp circuit breaker and no other appliance on it. **DO NOT CONNECT TO POWER BEFORE VENTLINE HAS BEEN INSTALLED.**

NOTE: UNIT IS GROUNDED INTERNALLY THROUGH THE FURNISHED CORD AND PLUG.
MAKE CERTAIN THAT YOUR CIRCUIT HAS ADEQUATE GROUNDING.

Wiring Diagram



Unplug before doing any electrical repairs.

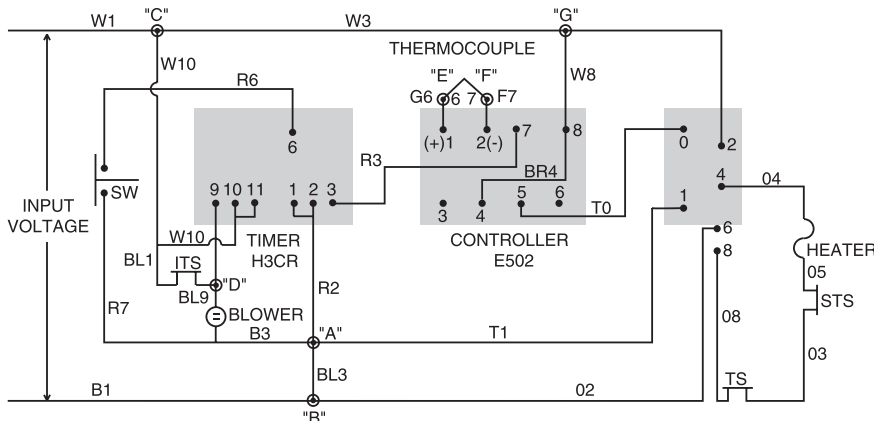
WIRE COLORS: Black=B Red=R Blue=BL Orange=O Gray=G Purple=P Tan=T White=W Brown=BR
Thermocouple Lead 6 is (+) Thermocouple Lead 7 is (-)

A, B, C, D, E, F and G are WIRE NUTS:

- A connects BL3, R7, B3, R2, T1
- B connects B1, BL3, 02
- C connects W1, W3, W10
- D connects BL9, BL9
- E connects G6, G
- F connects P7, 7
- G connects W3, W4, W,8

CONTROL ELEMENTS:

- ITS – Inverse thermostat to control blower – F-130
- STS – Safety thermostat in case of blower failure – L-140
- TS – Limit thermostat to prevent overheating – L-300
- SW – Start Switch



CALL TOLL FREE - USA

1-800-527-5551

in other countries, call the agent shown on front cover of manual.

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