

 This wood heater needs periodic inspection and repair for proper operation.

FIRE EXTINGUISHER

Every home should have a type A:B:C fire extinguisher that is checked and maintained on a regular basis. The National Fire Protection Agency (nfpa.org) recommends having an extinguisher on each floor of your home. The location of the extinguisher should be known to everyone in the house.

ASH DISPOSAL

Empty the ashes when they get 3" to 4" deep. Make sure that the fire is out - Never try to empty the ashes when the stove has an active or full fire, doing so will over heat the stove. Always wear gloves while handling hot ashes. The ashes may be removed by pulling out the ash drawer (if equipped on freestanding models) or scooping out the loading door of the stove. To operate the ash drawer:

1. Turn the ash drawer handle to the left or right to release the latch
2. Pull out the drawer and empty the ashes safely as described below.
3. Clean out any ashes that may have fallen into the cavity that the ash drawer slides in to. **If any ashes remain in the cavity it can prevent the ash pan from sealing, resulting in excessive air to the fire.**
4. Slide the ash drawer back into place, push in to compress the spring and turn the handle down.
5. **NEVER OPERATE THE STOVE WITH THE ASH DRAWER REMOVED OR OPENED.**

Leave 1" of ash in the bottom of the stove to help maintain a hot charcoal bed. Dump the ashes into a metal container with a tight-fitting lid and keep away from the house. **NEVER EMPTY ASHES INTO A COMBUSTIBLE CONTAINER SUCH AS A PLASTIC BUCKET OR PAPER BAG. NEVER LEAVE ASHES NEAR THE HOUSE OR GARAGE.**

CHIMNEY INSPECTION AND CLEANING

When wood is burned slowly, 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. The chimney connector and chimney should be inspected at least once every two months during the heating season to determine if a creosote buildup has occurred. If creosote has accumulated, it should be removed to reduce the risk of a chimney fire. Failure to remove creosote can result in a chimney fire which can damage both the chimney and the stove. We recommend having the chimney cleaned and inspected by a licensed, professional chimney sweep. If the chimney is damaged, it must be replaced.

GASKET INSPECTION AND REPLACEMENT

Inspect the gaskets around the door, glass and ash pan (if equipped) at least once a year. Check for areas that are frayed or missing. Press the gasket with your finger to see if the gasket is somewhat soft. Gaskets that are hard will not conform to the stove and may leak air. When the stove is cold, check to see if the glass moves up and down or left to right. If the glass moves, you may need to tighten the screws around the

retaining ring or replace the gasket. Replacement gaskets and service are available through your local dealer or by visiting kumastoves.com.

GLASS CLEANING AND REPLACEMENT

Never clean the glass when it is hot. Your stove is equipped with an air wash system that will self-clean. Burn the stove on high for 20 to 30 minutes every time you add fuel to the fire. This will reduce the creosote on the glass. If needed, clean the glass with a soft cloth and stove glass cleaner. Do not use steel wool, sandpaper or abrasive cleaners. If you close the door on a piece of wood that is too long, you will break the glass. If the glass breaks in your stove, shut off the primary air control and let the fire burn out. Do not leave the stove unattended with a broken glass. To replace broken glass:

1. Carefully lift the door from the stove and place it on a clean soft work area.
2. Using a Phillips screw driver, remove the retaining ring screws and the retaining ring.
3. Carefully discard the broken glass. **CAUTION: BROKEN GLASS WILL BE SHARP.**
4. Clean the door and set the new piece of glass into the door so that the logo reads correctly from the front side of the door. Kuma replacement glass will have the gasket pre-installed.
5. Replace the retaining ring and screws. Be careful to tighten the screws evenly and tighten just enough to hold the glass firmly

SECONDARY BURN TUBE REPLACEMENT

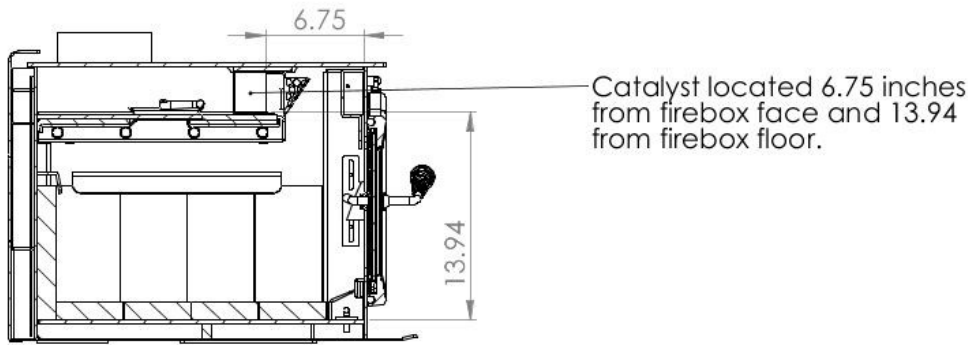
The burn tubes are one of two burn systems that causes your stove to operate efficiently, this stove also uses a catalyst to clean some of the remaining smoke before it leaves the stove. If your burn tubes are not physically degraded (falling apart, crushed or excessively warped) then they are functioning and will not need replacement. To remove a burn tube, un-bolt the tube using a 7/16" wrench. Pull the tube to the right then down and out of the stove. Replace the tube and re-install the bolt the holds the tube in place.

CATALYST INSPECTION, CLEANING AND REPLACEMENT

The catalyst is one of two burn systems that causes your stove to operate efficiently, this stove also uses secondary burn tubes to re-burn smoke before it reaches the catalyst. To inspect your catalyst, unhook the flame deflector from the face of the baffle by pulling it forward. If your catalyst has not physically degraded (falling apart, crushed or excessively warped) then it is likely functioning and will not need replacement. If your Catalytic combustor becomes plugged with ash, clean the catalyst **in place** using a soft brush or for deeper cleaning use a slight to moderate (~20-30 psi.) amount of air pressure blowing any ash through the cells of the catalyst. To replace the catalyst:

1. Remove the flame guard from the face of the baffle by pulling forward. Set aside.
2. Pull the catalyst out using the 2 handles on the front of the catalyst. You may need to wiggle the catalyst to loosen the gasket material.
3. Remove any gasket material that was left in the baffle cavity.
4. Your new catalyst will be wrapped in a gasket material that is held in place with masking tape and a stretch film. There is no need to remove the tape or the stretch film.
5. Slide the new catalyst into the cavity until it stops. If you see any gaps larger than 1/8" around the sides or top of the catalyst you will need to slide the catalyst out and wrap those areas with additional

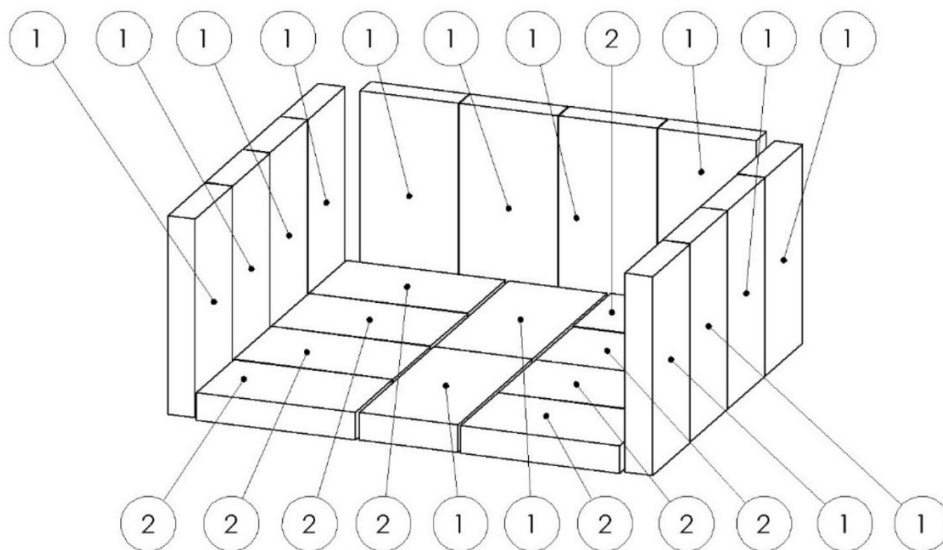
gasket material (you can use masking tape to hold it in place). The gasket provided will expand 2-3 times its original thickness once heated to seal gaps.



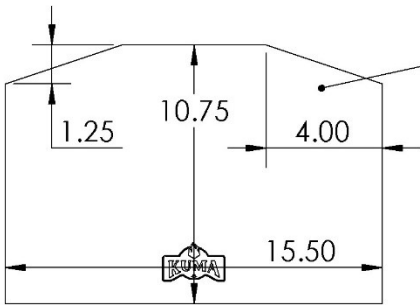
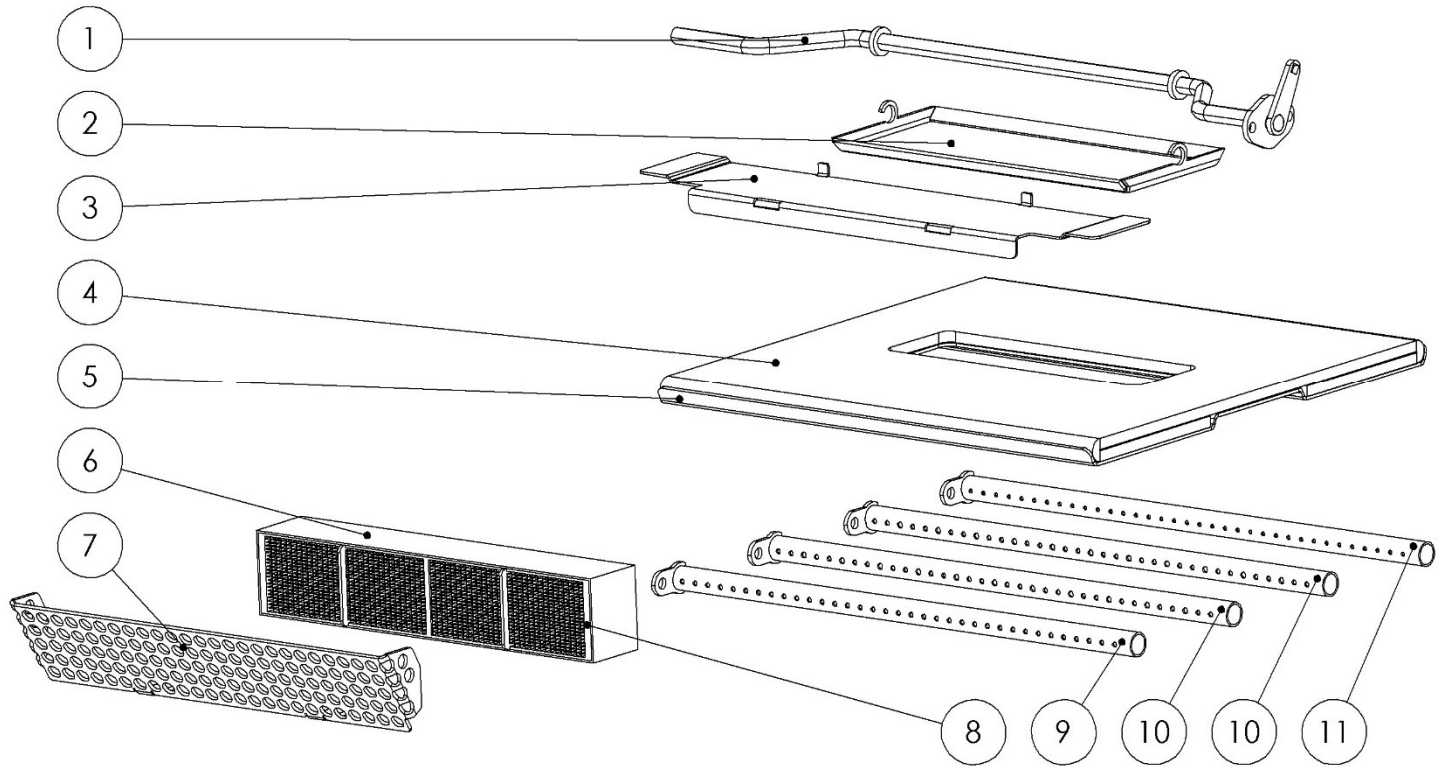
BRICK AND CERAMIC INSULATION REPLACEMENT

Bricks and ceramic insulation should be inspected annually and replaced if necessary. Cracked bricks are fine if they remain in place. Bricks that are crumbling or falling out need to be replaced. The ceramic insulation is located on the top of the stove's baffle and is designed to keep heat in the stove and increase efficiency. If the insulation is in place it can be left alone. If the insulation becomes torn during cleaning, simply lay it back together tightly in that area. If the insulation tears to multiple pieces, it should be replaced. To replace the ceramic insulation, remove the 3 burn tubes allowing the entire baffle to come down and out of the stove. Mark or otherwise note the order of the tubes so they can be replaced in the same location. Place the insulation blanket on top of the baffle so that the cut-out aligns with the bypass opening in the baffle. Re-install the baffle and the 4 burn tubes.

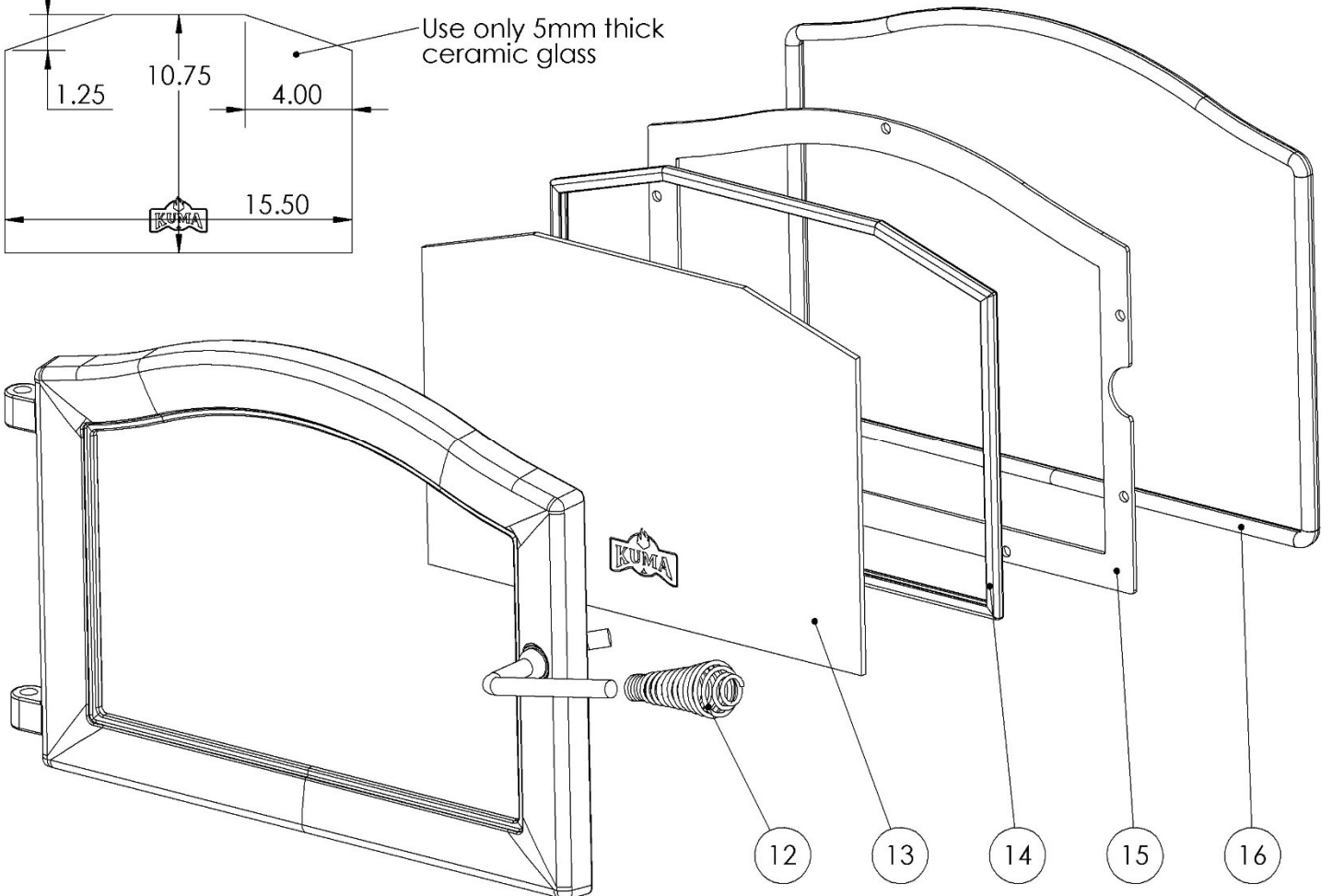
MAINTENANCE DIAGRAMS & PARTS LIST



ID	Item #	Description
1	KR-BR-01	Brick, standard size. 9" x 4-1/2".
2	KR-BR-251	Brick, cut size. 7-1/2" x 4-1/2"



Use only 5mm thick ceramic glass



Parts and support are available from your local dealer, by contacting Kuma Stoves at 888-714-5294 or visiting kumastoves.com and clicking on the support tab.

ID	Item #	Description
1	KR-BH-25	Bypass hinge assembly, stainless steel. Fits: ASH/WCL/CAM/CAS.
2	KR-BP-01	Bypass plate, stainless steel. Fits: All models.
3	KR-CS-01	Catalytic support tray, stainless steel. Fits: All models.
4	KR-IN-25	Ceramic baffle insulation set. Fits: ASH/WCL/CAM/CAS.
5	KR-BF-25	Baffle plate, stainless steel. Includes Insulation blanket (KR-IN-25) Fits: ASH/WCL/CAM/CAS.
6	KR-GK-01	Catalytic gasket, expanding. Fits: All models with catalytic KR-CT-01.
7	KR-FG-01	Catalytic flame guard, stainless steel. Fits: All models.
8	KR-CT-01	Catalytic combustor, metal alloy. Includes Gasket (KR-GK-01)Fits: All models.
9	KR-BT-251	Baffle burn tube, front. Fits: ASH/WCL/CAM/CAS.
10	KR-BT-252	Baffle burn tube, middle front or middle rear. Fits: ASH/WCL/CAM/CAS.
11	KR-BT-253	Baffle burn tube, rear. Fits ASH/WCL/CAM/CAS.
12	KR-SP-02G	Door handle, gold. Fits: All KA-DR-25 and KA-DR-18 doors.
12	KR-SP-02P	Door handle, pewter. Fits: All KA-DR-25 and KA-DR-18 doors.
13	KR-GL-25	Door glass, includes gasket. Fits: All KA-DR-25 doors.
14	KR-GK-034	Gasket, 3/4" fiberglass channel, 5 feet. Fits: All glass sizes.
15	KR-GR-25	Glass retainer. Fits: All KA-DR-25 doors.
16	KR-GK-058	Gasket, 5/8" fiberglass, 8 feet. Fits: All doors and ash pans.
n/a	KR-SP-01P	Control handle, pewter. Fits: All models.
n/a	KR-SP-01G	Control handle, gold. Fits: All models.
n/a	KR-AH-01	Gasket adhesive, fiberglass to metal. Fits: All doors and ash pans.

STOVE BURNS LAZY AT START UP.

1. The chimney is still cool, allow more time to warm up.
2. Wood is not seasoned (still green). Wood should sit for about 1 year, split and loosely stacked if it was cut green.
3. Wood is well seasoned but has a lot of surface moisture. Your wood supply must be covered. Check your tarps or other covering to see that no rain or snow is getting to your wood. Wood should be covered on top, but open on the sides to allow air movement to aid in drying.
4. Stove is being shut down too soon. Leave the air open for longer. (do not leave the stove unattended with door open) See Section 4 for lighting instructions.

STOVE BACK-PUFFS OR SMOKES INTO THE ROOM AT START UP.

1. Make sure the bypass rod is pulled open.
2. Chimney is cold. Cold chimneys can produce a "reverse draft" where cold air is rushing down the chimney into the stove. Open a door or a window for about 5 minutes to equalize pressure in the house then try restarting with small strips of newspaper. Using small strips of newspaper or an approved fast burning fire starter and small pieces of kindling will create heat faster to help reverse the cold air.
3. Chimney and/or the chimney cap needs to be cleaned. Your chimney should be checked and cleaned, if necessary, every few months. Even a small amount of buildup can cause a draft restriction, for example: ¼ inch of buildup on the side wall of an 8" chimney reduces the effective area of the chimney by about 20%. Pay close attention to the chimney cap, especially if it has a screen. Screened chimney caps can become blocked enough to restrict flow in just a few weeks.

STOVE SMOKES OUT THE DOOR WHEN IT IS OPEN.

1. The door was opened before the bypass rod was pulled open. Open the bypass for 1 minute before opening the door.
2. The door was opened too quickly. Crack the door open just a small amount and let the stove "breathe" a few seconds before slowly opening all the way.
3. Chimney and/or the chimney cap needs to be cleaned. Your chimney should be checked and cleaned, if necessary, every few months. Even a small amount of buildup can cause a draft restriction, for example: ¼ inch of buildup on the side wall of a 6" chimney reduces the effective area of the chimney by about 20%. Pay close attention to the chimney cap, especially if it has a screen. Screened chimney caps can become blocked enough to restrict flow in just a few weeks.

STOVE WON'T SHUT DOWN.

1. Check the main door gasket and glass gasket for proper seal. See section 6 for instructions on checking your gaskets.
2. Chimney is too tall, see Section 3 for flue height recommendations.

STOVE WON'T BURN HOT ENOUGH. LAZY BURN.

1. Wood is not seasoned (still green). Wood should sit for about 1 year, split and loosely stacked if it was cut green.
2. Wood is well seasoned but has a lot of surface moisture. Your wood supply must be covered. Check your tarps or other covering to see that no rain or snow is getting to your wood. Wood should be covered on top, but open on the sides to allow air movement to aid in drying.

3. Chimney and/or the chimney cap needs to be cleaned. Your chimney should be checked and cleaned, if necessary, every few months. Even a small amount of buildup can cause a draft restriction, for example: ¼ inch of buildup on the side wall of an 8" chimney reduces the effective area of the chimney by about 20%. Pay close attention to the chimney cap, especially if it has a screen. Screened chimney caps can become blocked enough to restrict flow in just a few weeks.
4. Catalytic combustor is plugged with ash. Clean the catalyst in place using a slight to moderate (~20-30 psi.) amount of air pressure blown through the baffle grid removing ash from the catalyst cells.
5. Atmospheric conditions. Occasionally, barometric episodes occur that affect draft, thereby affecting stove performance. If your stove has been working fine and performance drops suddenly, this is most likely the cause, and will usually go away within a few days.
6. Your fuel load may be too small or the wood size too large for the coal bed. A small bed of coals requires re-kindling to build up the heat, only put large chunks of wood on a very hot and active bed of coals.

BURN TIME TOO SHORT.

1. Your fuel load may be too small or the wood size too large for the coal bed. A small bed of coals requires re-kindling to build up the heat, only put large chunks of wood on a very hot and active bed of coals. If there are large chunks of charred wood left after the fire has gone out, the coal bed was not hot enough.
2. Fuel quality. Harder, denser woods produce longer burn times. Likewise, softer woods produce shorter burn times.
3. Check the main door gasket and glass gasket for proper seal. See for instructions on checking your gaskets.

CATALYST TROUBLESHOOTING.

Problem	Cause	Solution
Catalyst plugged with creosote	Burning wet wood or pushing in the bypass rod too soon.	Burn only dry, seasoned natural wood. Burn a hot fire to burn off the creosote buildup then brush off the face of the catalyst with a soft bristle brush.
Catalyst masked with soot or fly ash.	Pushing in the bypass rod too soon. Burning improper material such as cardboard, coal or wrapping paper.	Remove the flame guard but leave the catalyst in place. Brush off the face of the catalyst with a soft bristle brush or gently blow out the cells with a can of dusting air. Burn only dry seasoned natural wood.
Lower Efficiency	Flames contacting the catalyst from excessive draft can reduce the effectiveness of the catalyst.	Use less wood or lower the air to the stove. Install a damper to reduce draft. Do not burn material that will poison the catalyst such as colored paper, cardboard, paneling, painted or treated wood.
Catalyst is plugged with fly ash	Pushing in the bypass rod too soon. Burning material that produces fly ash and char. See section 4 for a list of improper materials	Make sure you achieve catalyst light off (see section 4) Remove the flame guard but leave the catalyst in place. Gently blow out the cells with a can of dusting air. Burn only dry, seasoned natural wood.

SECTION 8 – LIMITED WARRANTY

Our Promise:

If any maintenance items wear out in the first three years, we will supply you with the parts to fix it. For as long as you own your stove, if you ever have a defect in the material or workmanship of your stove's firebox, we will repair or replace it for you. See full details below:

Items Covered	Parts Coverage Period	Labor Coverage Period
Maintenance Items: Bricks, gasket, ceramic insulation, and paint.	3 Years	No Labor Coverage
Blowers, brick supports. All removable wear items including the ash grate, baffle plate, bypass mechanism, catalytic support tray, and catalytic flame guard.	5 Years	3 Years
Stove firebox, burn tubes, legs, glass (thermal breakage) and door casting.	Forever	3 Years

Catalyst Warranty: The combustor supplied with this heater is an Applied Catalysts ACI-5M, Long Life Combustor. Kuma part# KR-CT-01 Following is the catalytic combustor warranty supplied with this wood heater. Catalyst warranty claims should be addressed to: Kuma Stoves 50145 N. Old Highway 95 Rathdrum ID, 83858. Ph. 888-714-5294.

6-year structural warranty: Warranty claim must meet the following conditions: 1. warranty has been registered proving the date of purchase and that you are the original owner. 2. You return the catalyst to Kuma stoves: No advanced exchange is available under this warranty. 3. The catalyst has not been abused by over-firing or using unauthorized fuels. If the catalyst loses its structural integrity due to a manufacturing defect, Kuma stoves will replace the catalyst at no charge. The replacement catalyst will have a 90-day warranty coverage.

12-year performance warranty: One replacement catalyst is available for purchase from Kuma Stoves at a 50% discount from MSRP. The only condition of this pro-rated performance warranty is that your warranty has been registered proving the date of purchase and that you are the original owner. The catalyst does not need to be returned.

Warranty Coverage:

To ensure warranty coverage, it is very important that you register your Kuma Stove warranty within 30 days of purchase at kumastoves.com or fill out and return the warranty registration in your owner's packet. Operation of this stove in a manner inconsistent with the owner's manual, especially the burning of materials for which this unit is not certified by the EPA, will void the warranty. This warranty covers your new Kuma Stove from defects in material and workmanship for the period outlined in this warranty. Kuma Stoves reserves the right to replace, repair or authorize repair of any defective part at its sole discretion. This warranty is not transferrable and covers the original owner of the product from the time of purchase. All parts that have been replaced under this warranty will have a 90-day warranty coverage. The maximum value of this warranty is the original purchase price of the product. This warranty is subject to the conditions and limitations outlined below. This warranty covers stoves purchased from an authorized Kuma Stoves dealer.

Warranty Instructions:

Please contact the dealer where you purchased your stove. You may also contact Kuma stoves directly at 50145 N. Old Highway 95, Rathdrum ID 83858 or by phone at 1-888-714-5294 or contact us online at kumastoves.com. When calling, you will need to have your proof of purchase, the model name, and the serial number of your stove. When calling please remember that shipping and handling costs are not covered under this warranty.

Warranty Exclusions:

This Warranty does not cover: 1. Changes in the color of the surface of the stove as this naturally happens during the firing of the stove and is considered normal. 2. Damage to plating due to chemical cleaners, fingerprints, or scratching. 3. Shattered glass caused from wood impact. 4. Discoloration of plating or glass. 5. Expansion and contraction of the firebox causing noise. 6. Damage caused from: power surges, unauthorized modifications, using incorrect fuel and/or accelerants, shipping/handling, failure to follow the manufacturer's installation instructions, failure to follow any local building codes. 7. Damages to any product not manufactured by Kuma Stoves. 8. Any stoves ability to heat a specific area. Heating capacity is given as a guideline and is not guaranteed. 9. Shipping costs or travel time. Please talk with an authorized dealer or Kuma representative about the potential charges for travel or shipping. 10. This warranty is void in the case of abuse, over firing, unauthorized repair, alterations, improper installation and/or service.