

INTRODUCTION TO HITZER STOVES INSTALLATION AND OPERATION

Welcome to our proud team of HITZER heater owners. Your HITZER heater has the finest in Swiss craftsmanship and quality material to assure you that safety is the number one priority at HITZER.

We must now depend on you, our valued customer, to continue this safety in installation and operations, at the same time obtaining the maximum heat for comfortable living. Therefore, please read the entire manual before you install and use your new Hitzer heater.

SAFETY NOTICE: IF THIS HITZER HEATER IS NOT PROPERLY INSTALLED CARBON MONOXIDE OR A HOUSE FIRE MAY RESULT. FOR YOUR SAFETY AND TO REDUCE THE RISK OF CARBON MONOXIDE POISING OR FIRE FOLLOW THE INSTALLATION INSTRUCTIONS CAREFULLY. FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN PROPERTY DAMAGE, BODILY INJURY OR EVEN DEATH. ALWAYS USE A CARBON MONOXIDE DETECTOR AND A SMOKE DETECTOR WHEN USING THIS APPLIANCE. CONTACT YOUR LOCAL BUILDING INSPECTOR OR FIRE OFFICIALS ABOUT THE NEED FOR A PERMIT, RESTRICTIONS, OR INSTALLATION INSPECTION REQUIRED IN YOUR AREA. SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE.

CAUTION: THIS UNIT IS HOT WHEN IN OPERATION. DO NOT TOUCH. KEEP CHILDREN, CLOTHING, AND ANY COMBUSTIBLES A SAFE DISTANCE AWAY. CONTACT MAY CAUSE SKIN BURNING. SEE NAMEPLATE AND INSTRUCTION SHEET FOR SAFETY. CONTACT YOUR LOCAL BUILDING INSPECTOR, OR FIRE MARSHAL FOR SAFETY REGULATIONS IN YOUR AREA. FOLLOW THE MANUAL VERY CLOSELY.

“OUR STOVES MAKE WARM FRIENDS”

Keep warm and enjoy comfortable living with your Hitzer heater.

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INSTALLATION AND OPERATION INSTRUCTIONS 503 EZ FLO INSERT

This unit must be installed in a fireplace with either a listed type HT (2100°F) chimney per UL 103 or ULC S629 or a code approved masonry chimney with flue liner. The chimney size should not be less than or more than 3 times greater than the cross sectional area of the flue. Fireplace must accommodate this insert. No bricks or mortar may be removed to make the insert fit. All openings between the masonry of the fireplace and the facing masonry must be permanently sealed with mortar.

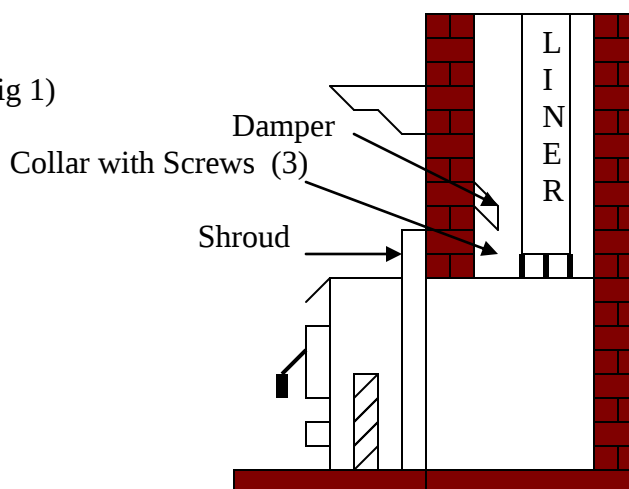
NOTE: For installations in Canada this insert must be installed with a continuous chimney liner with a diameter of 6" extending from the fireplace insert to the top of the chimney. The liner must conform to the Class 3 requirements of chimney liner standards CAN/ULC-S635 or CAN/ULC- S640.

CAUTION: DO NOT CONNECT THIS UNIT TO A CHIMNEY SERVING ANOTHER APPLIANCE. Inspection and cleaning are a prerequisite before installing your insert. Your fireplace and chimney system must be free of all soot and creosote. Inspect for deterioration of mortar joints and cracked liners for the safety of your unit and your home. If chimney is damaged or if local regulations or insurance companies require chimney lining for safety, install liner or reline the chimney following all of the liner manufacturer's instructions.

Installation in a masonry fireplace (see Fig 1)

Remove your damper from your fireplace or block open permanently to prevent it from accidentally closing and causing smoke in your room. A 6 inch chimney connector must be connected from your insert up through the damper area to the first flue liner. This connector should be stainless steel chimney liner material. Insert this liner in chimney now and support up in chimney until your insert is in place. Now position your insert on the hearth (**Note: First you**

will want to place a thin sheet of metal or cardboard on your hearth for protection from chipping or scratching your hearth.) With your insert positioned on the hearth, you are now ready to fasten the shroud on the sides of your insert. Fig 1 with 2 screws on each side. Determine the depth of the insert in the fireplace and adjust the shroud sides accordingly to line the flues up as close as possible. The sides are adjustable and should be tightened to the insert at this time. The shroud should overlap the face of the fireplace a minimum of 2 inches. This is necessary to hold the insulation in place and insure a good airtight seal around fireplace. Contact your dealer if a custom sized shroud is required. Pull chimney connector down into flue collar of the insert and fasten to insert with screws. Fasten the shroud top panel to the two shroud side panels with 2 bolts at each end. The optional brass trim for around the shroud, if ordered, should be fastened, now by cutting and fitting the sides, then the top and corner, drill holes and fasten with



screws provided. Place the insulation that is provided behind the shroud on sides and top to assure a good seal on the face of your fireplace. Now push your insert the remainder of the distance into your fireplace until shroud panel seals top and sides. If your fireplace has deep mortar joints or if your fireplace is rough stone make sure all joints and cavities are sealed. More insulation may have to be added. This is regular unfaced fiberglass building insulation. Slightly lift your unit and remove the metal or cardboard that is protecting your hearth

Installation in a factory built fireplace (see fig 1)

Install only in a factory built fireplace that is listed per UL 127 (US) or ULC S610 (CANADA) and is approved for insert installations. Alterations to the fireplace in any manner are not permitted with two exceptions. The first is the chimney damper may be removed to install the liner. The second is any external trim pieces not effecting the operation of the fireplace may be removed provided they can be stored on or within the fireplace for reassembly if the insert is removed. Attach the metal plate provided with these instructions to the rear of your fireplace. This states that the fireplace must be returned to its original condition for safe use if the insert is removed. Installation must include a full length 6 inch listed chimney liner meeting type HT requirements (2100°F) per UL 1777 (US) or ULC S635 or ULC S640 (CANADA). Liner must be securely attached to the chimney top and also the flue collar of the insert. Remove your damper from your fireplace or block open permanently to prevent it from accidentally closing and causing smoke in your room. Run liner down chimney and support at top of fireplace. Now position your insert on the hearth. First you may want to place a thin sheet of metal or cardboard on your hearth for protection from chipping or scratching your hearth. With your insert positioned on the hearth, you are now ready to fasten the shroud on the sides of your insert with 2 screws on each side. Determine the depth of the insert in the fireplace and adjust the shroud sides accordingly to line the flues up as close as possible. The sides are adjustable and should be tightened to the insert at this time. The shroud should overlap the face of the fireplace a minimum of 2". This is necessary to hold the insulation in place and insure a good airtight seal around fireplace. This seal is necessary to prevent room air from entering the chimney area. This may also be accomplished by sealing around the flue liner in the damper area. This must be done with ceramic wool insulation or equivalents that will not burn or melt.

CAUTION: WHEN POSITIONING SHROUD IT MUST NEVER ALTER OR RESTRICT AIR FLOW WITHIN OR AROUND FIREPLACE BY BLOCKING ANY LOUVERS OR COOLING AIR INLET OR OUTLET PORTS. CIRCULATING AIR CHAMBERS AROUND FIREPLACE ALSO SHALL NOT BE BLOCKED.

Different sized custom shrouds are available to facilitate this. Contact your dealer or Hitzer Inc to order. Pull chimney liner down into flue collar of the insert and fasten to insert with screws. Fasten the shroud top panel to the two shroud side panels with 2 bolts at each end. The optional brass trim for around the shroud, if ordered, should be fastened, now by cutting and fitting the sides, then the top and corners, drill holes and fasten with screws provided. Place the insulation that is provided behind the shroud on

sides and top to assure a good seal on the face of your fireplace. Now push your insert the remainder of the distance into your fireplace until shroud panel seals top and sides. If your fireplace has deep mortar joints or if your fireplace is rough stone make sure all joints and cavities are sealed. More insulation may have to be added. This is regular unfaced fiberglass building insulation. If the floor of the fireplace is raised above the hearth support is needed under the front of the insert. Contact your dealer or Hitzer Inc for these support structures. Please have the height of the rise and also the distance the insert protrudes from the front of the fireplace when you call. Slightly lift your unit and remove the metal or cardboard that is protecting your hearth.

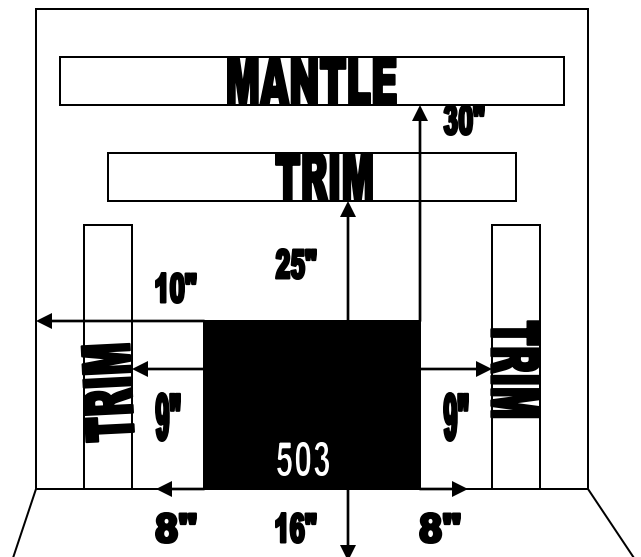
DO NOT CONNECT TO ANY AIR DISTRIBUTION DUCT OR SYSTEM

CLEARANCE:

Proper clearance from combustibles is a must to prevent fires. See figure for proper clearances that must be maintained. This is a must to prevent fires and damage to your home. Listed solid fuel burning fireplace inserts require noncombustible floor protection 16 inches beyond the front and 8 inches beyond the side of the fuel loading and ash removal openings.

Minimum clearances to combustible materials:

Unit to sidewall:	A- 10"
Unit to right side facing:	B- 9"
Unit to left side facing:	B- 9"
Unit to top facing:	C- 25"
Unit to mantle:	D- 30"
Floor protection in front of door	E- 16"
Floor protection each side of door	F- 8"



OPERATION:

CAUTION: USE ONLY THE TYPE OF FUEL SPECIFIED HERE AND ON THE HEATER

Type of fuel for use in these units is either anthracite or bituminous coal. Nut size or pea size are the recommended size of anthracite to use in this unit. Caution should be used when burning pea coal as shaking the grates too far can cause the small coal to be dumped into the ash pan thus wasting your coal. Kindling and small pieces of wood are required to use for igniting your coal when starting your fire.

CAUTION: DO NOT USE CHEMICALS OR FLUIDS TO START FIRE. NEVER USE GASOLINE OR KEROSENE OR ANY OTHER FLAMMABLE FLUID WHEN STARTING OR REFRESHING YOUR FIRE. DO NOT BURN GARBAGE OR FLAMMABLE FLUIDS.

NOTE: When your first fire your heater, the exterior paint will go through a curing process. This may emit some smoke or odor. The first few fires should be small and slow, this allows the paint to cure and the steel to temper. Adequate room ventilation should be used in case of smoking.

NOTE: Keep ash door, glass fuel door, and hopper lid closed and sealed during operation. Keeping any door open during operation may cause your appliance to over heat and possibly result in damage to your appliance or a house fire. Operating this appliance with doors open can result in carbon monoxide entering the house. Adequate room ventilation is also necessary for the chimney to operate correctly. Room air starvation can be caused by well-sealed vapor barrier and tight windows, exhaust fans, or other chimney ventilated appliances. Room air starvation can cause your appliance to not draw steadily, smoke rollout to occur, fuel to burn poorly, or back-drafts to occur whether or not there is combustion present. It can also result in carbon monoxide not venting properly or entering the house. Outside combustion air may be required. It is a very good idea to install a carbon monoxide detector no matter what type of fuel you burn and what type of appliance you burn it in. Carbon monoxide is produced when burning gas, oil, wood, coal, and anything else that burns and any venting problems can cause it to back up into the house. Carbon monoxide is extremely dangerous and can result in serious injury or even death

Starting your fire with anthracite coal:

First open the draft slide in the ash door to full open position. This is your primary air control. Also slide open the sliding flue damper by pulling handle directly above glass door all the way out.

CAUTION: BUILD FIRE ONLY ON INTEGRAL GRATE. DO NOT RAISE FIRE BY ADDING ANOTHER GRATE.

Place crumpled paper and kindling wood on grate and ignite with a match or lighter. Watch your fire very closely. When kindling wood is burning well add approximately 2" of coal over the entire grate area. As the coal starts burning and glowing red another layer of coal can be added. Keep adding layers of coal waiting between layers for each to start burning until coal level reaches almost the hopper bottom. Now fill your hopper and close hopper lid.

CAUTION: MAKE SURE THERE IS NO COAL OR OTHER DERBIES ON LEDGE WHERE HOPPER LID SEALS. IF HOPPER LID DOES NOT SEAL STOVE MAY OVER HEAT AND POSSIBLY DAMAGE THE STOVE OR CAUSE A HOUSE FIRE.

Adjust draft slide in the ash door for the amount of heat desired. Sliding knob on ash door to the right opens the air holes producing more heat. Sliding it to the left closes the holes producing less heat. Burn stove at the lowest setting to produce the heat you need. This will increase the life of the stove and make your coal last longer. Close the sliding flue damper as far as you can and keep the insert burning good. In most cases this will be completely pushed in. Even with damper all the way closed the flue is not completely blocked. If insert seams sluggish or smoke backs up into the room the damper must be pulled out till the problem is eliminated. For most efficient operation burn with damper as

far closed as possible. Air wash draft under glass door may be adjusted to add air on top of fire and across glass. This operates the same as the ash door slide. Slide handle to the right to open draft holes and to the left to close the draft holes. This helps burn coal gas and also keeps combustion by-products away from glass keeping it cleaner.

Starting your fire with bituminous coal:

To burn bituminous coal you must first remove the lower portion of the hopper.

CAUTION: DO NOT PUT BITUMINOUS COAL IN THE HOPPER AS IT WILL BURN UP INTO THE HOPPER AND POSSIBLY OVERHEAT THE STOVE. BUILD FIRE ONLY ON INTEGRAL GRATE. DO NOT RAISE FIRE BY ADDING ANOTHER GRATE.

Bituminous coal is started in much the same manner however it is not necessary to cover the entire grate with the coal. The opening of the air wash is more important with bituminous coal as there is much more soot that can cloud the glass.

Adding fuel and removing ashes: Anthracite coal

When it is time to add coal slide flue damper all the way out to the full open position. Open the ash door and place shaker handle on the end of grate. Shake vigorously until you see red coals dropping into the ash pan. Caution should be used when burning pea coal as shaking the grates too far can cause the small coal to be dumped into the ash pan thus wasting your coal. Remove shaker from grate and attach to other grate. Shake until you see red coals again. Now you can refill the hopper with fresh coal. Remove hopper lid and fill hopper with coal. For best results push coal with poker or small shovel to fill the back of the hopper. Replace hopper lid making sure it seals and reset your flue damper.

CAUTION: MAKE SURE THERE IS NO COAL OR OTHER DERBIES ON LEDGE WHERE HOPPER LID SEALS. IF HOPPER LID DOES NOT SEAL STOVE MAY OVER HEAT AND POSSIBLY DAMAGE THE STOVE OR CAUSE A HOUSE FIRE.

How often you do this will depend on how hard you are burning the stove. Once or twice a day should be enough in most cases. Remove and empty ash pan each time and make sure ash in pan does not contact bottom of grates as this can cause the grate to warp. If fire seems sluggish or is going out then not enough ash has been shaken out. Ashes should be placed in a metal container with a tight fitting lid. The closed container of ashes should be placed on a noncombustible floor or on the ground, well away from all combustible materials, pending final disposal. If the ashes are disposed of by burial in soil or otherwise locally dispersed, they should be retained in the closed container until all cinders have thoroughly cooled.

Adding fuel and removing ashes: Bituminous coal

When it is time to add coal slide flue damper all the way out to the full open position. Open the ash door and place shaker handle on the end of grate. Shake vigorously until you see red coals dropping into the ash pan. Remove shaker from grate and attach to other grate. Shake until you see red coals again.

With bituminous coal clinkers can form and it may be necessary to break these up to get them to fall into the ash pan. They may also be removed through the main glass door with metal tongs and placed in ash receptacle. Next add fresh coal to the firebox as needed and reset your flue damper. How often you do this will depend on how hard you are burning the stove. Once or twice a day should be enough in most cases. Remove and empty ash pan each time and make sure ash in pan does not contact bottom of grates as this can cause the grate to warp. If fire seems sluggish or is going out then not enough ash has been shaken out. Ashes should be placed in a metal container with a tight fitting lid. The closed container of ashes should be placed on a noncombustible floor or on the ground, well away from all combustible materials, pending final disposal. If the ashes are disposed of by burial in soil or otherwise locally dispersed, they should be retained in the closed container until all cinders have thoroughly cooled.

MAINTENANCE

NOTE: Failure to maintain or properly use this appliance may cause a house fire. At the beginning of each heating season this appliance, the connector pipe, and chimney should be inspected to see that it is in good working condition.

Removal of your 503 insert for chimney and insert inspection:

You may have to remove your insert for cleaning and inspection. The first thing you want to do is lift insert slightly and slide cardboard or sheet metal under it to protect your hearth from scratching. Begin sliding insert out of fireplace until you can reach the two bolts on either side of the insert that attach the shroud. Remove these bolts and lift shroud off of the insert. You now have access to the flue. With a long screwdriver or nut driver remove screw holding liner pipe into flue exit collar. Work pipe out of collar. You can now remove insert from fireplace. Be careful as you slide insert out to make sure your hearth protection stays under the insert. The hearth can be damaged by the weight of the insert sliding on it with out the protection. You may also reduce the weight of the insert by removing the firebricks, grates, and doors.

Prevent Soot and Creosote Fires:

When coal is burned, the products of combustion combine with moisture to form a soot residue, which accumulates on the flue lining. When ignited, this soot makes an extremely hot fire. When wood is burned it produces tar and other organic vapors, which combine with expelled moisture to form creosote. The creosote vapors condense in the relatively cool chimney flue of a slow-burning fire. As a result, creosote residue accumulates on the flue lining. When ignited this creosote makes an extremely hot fire. Chimney connector and chimney should be inspected at least once every two months during operation to determine if a build up has occurred. If buildup has occurred it must be removed with chimney cleaning chemicals and a chimney brush or contact a local chimney sweep.

Fans:

Your unit is equipped with dual fans, which may run continually or may be operated automatically. When your switch is on manual your fans will run continually.

You may want your switch on automatic and your fans will start when the unit heat is up to 110° and will stop if unit cools down to 90°. Fans should be cleaned of dust and dirt periodically. Replace only with original fan available from your Hitzer dealer.

CAUTION: ALWAYS DISCONNECT UNIT FROM POWER SOURCE BEFORE ATTEMPTING TO SERVICE OR REPLACE ANY ELECTRICAL SYSTEM COMPONENTS

Care and replacement of glass:

Never strike the glass or slam door shut as such abuse can damage the glass and cause it to fail. Never operate your appliance with broken glass. Never attempt to clean glass when hot. Never clean glass with harsh abrasives. Replace glass only with ROBAX CERAMIC glass (5mm x 7 ½" x 13 ½") available from your Hitzer dealer. Use of any other type of glass can cause glass to fail creating a fire hazard

Should you be required to replace the glass first remove door from your stove and lay face down on a smooth solid surface. You will want to pad the surface especially if you have the optional gold plated door so as not to scratch the finish. Remove and save the glass retainers and screws. Carefully remove all broken glass and sealing gasket material. Install new glass using new sealing gasket material and reinstall all glass retainers and screws.

Optional gold plating:

The gold plating option is real gold. Gold is very soft. Any abrasive type cleaner or polish will destroy the finish. It is best to use a clean, soft, damp cloth or a clean, soft cloth and window cleaner.

Fuel storage:

Coal does not absorb moisture as much as wood so coal can be easily stored outside. It is a good idea to build a bin, in your garage, basement, shed, or even outside if you are getting your coal in bulk. This will keep coal contained and not spread out all over the floor. If stored outside it is a good idea to cover your bin with a tarp to keep out a lot of snow. A estimate on size is a bin 4 feet wide by 8 feet long by 4 feet high will hold 3 ton or a little more of nut size anthracite coal. Bagged coal can be stored anywhere inside or out.

Other information needed may be received by contacting your Hitzer dealer or Hitzer Inc.

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