

IMPORTANT:
KEEP THESE INSTRUCTIONS
FOR FUTURE REFERENCE.



TN 20 Insert

INSTALLATION AND OPERATING INSTRUCTIONS - AUSTRALIA

AUSTRALIA

SERIAL #



SAFETY NOTICE

If this stove is not properly installed, a house fire may result. For your safety, follow the installation instructions. Contact local building or fire officials about restrictions and installation inspection requirements in your area.

MODEL: TN 20 Insert

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NOTE:

WE STRONGLY RECOMMEND THAT SMOKE DETECTORS BE INSTALLED IN THE ROOM WHERE THE UNIT IS INSTALLED.

SAFETY NOTICE:

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Please read this entire manual before you install and use your new room heater. Failure to follow instructions may result in property damage, bodily injury, or even death.

Safety and Maintenance

Burn cord wood only, dry well seasoned wood. The denser or heavier the wood when dry, the greater its heat value. This is why hardwoods are generally preferred. Green or wet wood should not be used, as it will reduce heat output, as well as contributing significantly to creosote buildup.

Remove ashes frequently and only when the stove is cold. Too much ash could cause embers to roll out the door when it is opened. This may pose a fire hazard. For proper operation, maintain a 25 mm minimum ash base.

If glass becomes darkened from slow burning or poor wood, it can readily be cleaned with fireplace glass cleaner when stove is cold. Never scrape with an object or use abrasive cleaners that might scratch the glass. The type and amount of deposit on the glass is a good indication of the flue pipe and chimney buildup. A light brown dusty deposit that is easily wiped off usually indicates good combustion and dry, well-seasoned wood, therefore relatively clean pipes and chimney. On the other hand, a black greasy deposit that is difficult to remove is a result of wet and green wood and too slow a burning rate. This will also create heavy deposit buildup in the chimney.

DOOR GASKETS - The gasket used on this unit (16 mm medium density fiberglass rope) requires only light pressure to seal. This will prolong seal life. It is important that the door seal be maintained in good condition. Periodically inspect seals and replace if necessary. Follow instructions included in the door gasket kit (TN19.DGKIT) obtainable from your nearest True North dealer.

DOOR GLASS - Do not slam loading door or otherwise impact glass. When closing door, make sure that no logs protrude to impact the glass. If the glass gets cracked or broken, **it must be replaced before using the stove.** Replacement glass can be obtained from your dealer. Use ceramic glass only. **Do not substitute with any other type.** GLASS SIZE - 337mm x 235mm x 5mm thick.

To remove broken glass, undo the four retaining screws and remove the clamps, noting position for re-assembly. Remove all pieces of glass. Be careful as they are very sharp. Install new glass complete with gasket. Replace clamps and screws.

Do not store wood within heater installation clearances, or within the space required for fuel loading and ash removal. Keep the area around the heater clean and free of loose combustibles, furniture, newspapers, etc.

If the heater requires cleaning, use mild soap and water only. **Use of abrasive cleaners will void warranty.**

Establish a routine for fuelling and firing the heater. Check daily for creosote buildup until experience shows how often you need to clean the chimney to be safe.

Be aware that the hotter the fire, the less creosote is deposited. Weekly cleaning may be necessary in mild weather, even though monthly cleaning is usually enough in the coldest months when burning rates are higher.

Instruct all members of your family on the safe operation of the heater. Ensure they have enough knowledge of the entire system if they are expected to operate it. Study the section on chimney fires and the importance of following the steps outlined "In Case of Chimney Fire".

WARNING:

Never use chemicals or any other volatile liquid to start a fire. Do not burn garbage, or flammable fluids such as gasoline, naphtha, or engine oil. We strongly recommend that smoke detectors be installed.

WARNING:

Only use materials supplied by manufacturer when doing maintenance or replacements.

CAUTION:

- **Tighten screws very carefully, do not over-tighten**
- **Do not clean glass when hot**
- **Do not use abrasive cleaners on glass**



Maintenance Checks

Check the following parts for damage such as cracks, excessive corrosion, burned out sections and excessive warping**: (See website for descriptions and more detail)

Weekly:

- Firebrick - Visual, for cracking.
- Door Gasket - sagging, placement, damage.

Monthly

- Brick rail tabs and brick rails.
- Back side of air wash chamber.
- Top Baffle Board.
- Secondary Air (Baffle) Tubes
- Boost tube cover.

When Cleaning the Chimney System:

- Top heat shield and mounting bolt.
- Brick Rails.
- Manifold.

•
** Replace the Baffle tubes if they show signs of cracking or breakage.
-

Please contact your Dealer if you experience any of the damage listed above. Continuing to operate your stove with broken parts may accelerate damage to other parts and will void your warranty

Wood Selection

This heater is designed to burn natural wood only. Higher efficiency and lower emissions generally result when burning air-dried seasoned hardwoods, as compared to softwoods or too green or freshly cut hardwoods. Wood should be properly air dried (seasoned) for six months or more. Wet or undried wood will cause the fire to smoulder and produce large amounts of creosote. Wet wood also produces very little heat and tends to go out often.

DO NOT BURN:

- | | |
|--------------------|--------------------|
| -*Salt water wood | -Coal/charcoal |
| -Treated wood | -*Garbage/Plastics |
| -Wet or green wood | -Solvents |

* These materials contain chlorides which will rapidly destroy metal surfaces and void warranty.

Do not burn anything but wood. Other fuel, e.g. charcoal, can produce large amounts of carbon monoxide, a tasteless, odourless gas that can kill. Under no circumstances should you attempt to barbecue in this heater.

Add a large piece of wood to the stove when it has a good, large bed of coals. It is dry if it is burning on more than one side within one minute. It is damp if it turns black and lights within three minutes. If it sizzles, hisses and blackens without igniting in five minutes it is soaked and should not be burnt.

Formation and Need for Removal

1. When wood is burned slowly, it produces tar and other organic vapours, which combine with expelled moisture to form creosote. The creosote vapours 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.
2. The chimney connector and chimney should be inspected periodically (at least once every two months) during the heating season to determine if a creosote buildup has occurred. If creosote has accumulated (3 mm. or more), it should be removed to reduce the risk of a chimney fire.
3. Highest smoke densities occur when a large amount of wood is added to a bed of hot coals and the air inlet is closed. The heated wood generates smoke, but without ample air, the smoke cannot burn. Smoke-free, clean burning requires leaving the air inlet relatively wide open, especially during the first 10 to 30 minutes after each loading, when most of the smoke generating reactions are occurring. After 30 minutes or once the wood is fully charred, the air inlet can be turned down substantially without excessive smoke generation. Wood coals create very little creosote-producing smoke.
4. The cooler the surface over which the wood smoke is passing, the more creosote will be condensed. Wet or green wood contributes significantly to creosote formation as the excess moisture that is boiled off cools the fire, making it difficult for the tars and gases to ignite, thus creating dense smoke and poor combustion. This moisture-laden smoke cools the chimney, compounding the problem by offering the smoke the ideal place to condense.

In summary, a certain amount of creosote is inevitable and must be lived with. Regular inspection and cleaning is the solution. The use of dry, seasoned wood and ample combustion air will help to minimize the buildup.

Avoiding a Chimney Fire

Excessive creosote build-up can cause a chimney fire. During a fire the inside temperatures in a chimney can exceed 1100 degrees C. This causes much higher than normal temperatures in the chimney and on its exterior surfaces thus ignition of nearby or touching combustible material is more likely during a chimney fire.

1. Keep your chimney clear of creosote build-up by cleaning your chimney before each burn season, and as necessary (accumulations of 3 mm or more) during the season.
 2. Burn clean, well-seasoned wood only (seasoned at least one year). Avoid wet or green wood.
 3. Do not use the heater as an incinerator or over-fire as it may ignite chimney fires. These are hot fires, such as when burning household trash, cardboard, Christmas tree limbs, or even ordinary fuel wood; (eg. With a full load on a hot bed of coals and with the air inlet wide open)
- Have a fire extinguisher handy. Contact your local fire authority for further information on how to handle a chimney fire. It is most important that you have a clearly understood plan on how to handle a chimney fire.

Signs of a chimney fire may be one or more of the following:

- Flames and sparks shooting out of the top of the chimney
- A roaring sound
- Vibration of the chimney

In the event of a Chimney Fire

1. Prepare to evacuate to ensure everyone's safety. Have a place outside where everyone is to meet.
2. Close down the damper on stove.
3. Call local fire department.
4. After the chimney fire is out, the chimney must be cleaned and checked for stress and cracking before starting another fire. Also check combustibles around chimney and the roof. This should be done by a certified inspector/chimney sweep.

Do not store/place wood or other combustibles within the required clearances surrounding the unit.

WARNING: Never use gasoline, gasoline-type lantern fuel, kerosene, charcoal lighter fluid, or similar liquids to start or 'freshen up' a fire in this heater. Keep all such liquids well away from the heater while in use.

WARNING: No alteration or modification of the combustion air control assembly is permitted. Any tampering will void warranty and could be very hazardous.

DO NOT OVERFIRE THIS HEATER: Attempts to achieve heat output rates that exceed heater design specifications can result in permanent damage to the heater and chimney.

Lighting for the first time

Curing of the New Paint Finish

When burning your stove for the first 2-3 times it is very important that the room be well ventilated. Open all windows and doors. Smoke and fumes caused by the curing process may cause discomfort to some individuals.

Lighting the Fire

- 1) Adjust air control, located under the Ash Shelf, to the "High" position (pushed to the far left) and open door.
- 2) Place crumpled newspaper in the centre of the heater and crisscross with several pieces of dry kindling. Add a few small pieces of dry wood on top.
- 3) Ignite the paper and close the door.
- 4) After the fire has established itself, open the door and add a few small logs. Close door.
- 5) Begin normal operation after a good coal base exists and wood has charred.

Your Pacific Energy heater is designed for maximum overall efficiency at a moderate firing rate. Over firing is hazardous and a waste of fuel. Too slow a burn contributes to creosote buildup and lowers combustion efficiency.

Normal Operation

1. To refuel, adjust air control to "High" position (pushed to the far left) and give the fire time to brighten. Open door slowly, this will prevent smoke from rolling out.
2. Use wood of different shape, diameter and length (up to 450mm). Load your wood endwise and try to place the logs so that air can flow between them. Always use dry wood.
3. Do not load fuel to a height or in such a manner that would be hazardous when opening the door.
4. Set air control to desired setting. If smoke pours down across the glass (waterfall effect), this indicates you have shut the control down too soon or you are using too low a setting. As every home's heating needs vary (i.e. insulation, windows, climate, etc.), The proper setting can only be found by trial and error and should be noted for future burns.
5. For extended or overnight burns, un-split logs are preferred. Remember to char the wood completely on the "High" setting before adjusting air control for overnight burn.

Experience will give you the right settings for proper combustion and efficient burning. Remember, the air inlet setting is affected by variables such as type of wood, outside temperature, chimney size and weather conditions. With practice, you will become proficient in operating your heater and will obtain the performance for which it was designed.

Restarting after Overnight Burn

1. Open door and rake hot embers towards the front of the heater. Add a couple of dry, split logs on top of embers, close door.
2. Adjust air control to the “High” position (pushed to the far left) and in just a few minutes, logs should begin burning.
3. After wood has charred, reset air control to desired setting.
4. When burning at a slow rate for extended periods, occasionally maintain a strong fire under supervision for a couple of hours to remove firebox and chimney deposits as well as any of the deposits on the glass.

Proper Draft

- Draft is the force which moves air from the appliance up through the chimney. The amount of draft in your chimney depends on the length of the chimney, local geography, nearby obstructions and other factors.
- Too much draft may cause excessive temperatures in the appliance. An uncontrollable burn or a glowing red stove part or chimney indicates excessive draft.
- Not enough draft may cause back puffing into the room and plugging of the chimney. Smoke leaking into the room through appliance and chimney connector joints indicates inadequate draft.

Blower Operation

The Insert comes equipped with a two speed circulating air blower. The Blower switch is located on the lower right side edge of the Surround Panel.

To turn ON the blower, push the fan speed control switch to Low or High.

Suggested settings:

- Combustion air control setting of “Low”(all the way to the right), operate blower speed control on “Low” (one line on switch).
- Combustion air control “Medium”, or greater, operate blower speed on high.(Two Lines on switch)

To turn OFF, push the switch to the middle position.

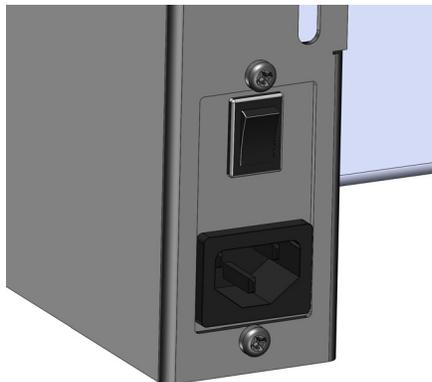


Figure 1. TN20.AS fan switch location.

WARNING: Always keep loading door closed when burning, except as instructed during start-up. This heater is not designed for open door burning.

WARNING: Do not use grates or andirons to elevate the fuel. Burn directly on the firebricks. Replace broken or missing bricks. Failure to do so may create a hazardous condition.

CAUTION: Unit hot while in operation. Parts of the appliance, especially the external surfaces, will be hot to touch when in operation. Keep children, clothing and furniture away. Contact may cause skins burns.

For your protection against shock hazard, use only a properly grounded outlet that will accept a grounded plug.

Dimensions

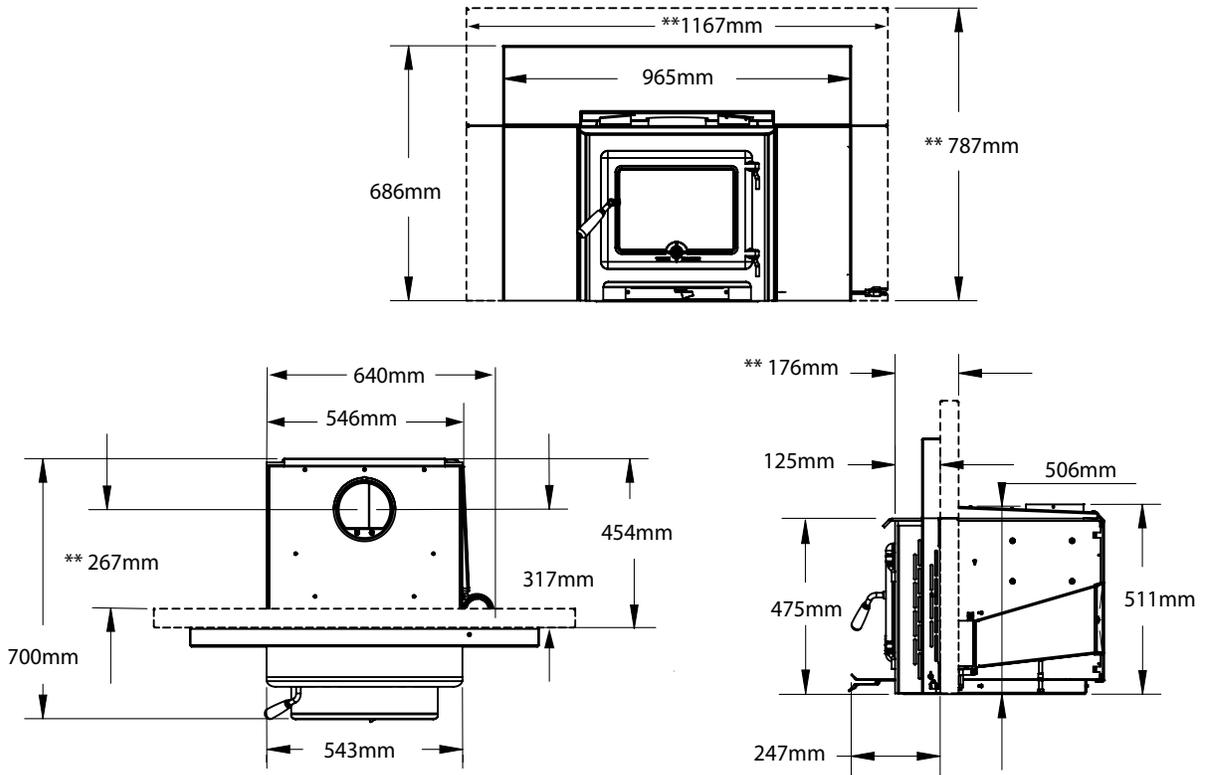


Figure 2. TN20.INSB 3 Metric Dims.

MINIMUM FIREPLACE OPENING AND HEARTH DIMENSIONS

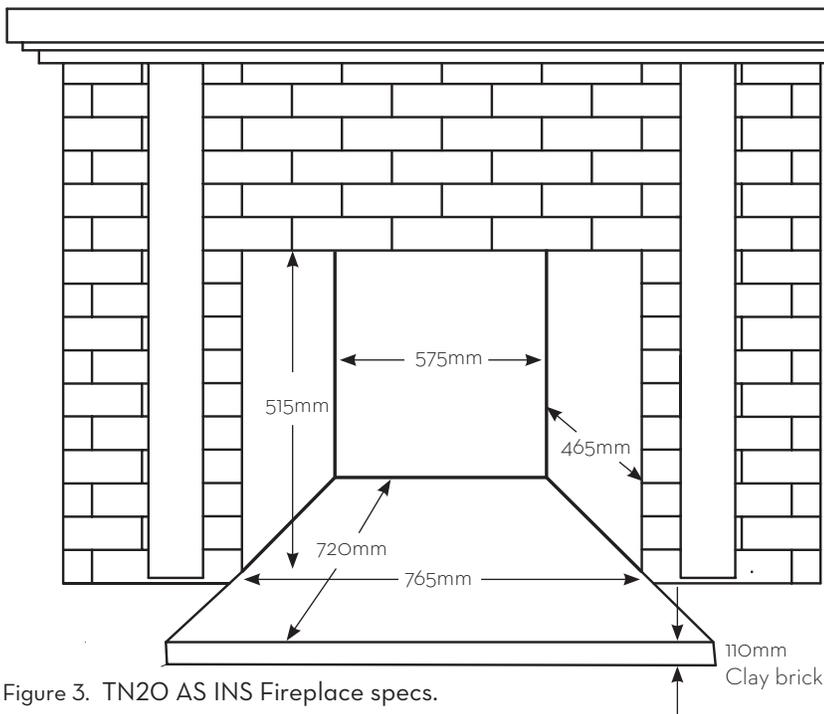


Figure 3. TN20 AS INS Fireplace specs.

MINIMUM FLOOR PROTECTION UNDER THE APPLIANCE MUST BE 720MM DEEP X 545MM WIDE X 110MM THICK (CLAY BRICKS).

Minimum Clearances

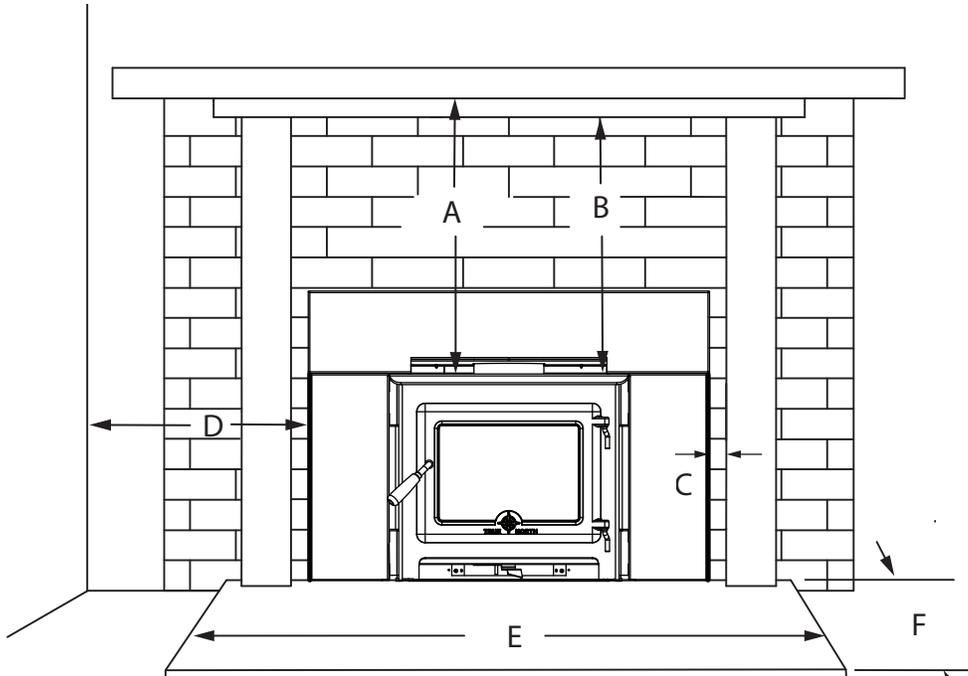


Figure 4. TN20.AS Insert Clearance.

Minimum Clearances to Combustibles

(Measured from the top of the stove)

- A: Mantle Shelf..... 425mm - Mantle Shelf shall extend no further than 250mm into the room.
- B: Mantle Key..... 380mm - Mantle Key shall be no thicker than 30mm.

(Measured from the edge of the surround)

- C: Mantle Upright..... 20mm - Mantle uprights shall be no thicker than 70mm
- D: Adjacent Sidewall.....305mm

(Measured from Front of Appliance Base)

- E: Floor Protection.....715mm Wide - Placed centrally.
- F: Floor Protection.....300mm Deep - in front of the appliance.

Ember Protection in front of the unit must be 9mm thick Bellis Board with a thermal conductivity of 0.1m²K/W.

Minimum Floor Protection under the appliance must be 720mm deep x 545mm wide x 110mm thick (Clay Bricks).

Electrical

Circulating air blower electrical rating: 240V, 0.4A 50 Hz.

For your protection against shock hazard, use only a properly grounded outlet that will accept a three-pronged plug. Do not cut or remove the grounding prong.

All electrical connections to and within an appliance shall be in accordance with the requirements of AS/NZS 3000, AS/NZS 3100 or ER 93 and the regulatory authority as appropriate.

Masonry Fireplace Installation

WARNING: UNDER NO CIRCUMSTANCES IS THIS HEATER TO BE INSTALLED IN A MAKESHIFT OR “TEMPORARY” MANNER. IT MAY BE FIRED ONLY AFTER THE STOVE IS INSTALLED PROPERLY.

WARNING: THE APPLIANCE AND FLUE-SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH AS/NZS 2918 AND THE APPROPRIATE REQUIREMENTS OF THE RELEVANT BUILDING CODE OR CODES

WARNING: APPLIANCES INSTALLED IN ACCORDANCE WITH THIS STANDARD SHALL COMPLY WITH THE REQUIREMENTS OF AS/NZS 4013 WHERE REQUIRED BY THE REGULATORY AUTHORITY, I.E. THE APPLIANCE SHALL BE IDENTIFIABLE BY A COMPLIANCE PLATE WITH THE MARKING ‘TESTED TO AS/NZS 4013’.

ANY MODIFICATION OF THE APPLIANCE THAT HAS NOT BEEN APPROVED IN WRITING BY THE TESTING AUTHORITY IS CONSIDERED TO BE IN BREACH OF THE APPROVAL GRANTED FOR COMPLIANCE WITH AS/NZS 4013.

CAUTION: MIXING OF APPLIANCE OR FLUE-SYSTEM COMPONENTS FROM DIFFERENT SOURCES OR MODIFYING THE DIMENSIONAL SPECIFICATION OF COMPONENTS MAY RESULT IN HAZARDOUS CONDITIONS. WHERE SUCH ACTION IS CONSIDERED, THE MANUFACTURER SHOULD BE CONSULTED IN THE FIRST INSTANCE.

CAUTION: CRACKED OR BROKEN COMPONENTS, e.g. GLASS PANELS OR FIRE BRICKS, MAY RENDER THE INSTALLATION UNSAFE.

CAUTION: THIS APPLIANCE SHOULD NOT BE OPERATED WITH A CRACKED GLASS.

CAUTION: THIS APPLIANCE SHOULD BE MAINTAINED AND OPERATED AT ALL TIMES IN ACCORDANCE WITH THESE INSTRUCTIONS.

CAUTION: THE USE OF SOME TYPES OF PRESERVATIVE-TREATED WOOD AS A FUEL CAN BE HAZARDOUS.

DO NOT ATTEMPT TO CONNECT THIS HEATER TO ANY AIR DISTRIBUTION DUCT.

DO NOT CONNECT THIS UNIT TO A CHIMNEY FLUE SERVICING ANOTHER APPLIANCE.

Outside combustion air or fresh air into the room may be required in your area, consult local building codes (see Combustion Air section).

Minimum Chimney height 4.5m

Inspect your fireplace for cracks, loose mortar or other physical defects. If repairs are required, they should be completed before installing your insert.

Have the chimney swept. The fireplace chimney must be suitable for wood burning use. Check for creosote build up or other obstructions, especially if it has not been in use for some time.

The existing fireplace damper is to be locked open or removed completely.

WARNING: Do not remove bricks or mortar from your existing fireplace. With the following

Exception: Masonry or steel, including the damper plate, may be removed from the smoke shelf and adjacent damper frame if necessary to accommodate a chimney liner, provided that their removal will not weaken the structure of the fireplace and chimney, and will not reduce protection for combustible materials to less than that required by Code.

The Insert must be installed in accordance with local codes, and or AS/NZS 2918:2001

Flue Liner

This fireplace insert must be installed with a continuous liner of 150mm diameter extending from the fireplace insert to the top of the chimney (Fig #5).

- 1) Measure the chimney height from the top of the existing flue to the floor of the hearth. This will allow extra length of liner for flashing and rain cap.
- 2) Feed the stainless steel liner from top of the chimney, through the damper area and into the fireplace cavity.
- 3) place the Insert part way into the fireplace. Attach the stove connector to the bottom of the liner.
- 4) Push the Insert into position inside the fireplace and use the rear adjusting legs to level the Insert.
- 5) Measure, trim and shape a top flashing to fit the existing chimney flue. Plan for a 30mm overlap on each side. Place flashing over top of the liner and seat firmly over the chimney.
- 6) Screw flashing collar to liner. Caulk gap around flashing with RTV silicone.
- 7) Attach a rain cap to the end of the liner. A storm collar may be used if desired.

The services of a competent or certified installer are strongly recommended to install or commission this installation.

Consult your local Dealer about relining your fireplace chimney.

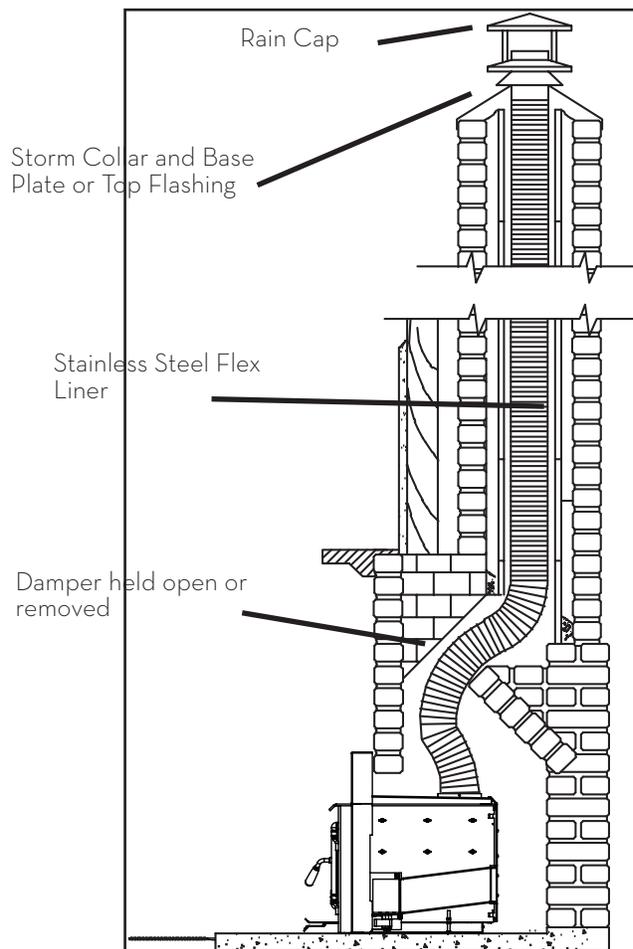


Figure 5. Full liner TRNO.

Chimney

WARNING: INSTALL CHIMNEY AND ALL COMPONENTS OF CHIMNEY SYSTEM ACCORDING TO CHIMNEY MANUFACTURER'S INSTRUCTIONS.

Connect to a listed chimney complying with the requirements of AS/NZS2918/2001 and a chimney suitable for use with solid fuel that is lined and in good condition and meets local building codes. The chimney flue size should be the same as the stove outlet for optimal performance. Reducing or increasing the flue size may adversely affect stove performance. Chimney flue exit is to be minimum 100 cm above roof and 60 cm above highest projection within 300 cm. The installation must meet all local codes. Do not connect this unit to a chimney flue serving another appliance. Minimum system height is 460 cm (measured from base of appliance).

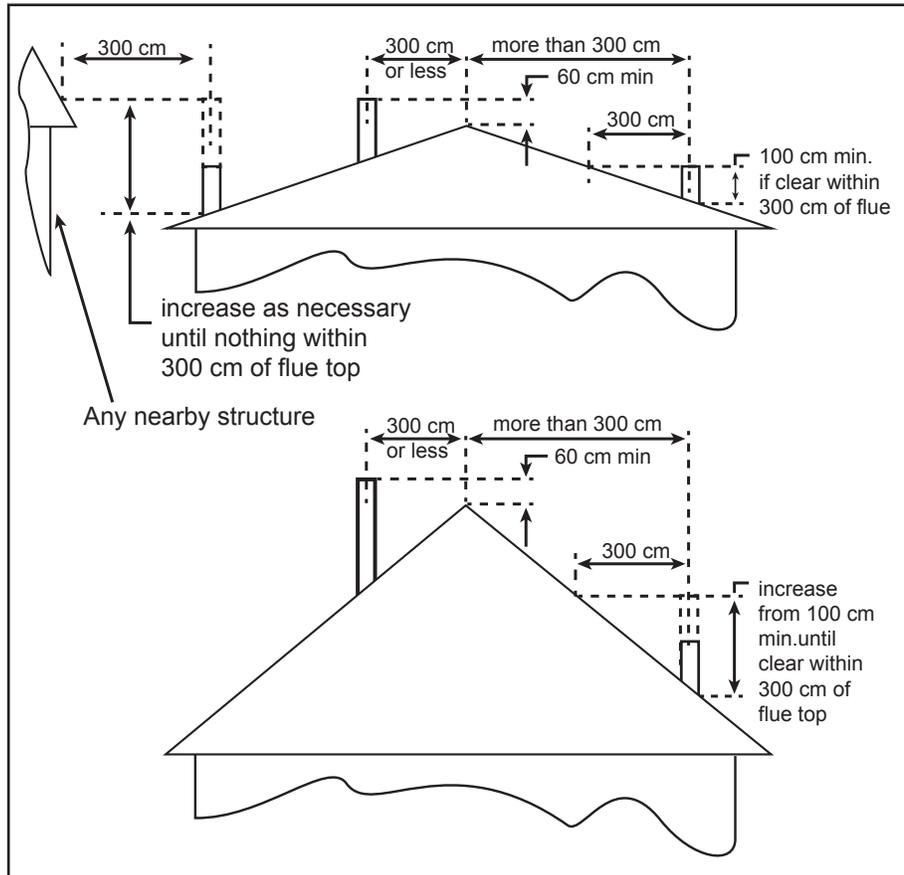


Figure 6. Chimney and connector

Combustion Air

Consult local building codes regarding combustion air supply. Intake or combustion air can be supplied to the Insert in one of two ways:

- 1) Outside air supply: Remove cover from ash clean out in existing fireplace. Place a rodent screen in place of the cover. Install the Insert as described in the "Installation" section, making sure not to cover the opening of the air inlet.
- 2) Room air supply: Remove the cover plate beneath the ash lip by removing the two screws securing it to the unit base (Fig. #7). The unit must have adequate air for combustion provided in the room the unit is installed in. This may involve providing make up air from outside the house.



Figure 7. Room air opening.

Surround Assembly and Installation

- 1) Remove the shipping screws located at the top of each surround side panel (fig. 8). remove the two screws holding the Fan Controls on the side panel and remove the controls (Fig.8). Lift to remove both panels from the unit.
- 2) Unpack the top panel and lay parts A, B and C face down on a flat, non-marring surface. Fasten together with 1/4" x 1/2" bolts and nuts provided through holes at points "D" (Fig. #9).
- 3) Lift the surround assembly to the upright position and make sure the front face is flat and even at the joints.
- 4) Move the assembled surround around the stove. Locate and engage the panels hooks onto the pins located on the surround brackets. Push down to lock. (Fig. #10).
- 5) Attach the fan switch plate to the inside of the right side surround panel using the two screws provided.
- 6) Push the entire appliance back until the surround assembly is in contact with the fireplace structure.

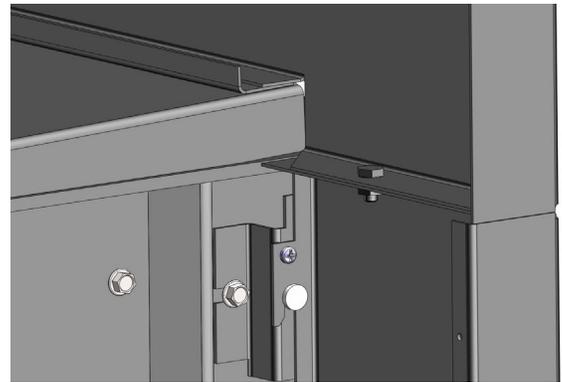


Figure 8. TN20.INSA.packing screw.

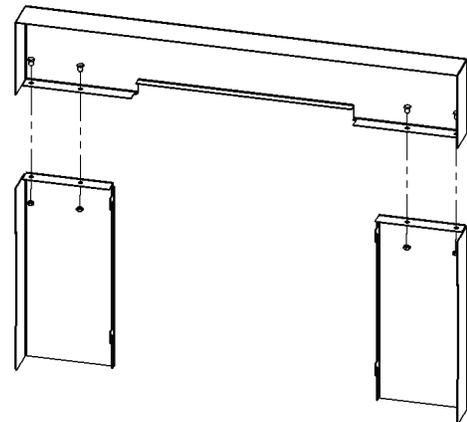


Figure 9. TRNO20 SURROUND ASSEMBLY.



Figure 10. Surround removal.

Firebrick Installation

The package contains 20 full-size firebricks.

With the wood stove in the upright position, install firebricks as follows:

1. Place 4 full-size firebricks against the rear wall.
2. Next install 2 rows of 3 firebricks on the bottom of the unit. Place them to the rear of the firebox.
3. Then, to install each side brick, insert the brick under the retaining flange near the front of the baffle air box on each side of the firebox and then slide the brick to the back of the unit. (NOTE: The retaining flange can be bent outwards slightly if needed to make room for the bricks using a set of vise grips or pliers.
4. Finally install the last 4 firebricks by inserting the side brick under the retaining flange and then the bottom brick under the side brick and lay it down

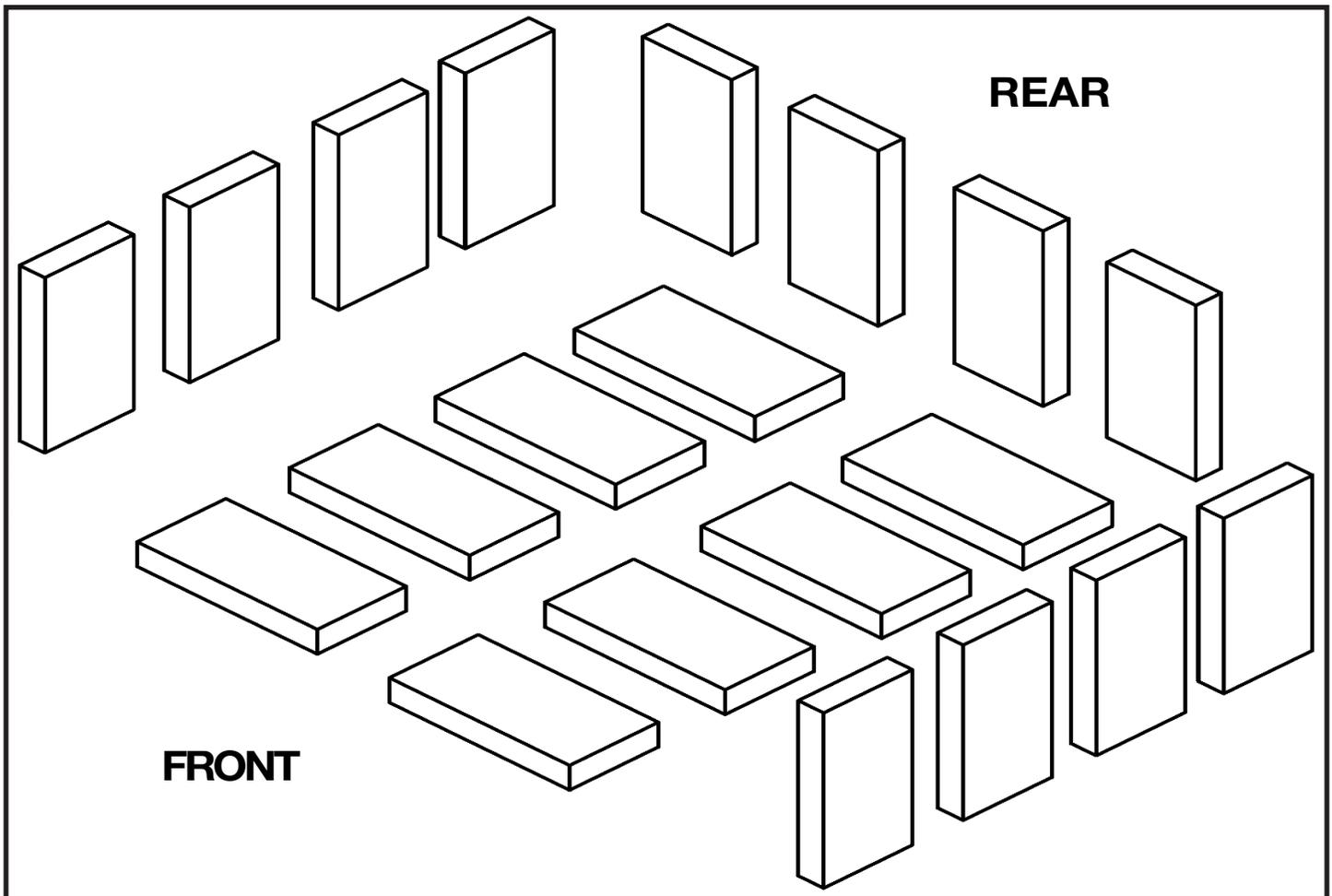


Figure 11. TN20 Firebricks.

Cleaning/Maintenance

Ash Removal

Whenever ashes get above 75mm deep in your firebox, and when the fire has burned down and cooled, remove excess ashes. Leave an ash bed approximately 30mm deep on the firebox bottom to help maintain a hot charcoal bed.

Disposal of Ashes

Ashes should be placed in a metal container with a tight fitting lid. The closed container of ashes should be placed on a non-combustible 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. Other waste should not be placed in this container!

Chimney Liner

It is recommended to inspect the liner and connector monthly and to have the liner cleaned annually or more frequently if required.

WARNING: DO NOT use a vacuum to clean above the baffle Board while installed, you may accidentally damage or remove the Ceramic Baffle Insulation.

Blower Maintenance

The blower requires occasional cleaning to prevent buildup of dust and hair. More frequent cleaning may be required if conditions are dusty or pets are present. This service is best performed by a qualified service technician.

The blower uses sealed bearings and do not require service lubrication.

Blower Removal

Remove the surround by lifting to disengage the securing hooks at the top and bottom of the surround sides and pulling away from the unit. Remove the Blower Control from the side panel.

With a 3/8" socket, remove the two bolts securing the blower mounting assembly to the unit..

Remove the Blower Control from the side panel. Pull the blower assembly and controls off of the stove.

Remove the four screws securing the blower cover to the blower bracket.

Remove the three nuts securing the blower to the mounting bracket and replace the blower.

Reverse all previous steps to re-install the new blower.

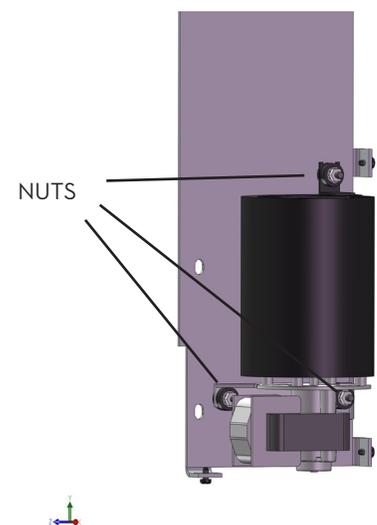


Figure 12. TN20.INS.A.fan removal

Baffle tubes/Board Removal

The Chimney connector pipe should be disconnected from the woodstove to clean and inspect the chimney.

The baffle tubes should be removed from the firebox to prevent damage to the Ceramic Board when sweeping/cleaning and/or inspecting the chimney liner.

Removal

1. With a set of vise-grips, grasp the front baffle tube on the right, slightly away from the baffle air assembly. While squeezing tightly, use a hammer to hit the pliers and pull the tube to the right to disengage the tube from the hole on the left. Allow the tube to hang freely from the hole on the right.
2. Repeat step #1 for second baffle tube.
3. Grasp the front edge of the left half of the baffle board and tilt up at the back. Guide the board down and through the door opening.
4. Grasp the right half of the baffle board and slide it over to the left.
5. Tilt the back of the board up and guide it down and through the door opening.
6. Reverse the process to replace the baffle assembly.

WARNING: DO NOT OPERATE WITH BAFFLE ASSEMBLY OR INSULATION REMOVED.

Installation

1. Insert one half of baffle board above the two back baffle tubes inside the firebox, slide over to the right and allow to rest on the baffle air assembly.
2. Ensure that the second half is inserted to allow the two cuts in the baffle boards to overlap. Insert the other half of the baffle board and allow to rest on the left side baffle air assembly.
3. With the holes facing forward and the notch to the left side, insert a baffle tube into the hole in the baffle air channel on the right at an angle and then raise and insert into the opposite hole on the left side baffle air assembly.
4. With a set of vise-grips, grasp the baffle tube on the left, slightly away from the baffle air assembly. While squeezing tightly, use a hammer to hit the pliers and push the tube to the left to engage the tube in the hole on the left.
5. Repeat steps #3 & #4 with the remaining baffle tube.
6. Slide the baffle board halves together and then separate slightly to ensure there are no gaps on either side of the baffle board.
7. Push baffle board tight against the rear of the firebox.

Troubleshooting

Problem	Cause	Cure
Glass is Dirty	<ol style="list-style-type: none"> 1. Wood is wet 2. Turning down air control (damper) too soon 3. Draft too low 4. Door gasket leakage 	<ul style="list-style-type: none"> • Use dry wood • Do not turn down until <ol style="list-style-type: none"> a) there is a good bed of coals b) the wood is charred • Improper chimney height and / or diameter, -consult dealer • Chimney plugged or restricted, - Inspect and clean • Provide outside air for combustion • Replace gasket • Check latch for proper operation
Excessive Creosote Buildup	See 1,2,3, above.	See 1,2,3, above.
Low Heat Output	<ol style="list-style-type: none"> 1. Wood is wet 2. Fire too small 3. Draft too low 	<ul style="list-style-type: none"> • Use dry wood • Build a larger fire • Chimney plugged or restricted, - Inspect and clean
Won't Burn Overnight	<ol style="list-style-type: none"> 1. Air control is set too high 2. Not enough wood 3. Draft too high 4. Poor quality or wet wood 	<ul style="list-style-type: none"> • Set air control lower • Unsplit wood is preferred for overnight burns • Excessive chimney height and/or diameter • Use good quality, dry wood
Wood Won't Burn	<ol style="list-style-type: none"> 1. Combustion air supply blocked 2. Draft too low 	<ul style="list-style-type: none"> • Check outside air supply for obstruction • Chimney plugged or restricted, -inspect and clean • Chimney oversized or otherwise unsuitable, -consult Dealer

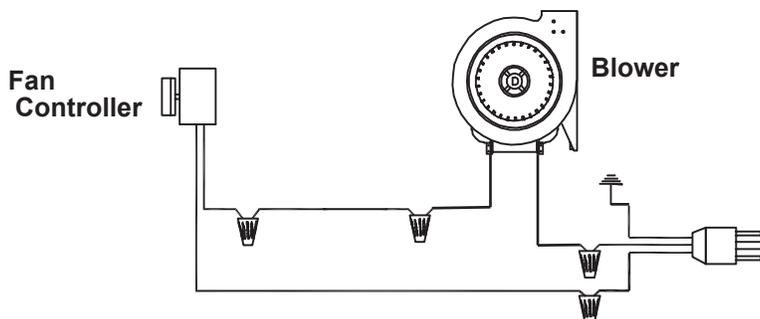


Figure 13. TN20 INSA Wiring dia.

Replacement Parts

WHEN ORDERING, INCLUDE PART NUMBER WITH DESCRIPTION

Parts can be obtained from your local Pacific Energy dealer using these part numbers.

ITEM DESCRIPTION

1. Surround, Standard Size Set,
2. Baffle Board (2pcs.)
3. Baffle Tube Set(4pcs.)
4. Complete Door Assy(c/w Handle)
5. Replacement Glass (c/w gasket)
6. Door Gasket
7. Glass Clamps (4 pc.)
8. Firebrick Set 9"x4 1/2"x1 1/4"(20pcs.)
9. Rear Brick Rail(c/w 2 screws)
10. Quadrant Assembly
11. Fan
12. Trimmable O/S Surround add-on
13. Flame shield

PART NO.

- TN20.SURRA
 TRNO.BAFF
 TRNO.50001101
 TRNO.DRBK
 TRNO.7025
 TRNO.DGKIT
 TRNO.7608
 TRNO.BRIC
 TN20.7625
 TN20.7475.25
 TN20.INSBLOWA
 TN20.7482
 TRNO.7610

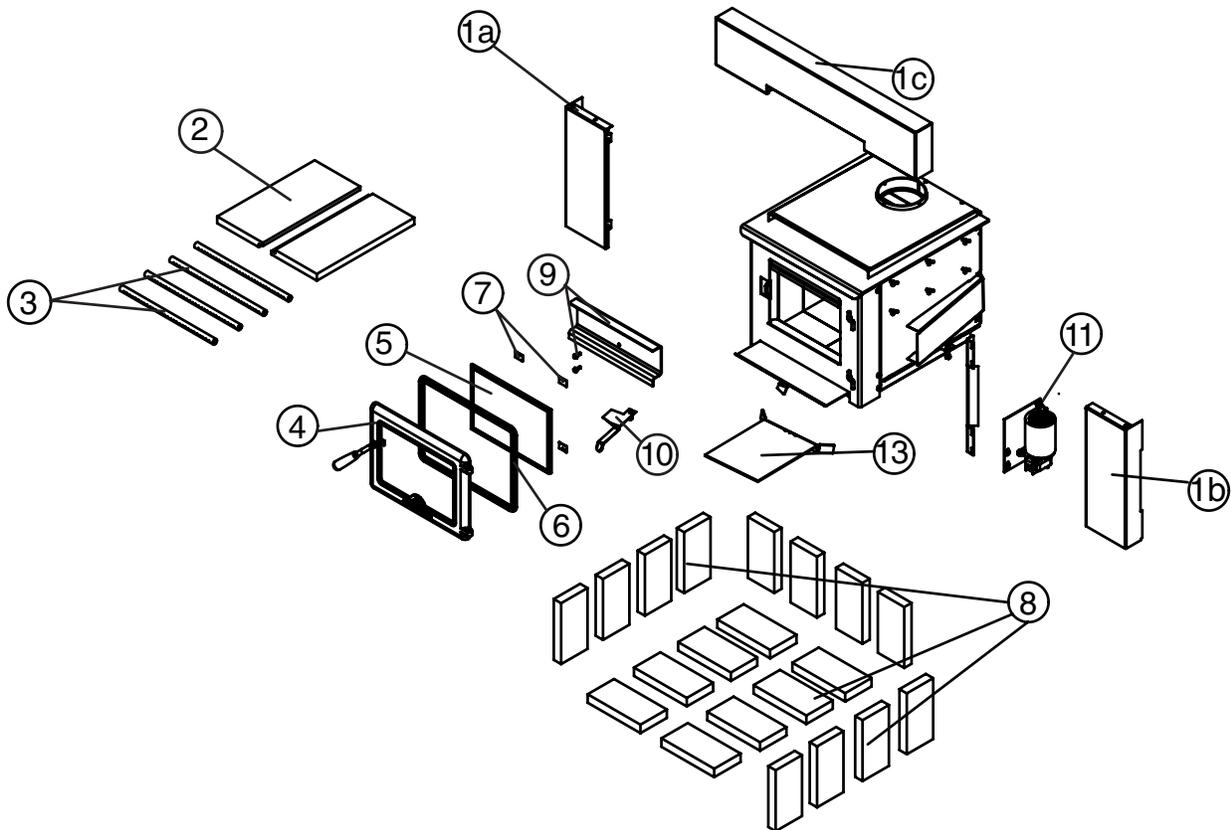


Figure 14. TN20 AS Insert Exploded Parts.

Compliance Plate

 **PACIFIC ENERGY FIREPLACE PRODUCTS LTD.**
2975 ALLENBY RD., DUNCAN, BC V9L 6V8

Model: **TN 20 Insert**
Series: **A** Type: **INSERT**

Tested by: **AUSTRALIAN SOLID FUEL TESTING PTY LTD**
3 GARDEN STREET, MORWELL, VICTORIA

Test report no: **ASFT16029 10 SEPT. 2016**

WHEN TESTED IN ACCORDANCE WITH:
AS/NZS 4012:2014 & AS/NZS4013:2014

MAXIMUM AVERAGE HEAT OUTPUT BURNING HARDWOOD
5.9 kW

OVERALL AVERAGE EFFICIENCY BURNING HARDWOOD
66%

PARTICULATE EMISSIONS FACTOR - 1.8g/kg
CATALYTIC COMBUSTOR - **NO**

Distributed by: PIVOT STOVES AND HEATING CO
234-238 MOORABOOL STREET, GEELONG, VIC 3220
pivotstove.com.au

13/12/16 **MADE IN CANADA** 5050.86AS

Figure 15. 5050.852AS TN 20 INS AUS Rating Label-131216.

The certification label is located on the left side casing of the insert.

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PACIFIC ENERGY FIREPLACE PRODUCTS LTD.

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