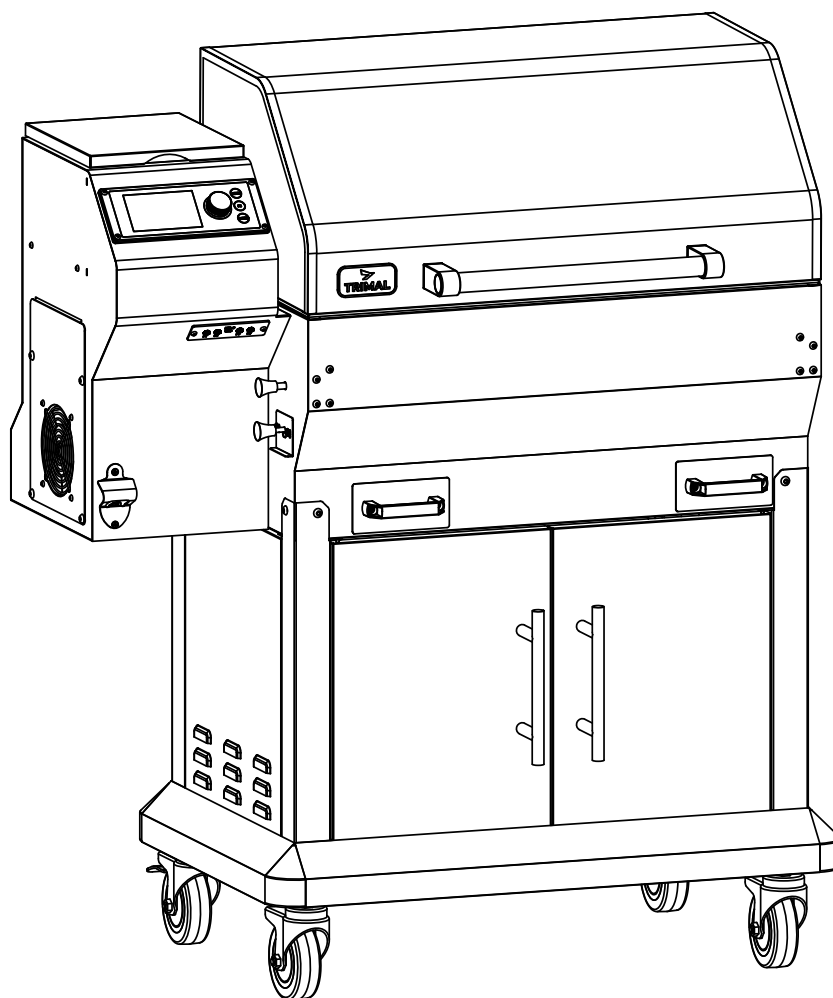




S1 Smoker Grill

Instruction Manual



s1-assembly

Scan QR code or visit help.trimalgrills.com for video instructions and downloadable version of this manual.

This manual is for Trimal S1 Wood Pellet Smoker Grills

Edition 3 - 12th March 2026

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Welcome to Trimal!

Designed right here in Australia, the Trimal S1 is the result of years of hands-on feedback and real-world testing from our passionate local grilling community. From backyard BBQ masters to weekend warriors, every feature of the S1 has been shaped by the people who use it most —Australians who know and love good food, smoky flavour, and the joy of cooking over fire.

Whether you're new to smoking or a seasoned pit master, the Trimal S1 makes it easy to achieve mouthwatering results. Engineered for consistent heat control, effortless smoke management and unrivalled versatility, it brings professional-grade performance into your backyard without the complexity.

Join the Trimal community to swap recipes, share tips, and connect with fellow grillers across the country. With an active network of users sharing ideas, experiments, and inspiration, you'll always have support as you explore everything from slow-cooked brisket to smoked seafood and classic Aussie roasts.

Join the Trimal Community



Trimal Knowledge Centre



1. Grill Safety

1.1. Safety Warnings

INSTRUCTION MANUAL

- Read and follow all warnings and instructions before assembling and using this appliance.
- **DO NOT DISCARD THIS INSTRUCTION MANUAL**

WHERE TO USE

- For outdoor use only.
- For household use only.
- Store indoors or under a waterproof cover when not in use.
- Hopper and grill lids must be kept closed while the grill is off or when operating but not attended.
- The grill must be positioned on a flat, level surface for safe and reliable operation.
- Take care when moving the grill as it can tip over, especially on uneven surfaces. Lock the wheels when in position ready for use. Never move the grill while it's operating or still hot.
- Do not use the grill near combustible materials, adhering to the following minimum distances:
 - Minimum clearance from combustible material to the side or rear of the grill body is 300mm.
 - Minimum clearance from combustible material above the closed grill lid is 800mm.
- Minimum clearance from non-combustible materials to the side or rear of the grills body is 100mm.

FLAMMABLE LIQUIDS

- Never operate this grill within 7.5 metres of any flammable liquids, or use flammable liquids to light the grill.

POWER SUPPLY

- Connect the grill to a properly earthed 10 Amp (or higher) AC power outlet, ensuring the circuit is protected by a Residual Current Device (RCD) in the household switchboard. A 10 Amp or higher-rated extension lead may be used if required.
- The appliance should be supplied through a residual current device (RCD) having a rated residual operating current not exceeding 30 mA.
- The power supply cord should be regularly examined for signs of damage and the appliance is not to be used if the cord is damaged.
- If the power cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.
- Always disconnect the power supply (switch off and unplug) before attempting any repairs.
- This appliance is to be connected to a socket-outlet having an earthing contact.
- This appliance incorporates an earth connection for functional purposes only.

CARBON MONOXIDE WARNING

- Follow these guidelines to prevent this colourless, odourless gas from poisoning you, your family or others.
- Know the symptoms of carbon monoxide poisoning: headache, dizziness, weakness, nausea, vomiting, sleepiness, and confusion. Carbon monoxide reduces the blood's ability to carry oxygen.
- Low blood oxygen levels can result in loss of consciousness and death. See a doctor if you or others develop cold or flu-like symptoms while cooking or in the vicinity of this appliance.
- Carbon monoxide poisoning, which can easily be mistaken for a cold or flu, is often detected too late.
- Alcohol consumption and drug use increase the effects of carbon monoxide poisoning.
- Carbon monoxide prevents blood from carrying oxygen and is especially toxic to mother and child during pregnancy, infants, the elderly, smokers and people with blood or circulatory system problems, such as anaemia, or heart disease.

CHARCOAL

- Charcoal must only be used in the Charcoal Rotisserie Kit (see 8.4).
- Charcoal must not be lit inside the grill.
- Charcoal must be lit in a charcoal chimney, allowed to burn until the surface turns a white colour and flames die down, then may be carefully poured into the charcoal trays.

USERS

- Children should be supervised to ensure that they do not play with the appliance.
- Cleaning and user maintenance shall not be made by children without supervision.
- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

CLEANING

- Regularly clean the grill in accordance with the guidelines provided in this manual. Allowing grease and residue to build up can increase the risk of hazardous grease fires or unexpected flameouts.

HOT SURFACES

- This grill will be extremely hot during operation and for some time after turning off.
- Accessible parts may become hot during use. Young children should be kept away.
- Take care to avoid burns.
- Use heat-resistant gloves.

WOOD PELLETS

- Always store wood pellets in a dry location, away from heat or ignition sources. Only add wood pellets to the hopper when about to use the grill. Remove all wood pellets if not planning to use the grill for a week or longer.
- It is NOT recommended to store pellets close to the underside of grill (high in cabinet) due to high temperatures.
- Only use wood pellets which are made specifically for pellet grills and no larger than 6mm in diameter and 30mm long.



The symbol on the product or on its packaging indicates that this product may not be treated as household waste. Instead it should be handed over to the applicable collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. For more detailed information about the recycling of this product, please contact your local council office or your household waste disposal service.

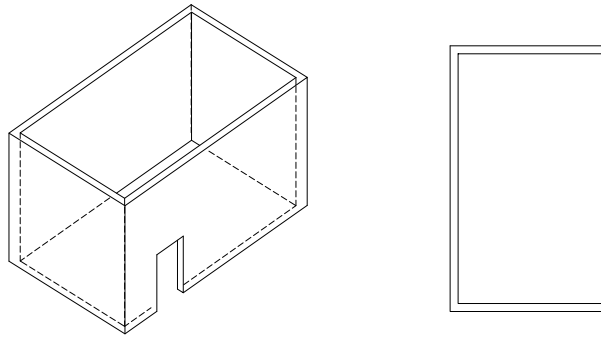
1.2. Total Fire Ban Days

- This grill uses solid fuel wood pellets which are generally not permitted for use on total fire ban days.
- Use of the Dehydrator and Fan Only modes that don't burn wood pellets may be permitted.
- Check with relevant authorities for fire ban and related safety guidelines and restrictions applicable to your local area before using this grill on total fire ban days or days of high fire danger.

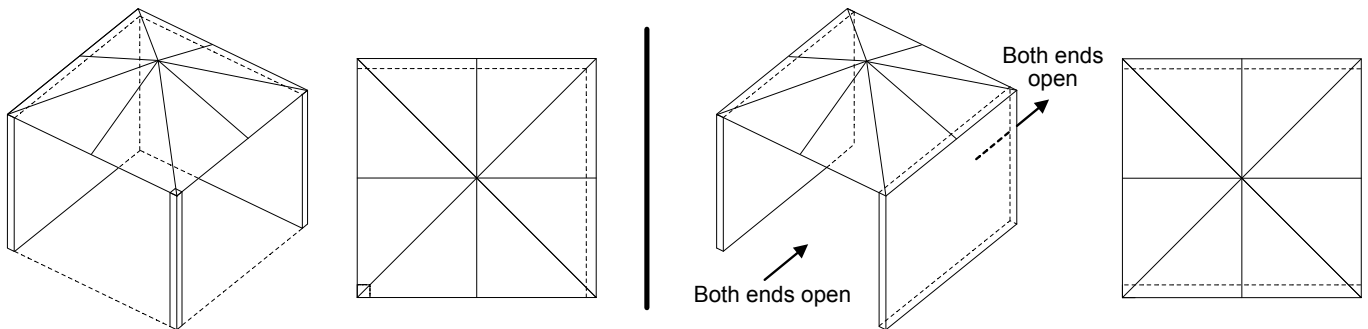
1.3. Outdoor Enclosure Guidelines

In accordance with AS/NZS 5601.1:2022 – Gas Installations, outdoor grills such as the Trimal S1 must be installed with adequate ventilation to ensure safe operation. The diagrams below illustrate the minimum ventilation clearances required to comply with this standard and maintain proper airflow. If the S1 grill is to be installed in a partially or fully enclosed outdoor area, additional ventilation measures may be necessary. Always consult local regulations and engage a qualified professional to assess, size, and install a compliant active ventilation system where required.

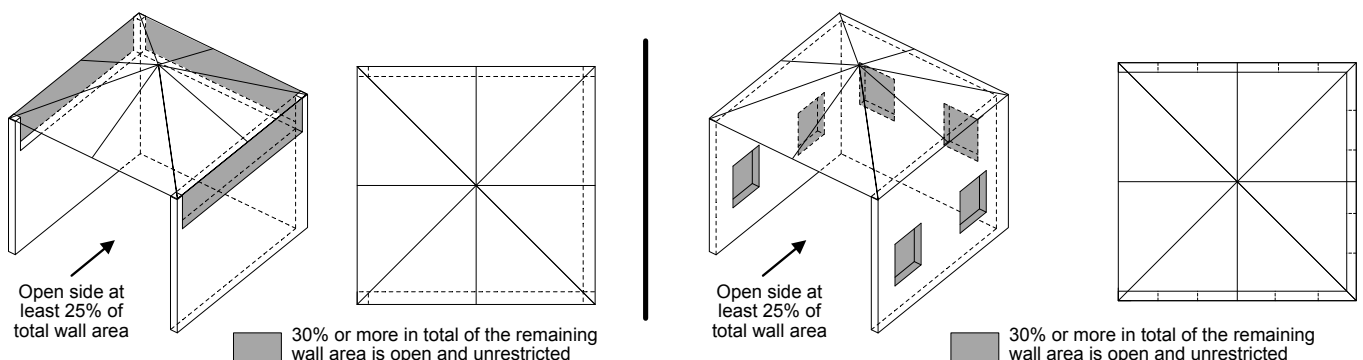
The area has walls on all sides but at least one permanent opening at ground level and no overhead cover.



The area has a partial enclosure that includes an overhead cover and no more than two walls.



The area is partially enclosed including an overhead cover and three or more walls with at least 25% of the total wall area completely open AND at least 30% of the remaining wall area is open and unrestricted.

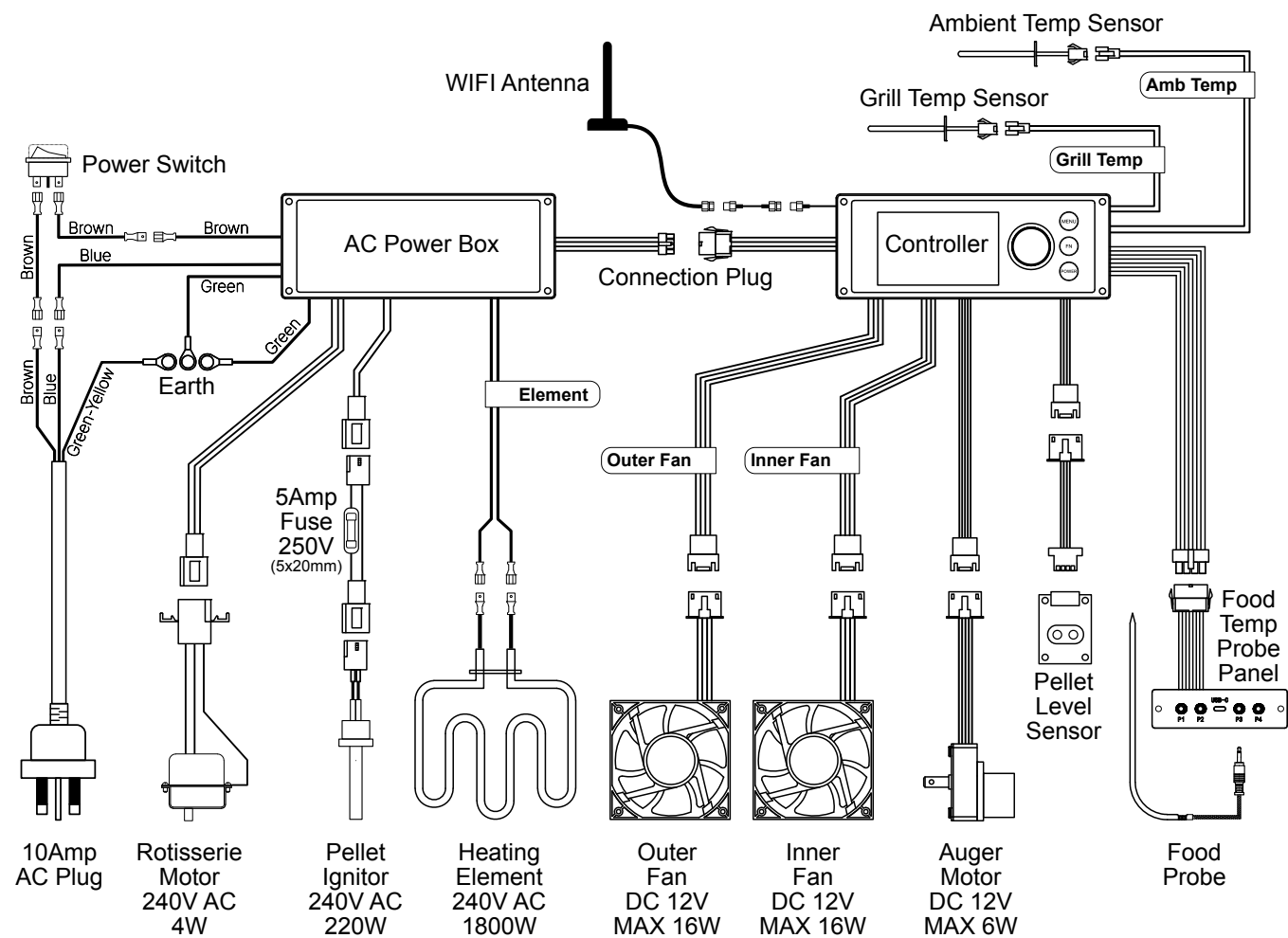


2. Grill Information

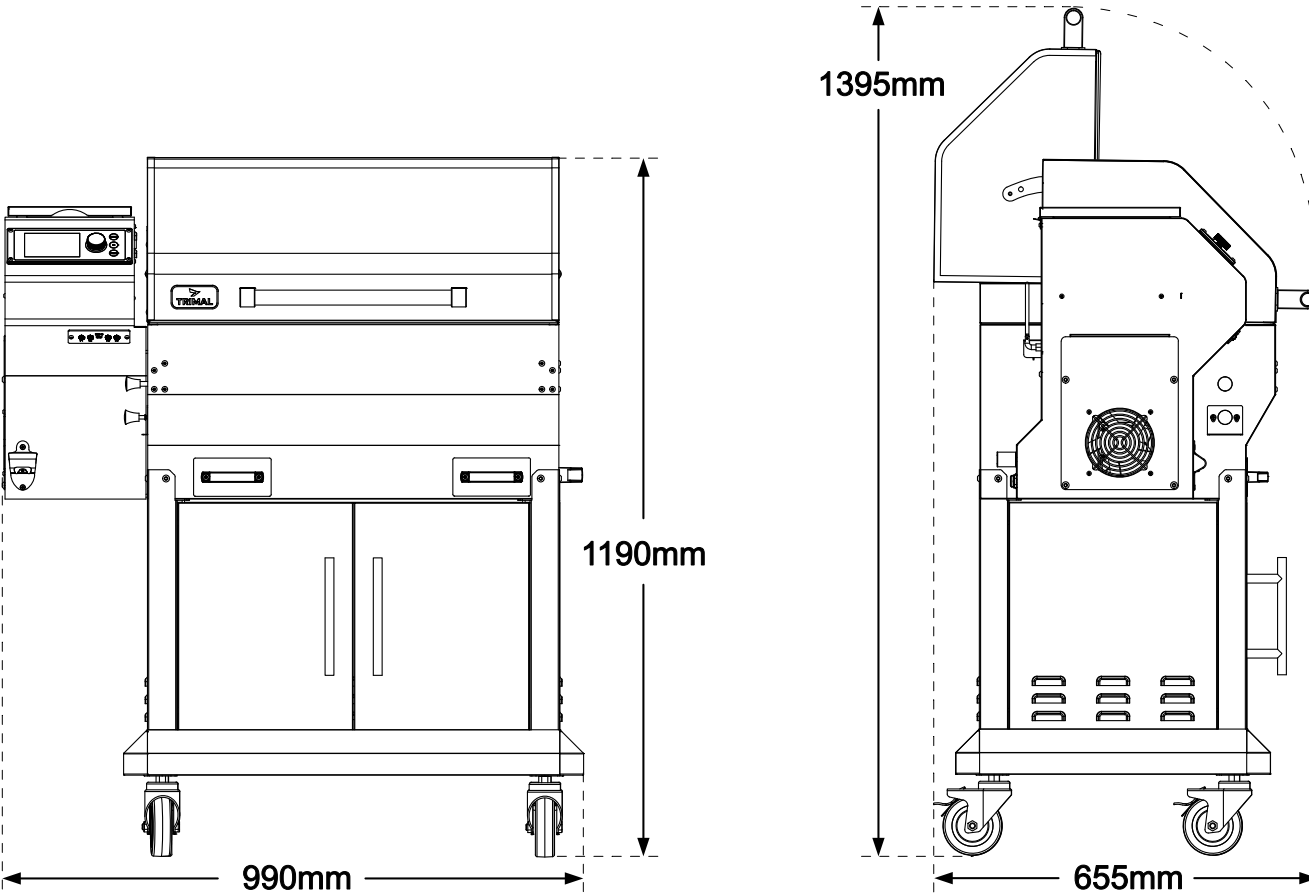
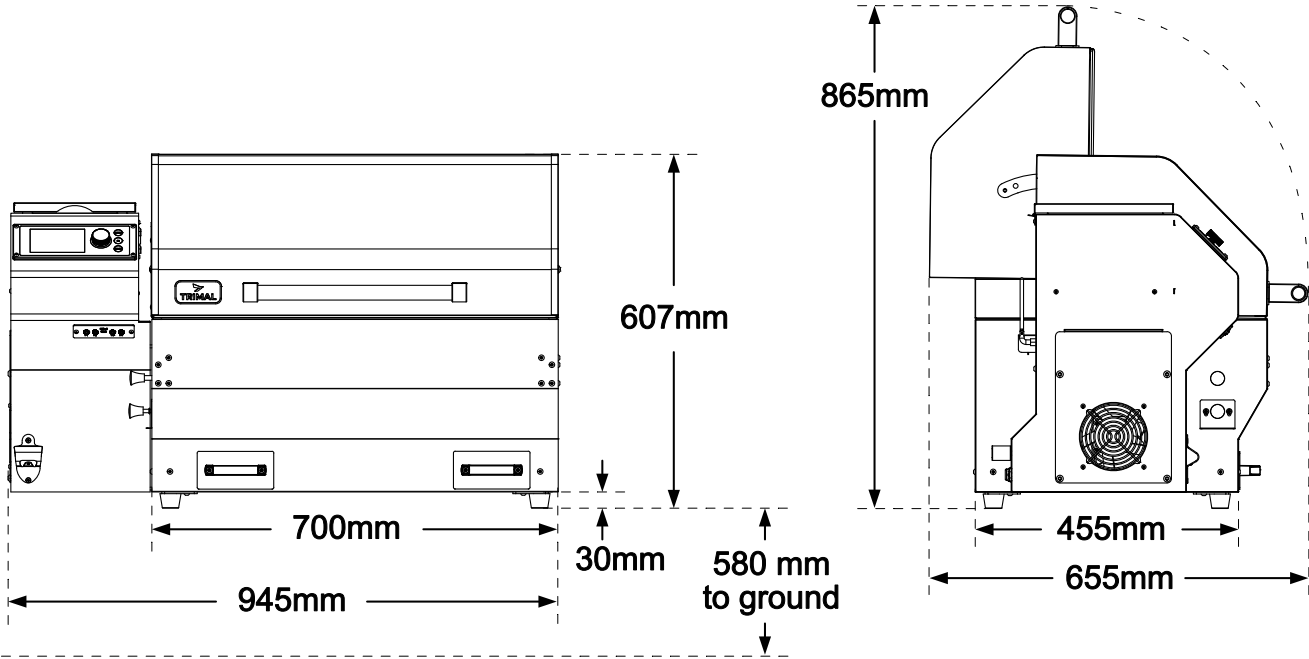
2.1. Specifications

Grill Model	GR-S1 (Electric wood pellet smoker grill for outdoor use)
Controller Display	4.3" 480×800 IPS TFT Colour Display (900 cd/m² brightness)
Wireless Connectivity	Bluetooth and WIFI (2.4GHz)
Bottom Grilling Area	637 × 464 mm (0.3 m²)
Top Grilling Area	622 × 352 mm (0.22 m²)
Total Grilling Area	0.52 m² (806 square inches)
Power Supply	220~240VAC 50Hz
Max Power Usage	1850W (heating element installed) 270W (no heating element)
Hopper Capacity	6 kg (25+ hours cooking time at 100°C)
Assembled Dimensions	990mm wide x 655mm deep x 1190mm tall
Ingress Protection Rating	IPX4

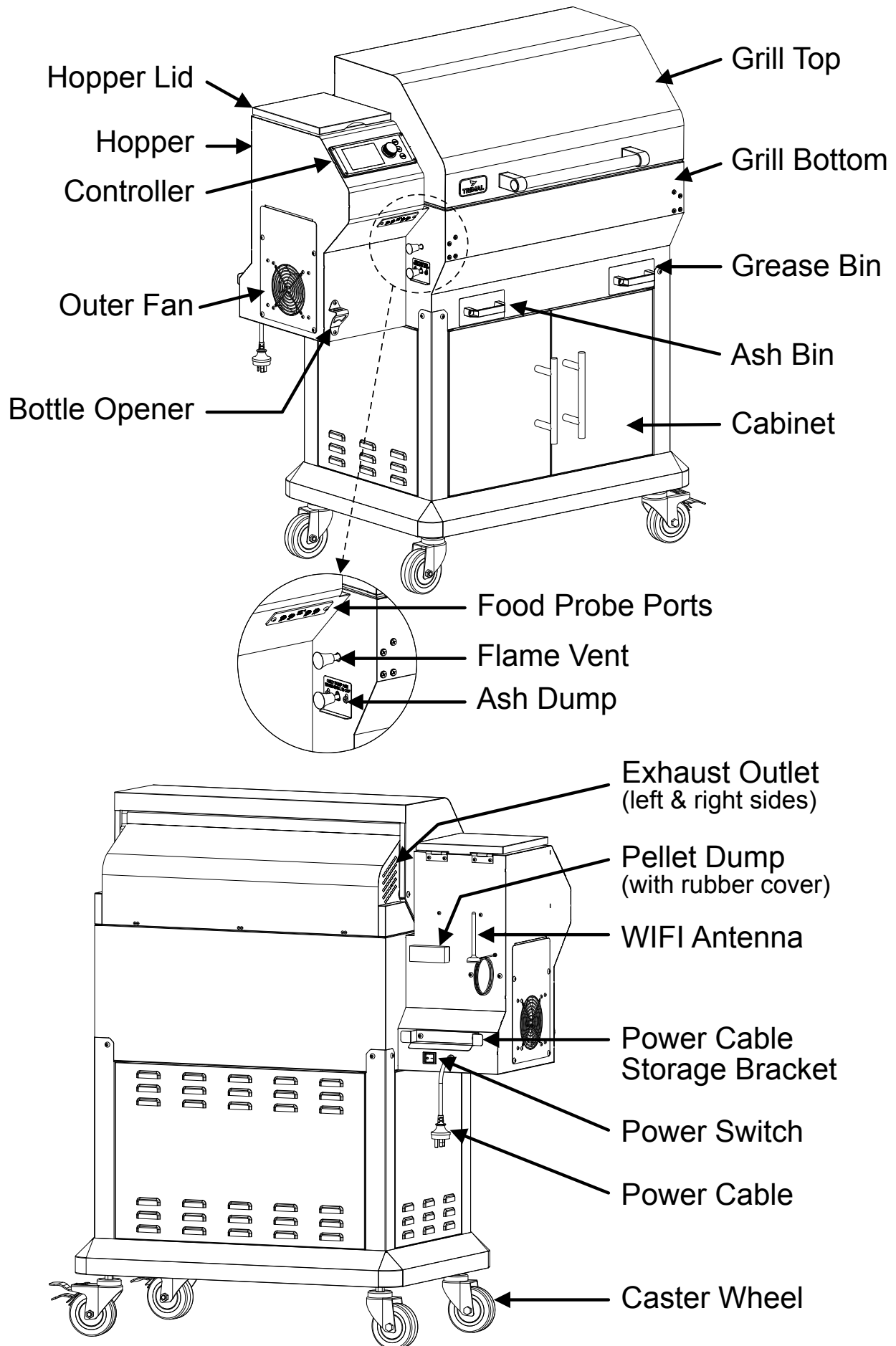
2.2. Electrical Wiring Diagram



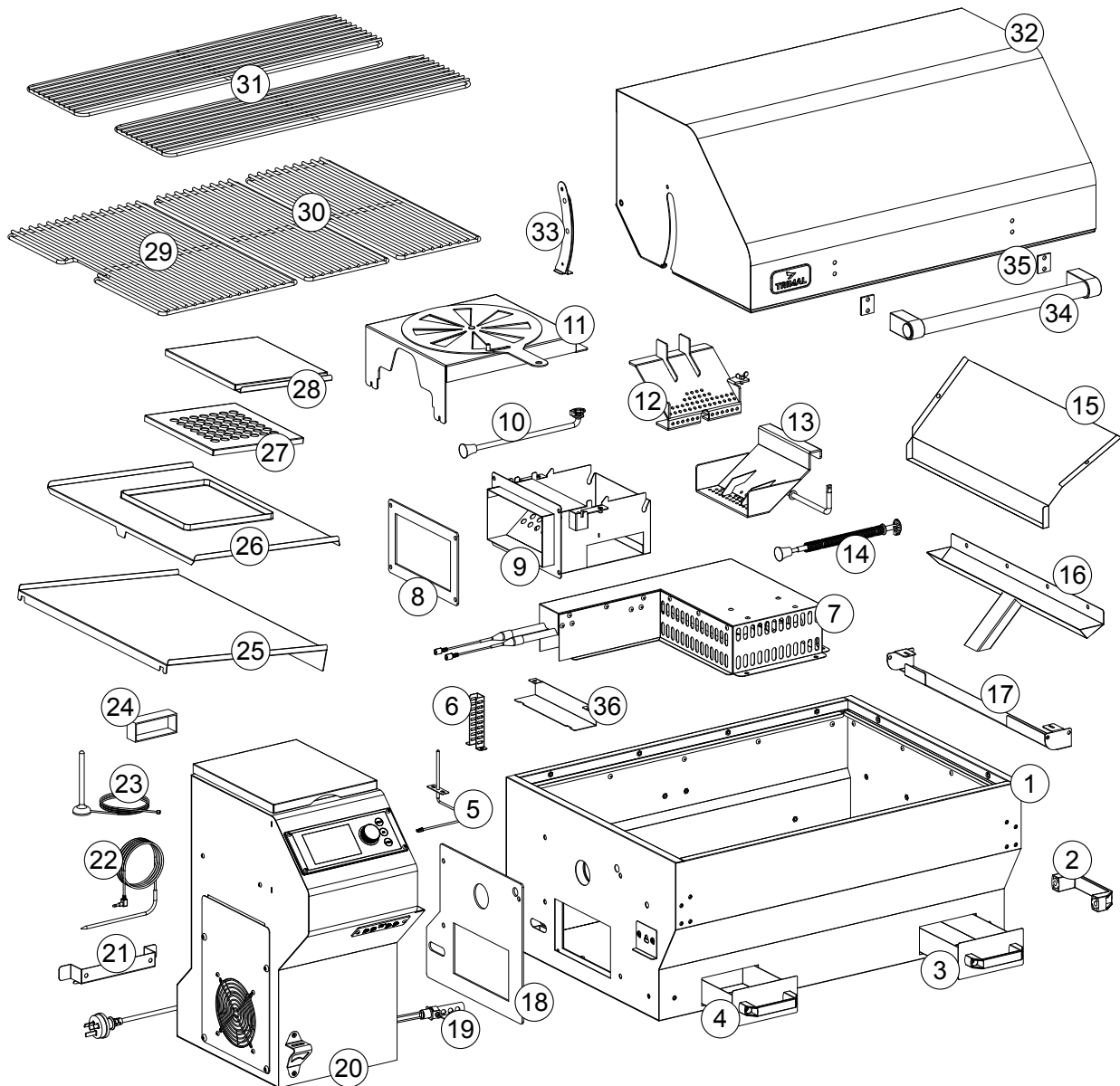
2.3. Grill Dimensions



2.4. Grill External Parts Diagram



2.5. Grill Exploded Parts Diagram



No.	Part Name	Part SKU	Qty
1	S1 Grill Bottom	GR-CP-003-01	1
2	Side Handle	GR-CP-009-26	1
3	Grease Bin	GR-CP-007-25	1
4	Ash Bin	GR-CP-005-25	1
5	Grill Temperature Sensor	GR-EL-002-01	1
6	Temperature Sensor Cage	GR-CP-003-12	1
7	Electric Heating Element	GR-EL-008-01	1
8	Fire Box Gasket	GR-CP-005-40	1
9	Fire Box	GR-CP-005-01	1
10	Heat Baffle Arm Assembly	GR-CP-006-03	1
11	Heat Baffle Assembly	GR-CP-006-01	1
12	Left Fire Grate	GR-CP-005-20	1
13	Right Fire Grate	GR-CP-005-21	1
14	Ash Dump Arm Assembly	GR-CP-005-04	1
15	Grease Wall	GR-CP-007-23	1
16	Grease Drain	GR-CP-007-27	1
17	Mid Support Rail	GR-CP-007-24	1
18	Hopper Gasket	GR-CP-008-16	1

No.	Part Name	Part SKU	Qty
19	Pellet Ignitor & Sleeve	GR-CP-005-28	1
20	S1 Hopper	GR-CP-008-01	1
21	Power Cable Bracket	GR-CP-008-15	1
22	Food Temperature Probe	GR-EL-002-03	2
23	WIFI Antenna	GR-EL-009-02	1
24	Pellet Dump Cover	GR-CP-008-17	1
25	Right Drip Tray	GR-CP-007-22	1
26	Left Drip Tray	GR-CP-007-30	1
27	Left Drip Tray Vent	GR-CP-007-31	1
28	Left Drip Tray Cover	GR-CP-007-32	1
29	Bottom Left Grill Rack	GR-CP-004-30	1
30	Bottom Mid-Right Grill Rack	GR-CP-004-31	2
31	Top Grill Rack	GR-CP-004-22	2
32	S1 Grill Top	GR-CP-002	1
33	Lid Rotisserie Slot Cover	GR-CP-001-11	1
34	Grill Lid Handle	GR-CP-009-02	1
35	Lid Arm Pad	GR-CP-009-22	2
36	Temperature Sensor Cable Cover	GR-CP-003-13	1

3. Grill Assembly

3.1. Unpacking Boxes

Trimal S1 Includes

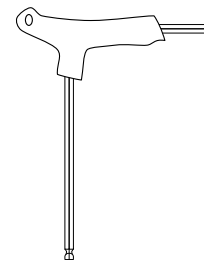
- GR-S1-03-BOT: contains bottom half of the grill, this manual and the tools. **Open this box first!**
- GR-S1-03-TOP: contains the lid, top section of the grill, grill racks and drip trays.
- GR-S1-03-HOPP: contains the hopper and Wifi antenna.
- GR-S1-03-LCAB: contains cabinet and legs; **or** GR-CP-014-01: contains benchtop feet.

Unpacking Tips

- Unpack and lay out all components neatly before beginning the assembly process checking them against the packing list in each box. Please contact support if any items are missing.
- Follow the step-by-step instructions in order, starting with the grill bottom.
- Avoid sitting metal components on concrete or brick surfaces as they may become scratched.
- Keep screws separated into their different types/sizes to avoid confusion during assembly.

3.2. Tools Required

- Hex wrenches (Allen keys) are provided for tightening all the hex socket screws.
- If using a power tool (with hex tool bit), use a LOW torque setting and always start the thread by hand first to avoid crossing-threading!
- Some accessories require a standard Phillips head screwdriver (not supplied)



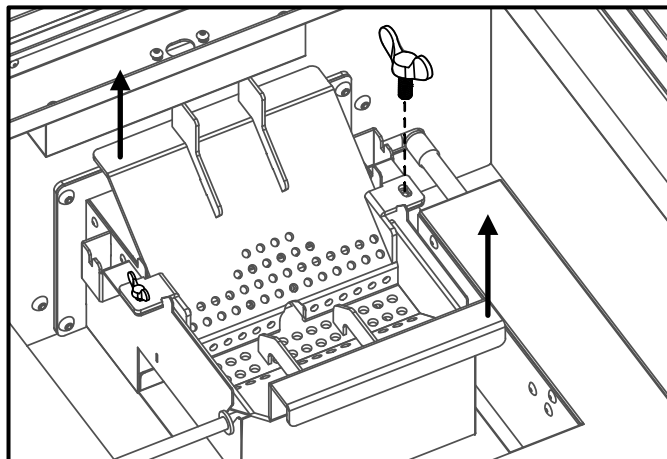
3.3. Fastening Screws

- Refer to the table below for all the screws used to assemble the grill and mounting options.
- Screws are packed in clearly labelled (A, B, C....) plastic zip-lock bags. Some are already attached to components on the grill.

Image	Code	Part Name	SKU
	A	M4x10 Hex Screw (SS)	FA-001-22
	B	M5x12 Hex Screw (Black)	FA-002-52
	C	M5x12 Hex Screw (SS)	FA-002-23
	D	M6x16 Hex Screw (Black)	FA-003-53
	E	M6x9x16 Sleeved Hex Screw (SS)	FA-003-24
	F	M6x30 Hex Screw (SS)	FA-003-25
	G	M4x10 Hex Screw (Black)	FA-001-51
	H	M6x10x20 Sleeved Hex Screw (SS)	FA-003-26
	J	M6x12 Flat Washer (Black)	FA-099-20
	K	M8x16 Flat Washer (SS)	FA-100-20
	N	M4x10 Butterfly Screw (SS)	FA-050-20

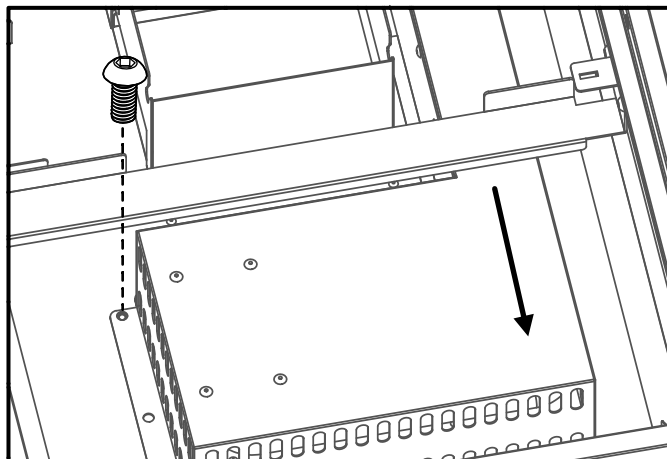
3.4. Remove Fire Grates

- The left and right fire grates are already sitting in the fire box. They need to be removed before the grill bottom is turned over for cabinet or feet attachment.
- Remove the two N butterfly screws and lift out the left fire grate.
- To avoid losing them, thread the butterfly screws back into the fire box.
- Lift out the right fire grate.



3.5. Remove Heating Element

- Remove the single C screw that secures the heating element in place and carefully slide the element out from underneath the middle support rail. Place the heating element off to the side for now.
- The screw will be used together with a second C screw to secure the heating element in step 3.13.



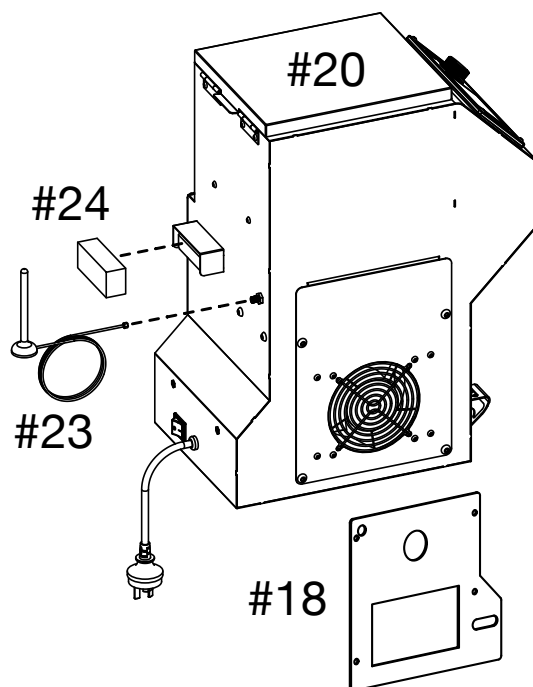
3.6. Hopper Unpacking

Carefully unpack the hopper (#20), then:

- Attach the Wifi antenna to the brass nut on the back.
- Refer to section 4 for instructions on how to connect the controller to the Trimal Aus App and update the software. The updates can take some time, so can be completed while assembling the grill.

Parts

- #23 is the Wifi antenna that screws onto the brass thread on the rear of the hopper. The magnet base can be stuck to the rear, side or front of the hopper (not on hot parts of the grill).
- #24 is a cover for the pellet dump. It helps avoid accidental dumping of pellets and protects against water ingress in the case of rain.
- #18 is a gasket, used to seal between the hopper and grill body. Do not throw this away as it will be used later in the assembly process.



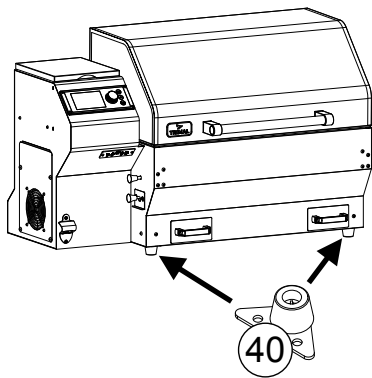
Turning on the controller before attaching to grill body - SAFETY WARNING!

- The hopper may be plugged into power before attaching to the grill so that it can be connected to Wifi and software updates completed.
- Do NOT run any operational tests, or “fire up” the grill as the pellet ignitor will get red hot and could start a fire or cause serious burns!

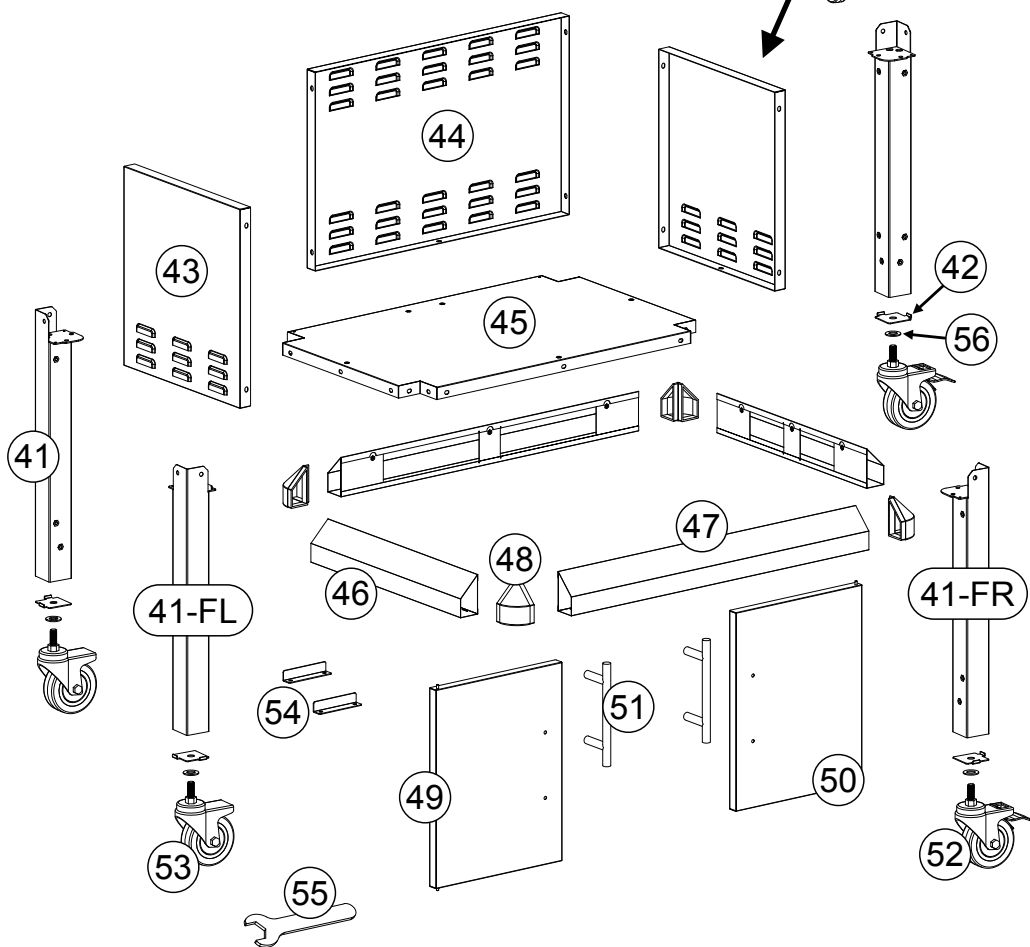
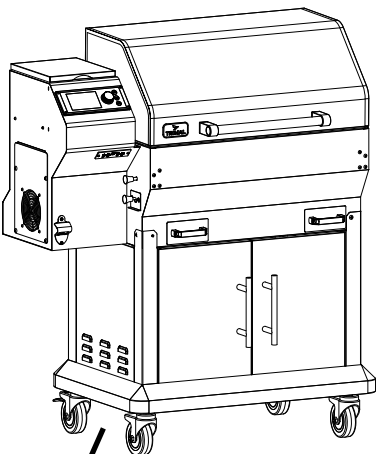
3.7. Mounting Options

Your Trimal S1 includes either benchtop feet or a full cabinet with castor wheels, depending on the option selected at the time of purchase. See summary of components below.

Benchtop Feet (GR-CP-014-01)



Cabinet with Castor Wheels (GR-S1-03-LCAB)



No.	Part Name	Part SKU	Qty
40	Benchtop Foot	GR-CP-014-02	4
41	Rear Leg	GR-CP-011-21	2
41-FL	Front Left Leg	GR-CP-011-26	1
41-FR	Front Right Leg	GR-CP-011-27	1
42	Skirt Locking Plate	GR-CP-011-25	4
43	Cabinet Side Panel	GR-CP-012-21	2
44	Cabinet Rear Panel	GR-CP-012-20	1
45	Base Panel	GR-CP-011-20	1
46	Side Skirt	GR-CP-011-24	2
47	Front-Rear Skirt	GR-CP-011-23	2

No.	Part Name	Part SKU	Qty
48	Skirt Corner	GR-CP-011-22	4
49	Left Cabinet Door	GR-CP-012-22	1
50	Right Cabinet Door	GR-CP-012-23	1
51	Cabinet Door Handle	GR-CP-009-24	2
52	Locking Wheel	GR-CP-010-20	2
53	Non-locking Wheel	GR-CP-010-21	2
54	Door Stop	GR-CP-012-24	2
55	16mm Spanner	TL-002-10	1
56	M12x24 Flat Washer	FA-101-20	4

3.8. Benchtop Feet Assembly (optional)

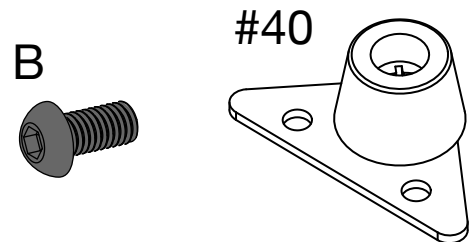
Recommended Use

- The benchtop feet are designed for situations where the grill is placed on a flat bench surface.
- An ideal bench height is around 580mm, giving a cooking rack height of 900mm for comfortable use.
- The bench surface must be constructed from materials rated to withstand temperatures of at least 150°C.
- For detailed guidance on integrating the Trimal S1 into a custom outdoor kitchen setup, please scan the QR code.



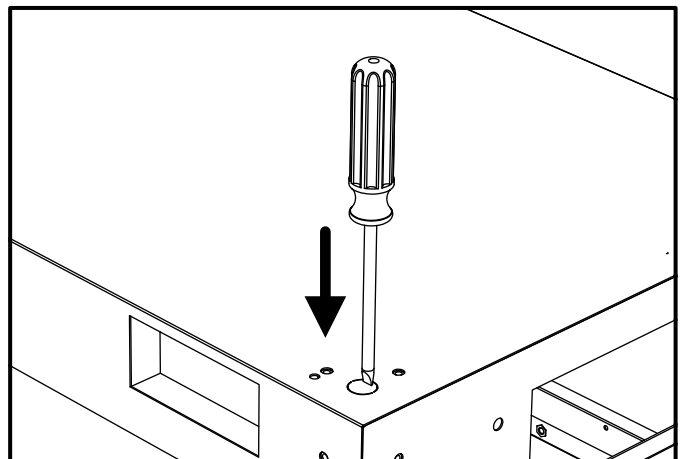
Components Used

- 1 x #40 (Benchtop Foot)
- 16 x B (Black M5x12 HEX Screw)
 - 8 screws used for feet attachment
 - 8 screws used to plug the leg attachment holes in grill bottom that are not used.



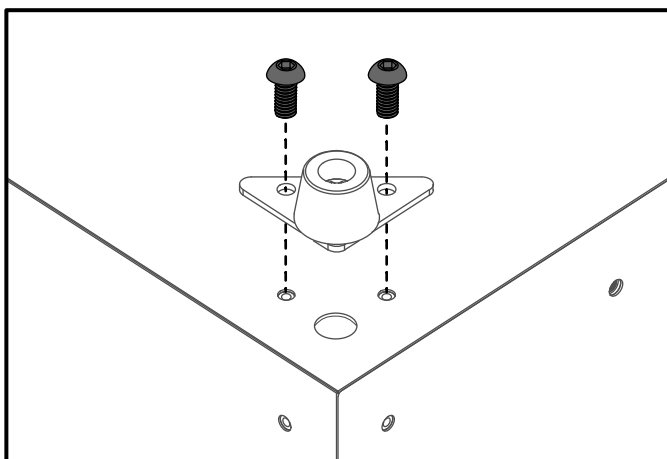
Step 1. Punch Out Panel

- Four cut-out panels block the holes where the foot bolt extends into the bottom of the grill bottom and must be removed.
- Use a screwdriver or other blunt object to force one side of the panel down. Twist around multiple times until it breaks off.
- Remove all 4 panels.



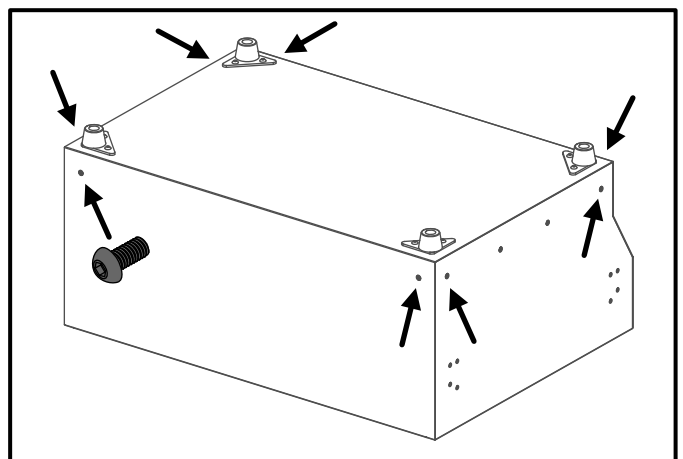
Step 2. Assemble Feet

- Use 2 x B screws to secure each foot.



Step 3. Plug Unused Holes

- Plug the 8 unused holes (for leg mounting) in the grill bottom with remaining B screws.

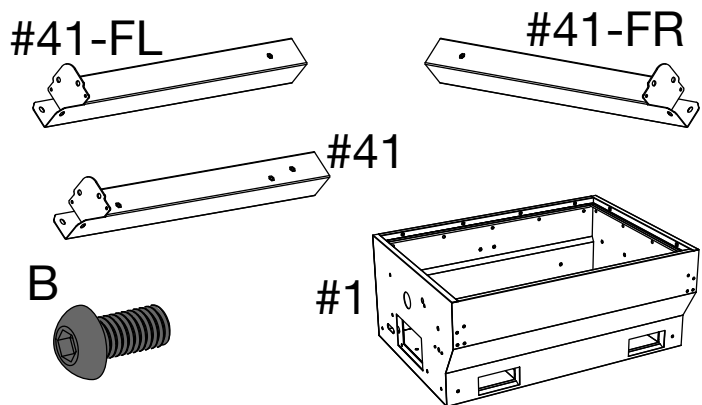


3.9. Cabinet Assembly (optional)

3.9.1. Legs & Base

Components Used

- 1 x #1 (S1 Grill Bottom)
- 2 x #41 (Rear Leg)
- 1 x #41-FL (Front Left Leg)
- 1 x #41-FR (Front Right Leg)
- 16 x B (Black M5x12 HEX Screw)

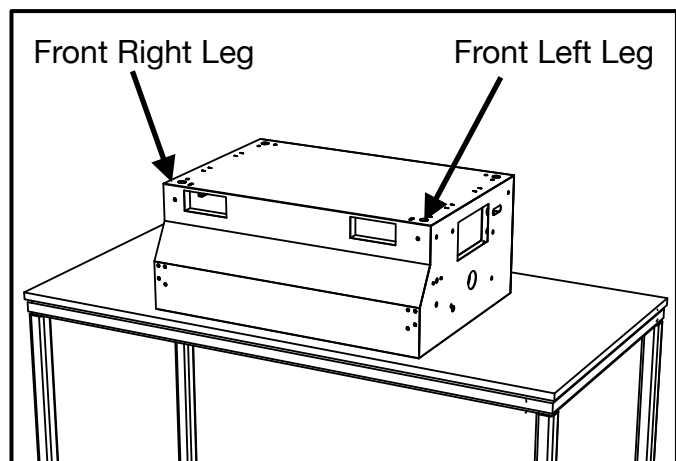


Helper Required!

The assembly is most safely and more easily completed with the help of another person!

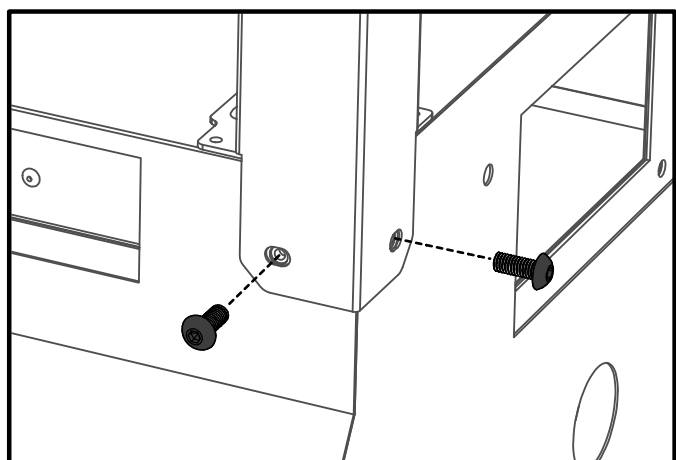
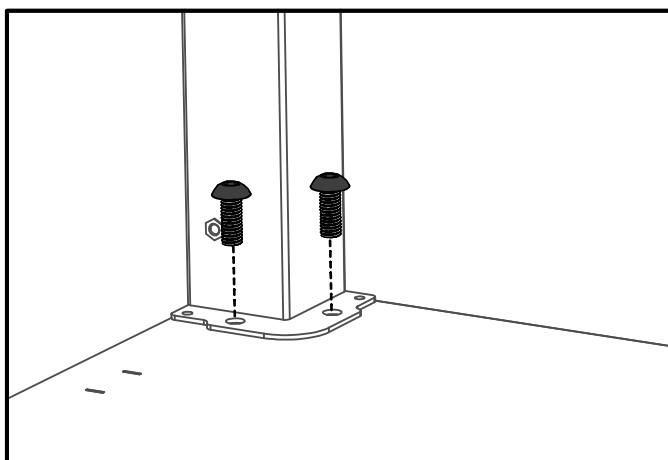
Step 1 - Place on Table

- If possible lift the grill bottom onto a table for the assembly process, as it will be easier than on the ground.
- If done on the ground, lay down cardboard, or a soft mat to protect the grill surface.
- There are 2 x Rear Legs, and specific Front Left and Front Right legs.
- With the grill bottom up-side-down note that LEFT and RIGHT are reversed!



Step 2 - Attach Legs

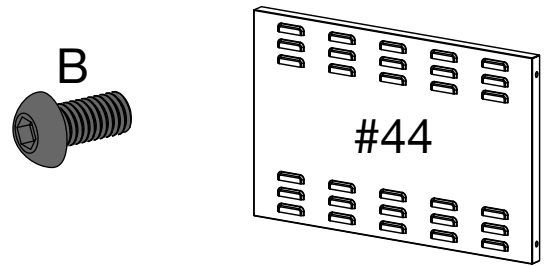
- Use 4 x B screws to secure each leg to the base and sides of the grill bottom.



3.9.2. Cabinet Rear Panel

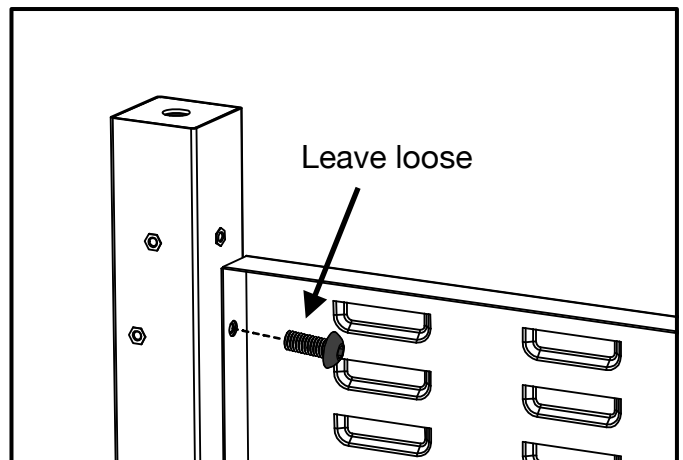
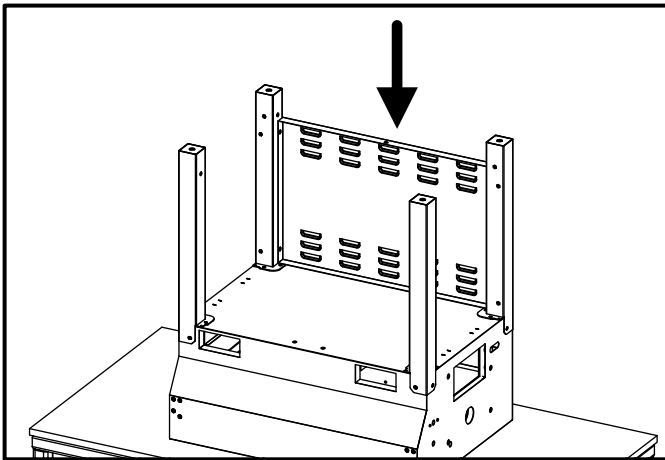
Components Used

- 1 x #44 (Cabinet Rear Panel)
- 4 x B (Black M5x12 HEX Screw)



Attach Cabinet Rear Panel

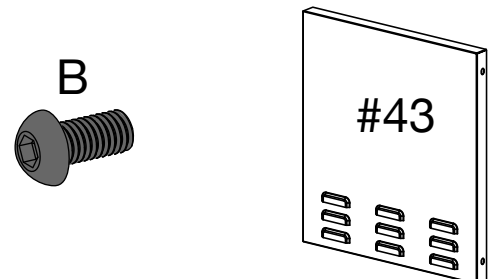
- Lower the cabinet rear panel in between the rear legs.
- The legs may need to be pulled apart slightly to allow the panel to fit in.
- Use 4 x B screws to secure in place, ensuring the panel is flush with the rear of the grill and legs.
- Leave the top left and right screws loose for the moment. They can be tightened once the base panel has been attached.



3.9.3. Cabinet Side Panels

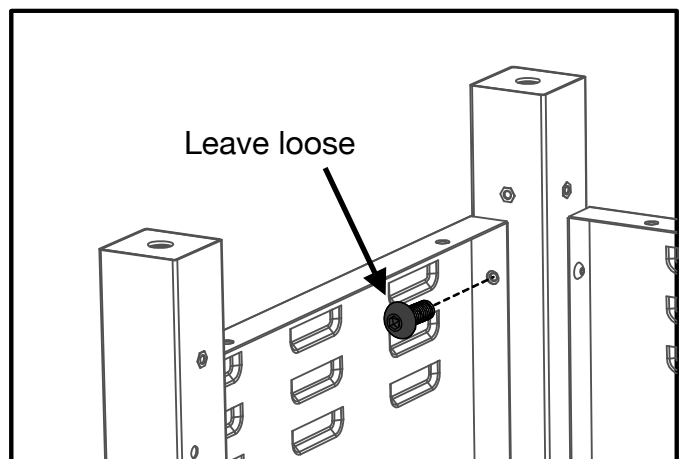
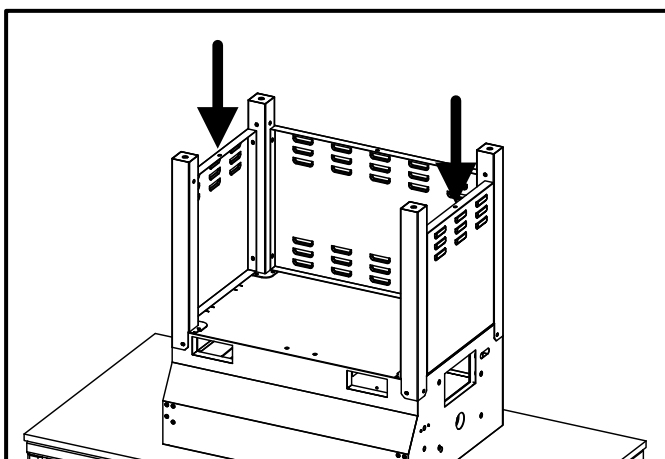
Components Used

- 2 x #43 (Cabinet Side Panel)
- 8 x B (Black M5x12 HEX Screw)



Attach Cabinet Side Panels

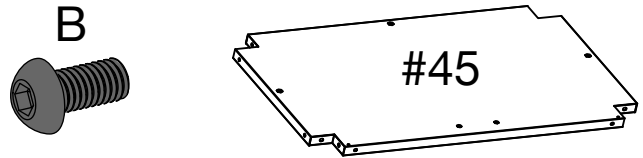
- Lower the cabinet side panels in between the front-rear legs.
- Use 4 x B screws to secure each side panel in place, ensuring they are flush with the sides of the grill and legs. Leave the top screws loose for the moment.



3.9.4. Cabinet Base Panel

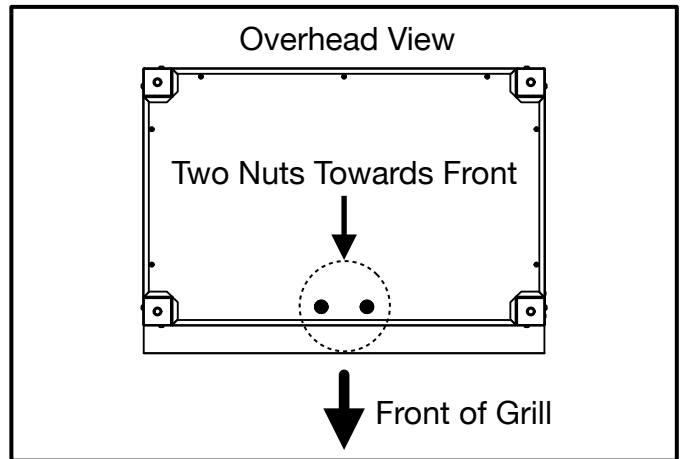
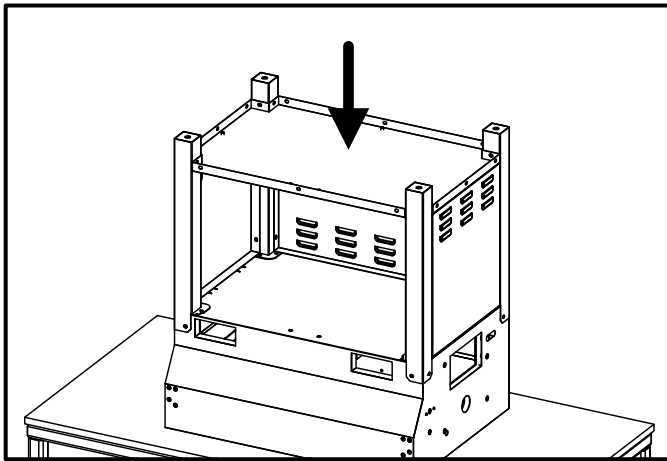
Components Used

- 1 x #45 (Cabinet Base Panel)
- 11 x B (Black M5x12 HEX Screw)



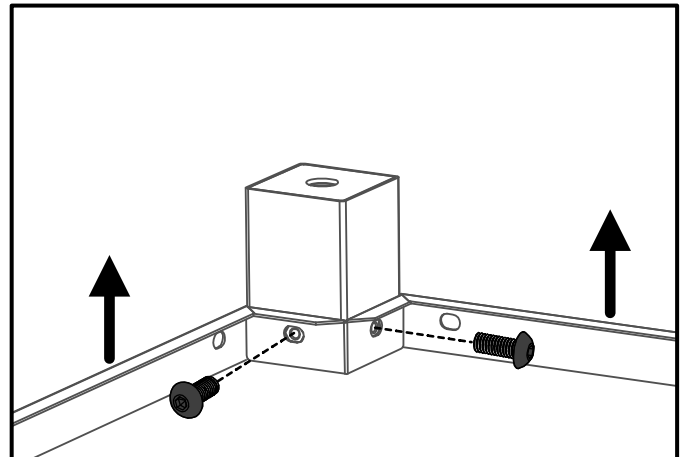
Step 1 - Position Base Panel

- Lower the cabinet base panel in between the four legs with the two nuts (for door stop) towards the front of the grill.
- The legs may need to be pulled apart slightly to allow the panel to drop into place.
- If the legs are too tight to fit in the base panel, loosen off the cabinet rear and side panel top screws.



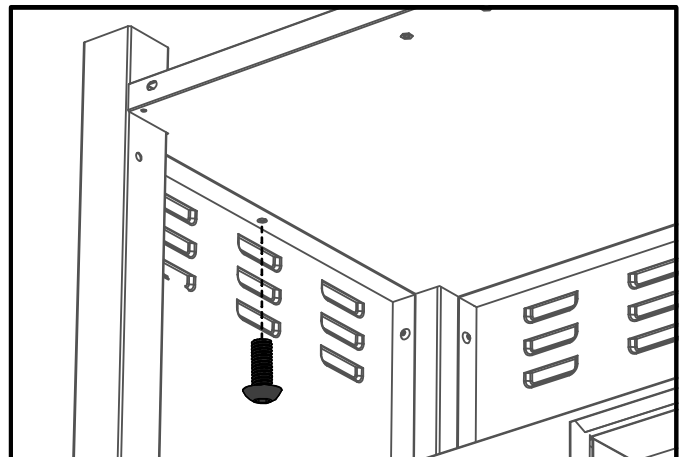
Step 2 - Attach Cabinet Base

- Use 8 x B screws to attach the cabinet base to the legs.
- Lift the base panel up while tightening the screws.



Step 3 - Attach Remaining Screws

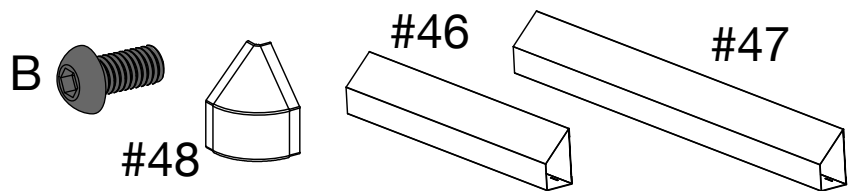
- Use 3 x B screws to attach the side and rear panels to the base panel.



3.9.5. Cabinet Skirting

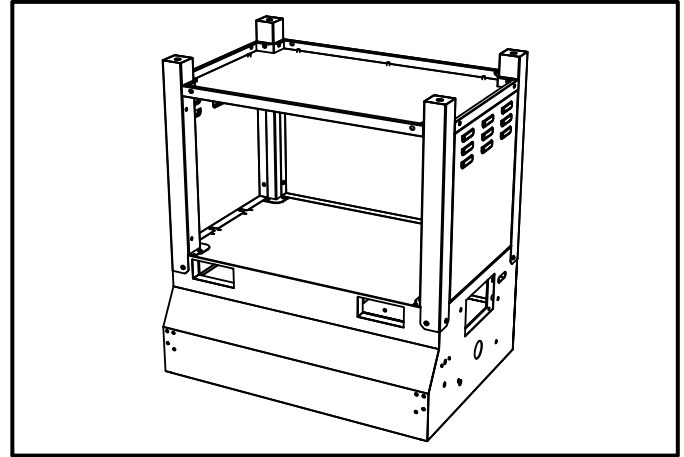
Components Used

- 2 x #47 (Front-Rear Skirt)
- 2 x #46 (Side Skirt)
- 4 x #48 (Skirt Corner)
- 12 x B (Black M5x12 HEX Screw)



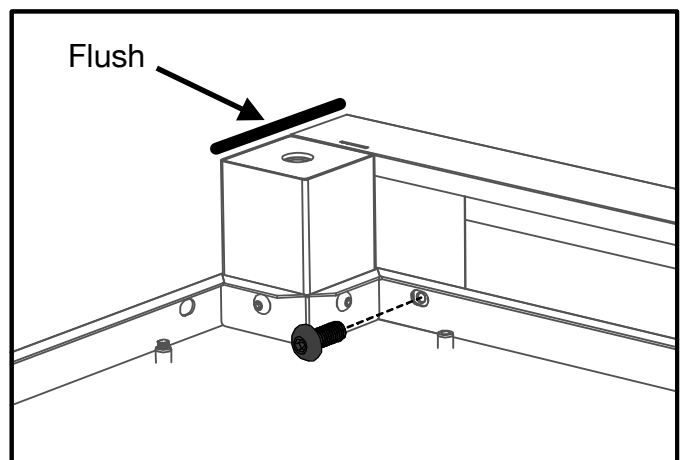
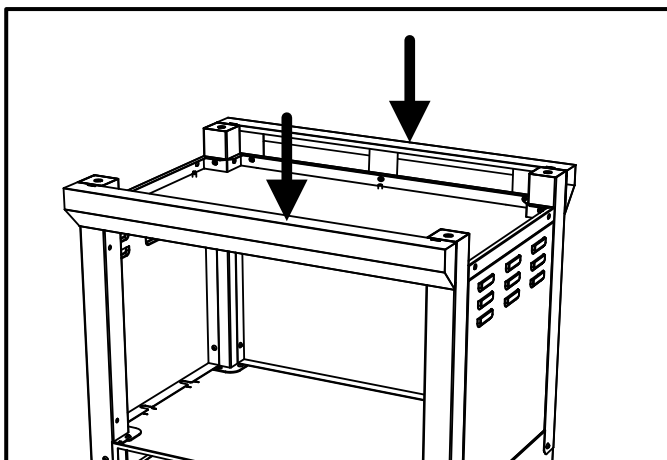
Step 1. Place on Ground

- With the assistance of another person, carefully lift the grill bottom and cabinet assembly down onto the ground.
- Put cardboard or matting down on the ground to avoid scratching the grill.



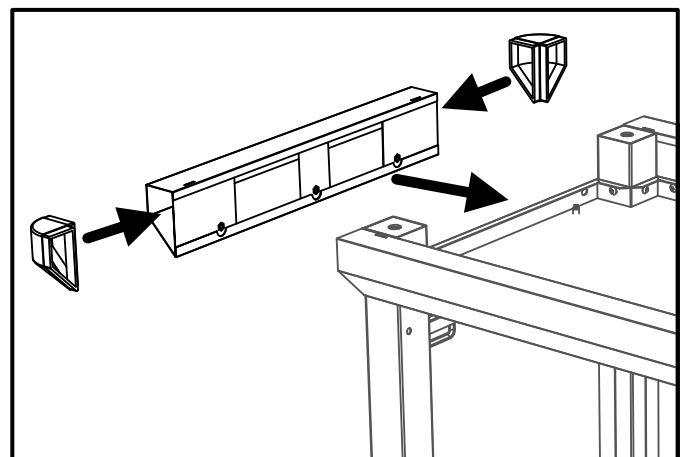
Step 2. Attach Front & Rear Skirts

- Use 6 x B screws to attach the front and rear skirts.
- Do not tighten screws until the side skirts and corners are also in place.
- Align the skirts flush (level) with the side and bottom of the legs.



Step 3. Attach Side Skirts

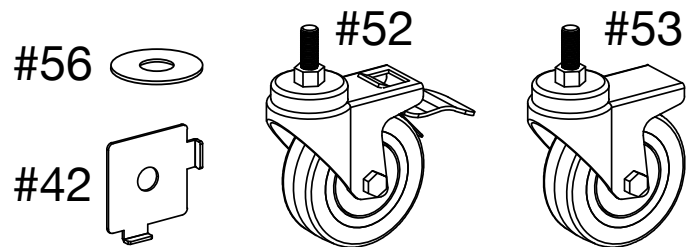
- Push the skirt corners into the ends of the side skirts.
- The corners may need to be pulled back out slightly to align when inserting into the front-rear skirts.
- Push into the front-rear skirts.
- Tap with hand or rubber hammer if required.
- Use 6 x B screws to attach the side skirts to the cabinet base panel.



3.9.6. Wheels

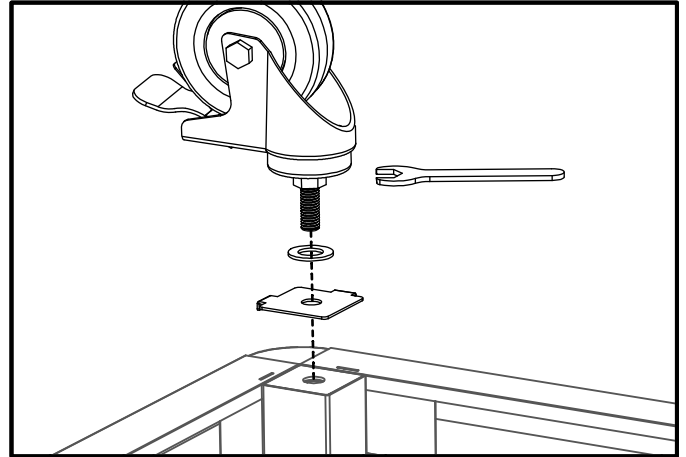
Components Used

- 2 x #52 (Locking Wheel)
- 2 x #53 (Non-Locking Wheel)
- 4 x #42 (Skirt Locking Plate)
- 4 x #56 (M12x24 Flat Washer)



Attach Wheels

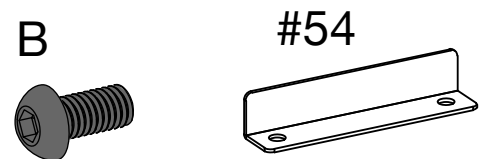
- Position the skirt locking plates over each leg with tabs inserted into the slots in the skirts.
- Locking wheels are generally best installed on the front of the grill for easy access.
- Screw in each wheel by hand (rotating the base, not wheel) and tighten with spanner.



3.9.7. Door Stops

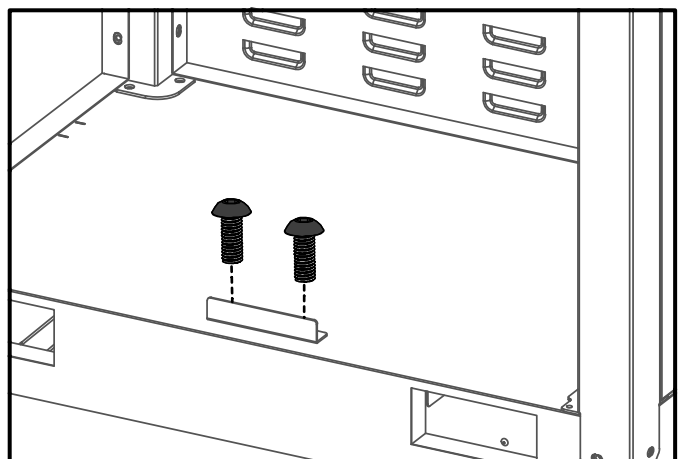
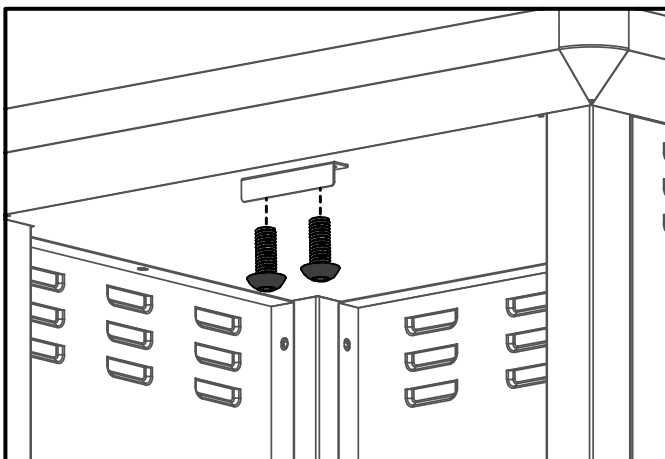
Components Used

- 2 x #54 (Door Stop)
- 4 x B (Black M5x12 HEX Screw)



Attach Door Stop

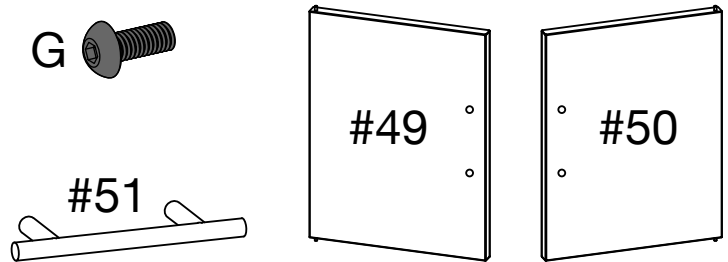
- Use 4 x B screws to secure the top and bottom door stops with the flat face towards the front.
- Carefully turn the grill back over (wheels on the ground).



3.9.8. Cabinet Doors

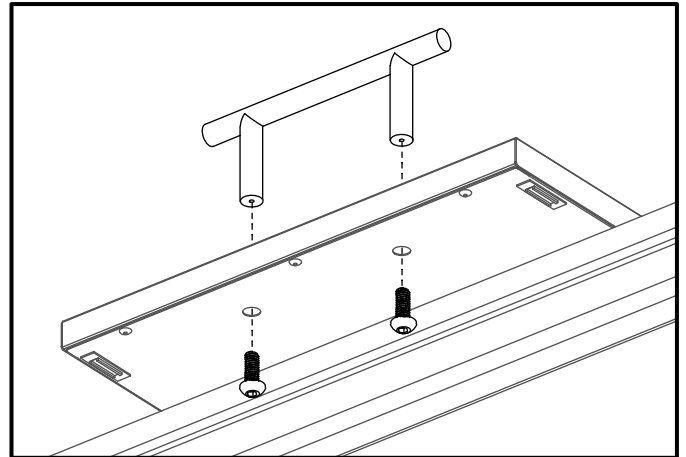
Components Used

- 1 x #49 (Left Cabinet Door)
- 1 x #50 (Right Cabinet Door)
- 2 x #51 (Cabinet Door Handles)
- 4 x G (Black M4x10 HEX Screws)



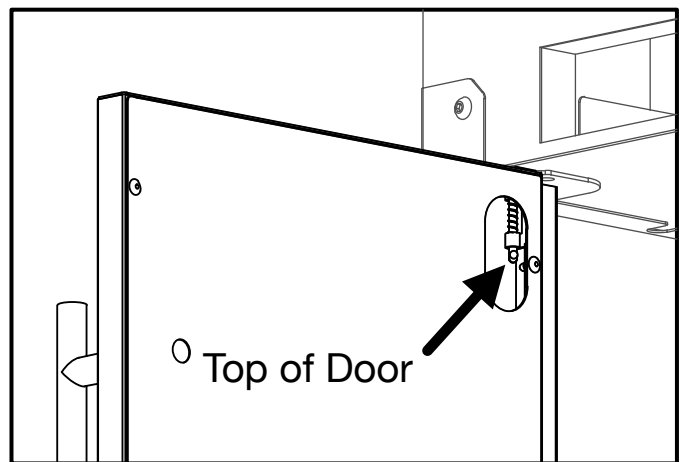
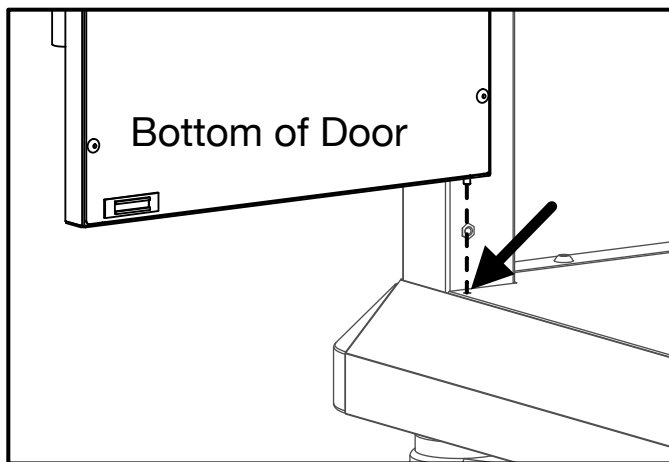
Step 1. Attach Handles

- Lay door flat on table with holes overhanging for access from below.
- Use 2 x G screws to secure in place.
- Put a screw on the end of the hex tool and lift up through the hole, and loosely screw into the handle.
- Repeat for the second screw, then do both up tight.
- If a screw drops inside the door, just shake it out of the large top opening.



Step 2. Fit Doors into Cabinet

- BOTTOM: Insert the round pin in the bottom of the door into the cabinet base panel.
- TOP: Pull the spring pin down, align with the top hole underneath the grill bottom and push the pin up into place.



3.10. Hopper

Components Used

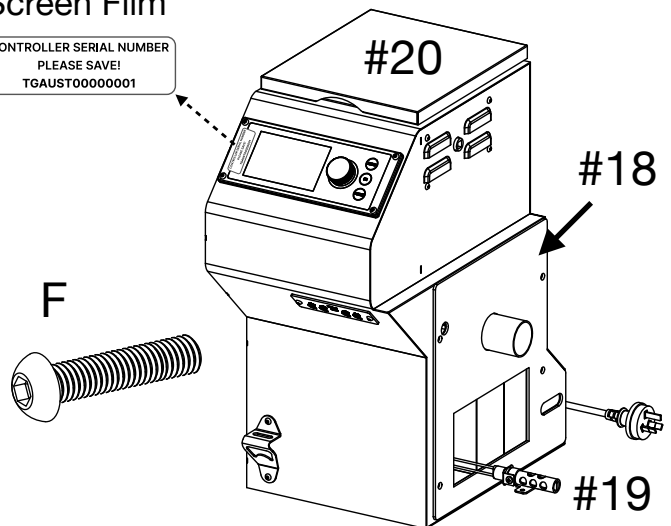
- 1 x #20 (S1 Hopper)
- 1 x #18 (Gasket)
- 1 x #19 (Pellet Ignitor - wired into hopper)
- 4 x F (M6x30 HEX Screws)

Step 1 - Remove Screen Film

- Peel the protective film off the screen together with the controller serial number sticker and store with this instruction manual for future reference.
- Do NOT leave the film on the controller glass screen! It is just there to protect the glass during factory assembly and packing.
- The screen is made from high strength glass.

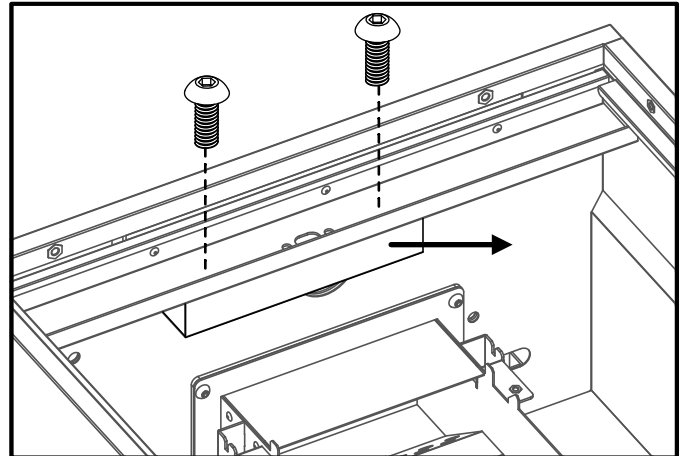
Screen Film

CONTROLLER SERIAL NUMBER
PLEASE SAVE!
TGAUST00000001



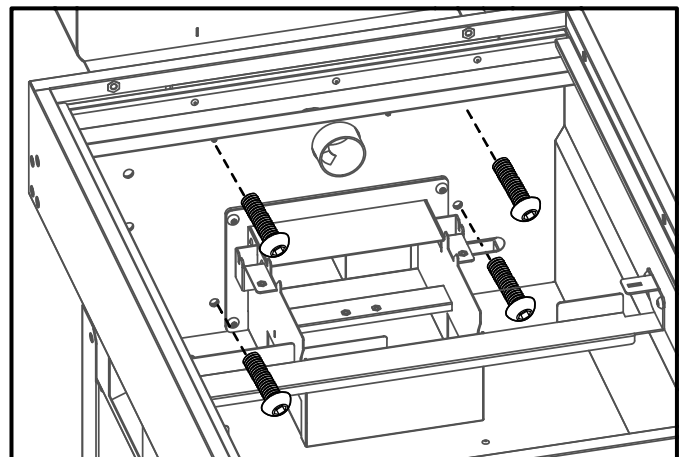
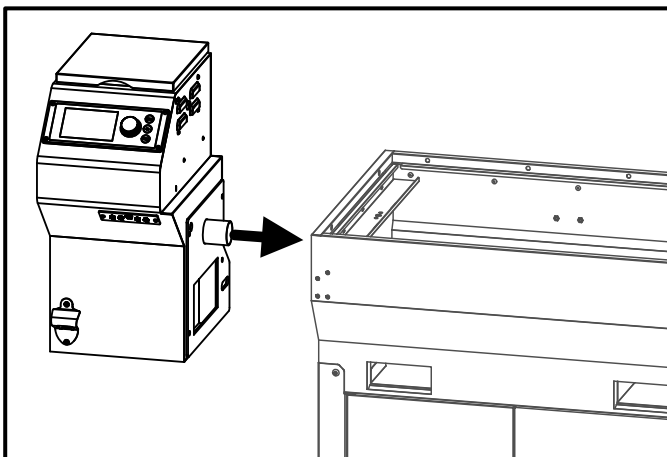
Step 2 - Remove Cable Cover

- Remove the 2 screws that secure the grill temperature sensor cover in place.
- This will be put back in place shortly, so do not lose!



Step 3 - Attach Hopper

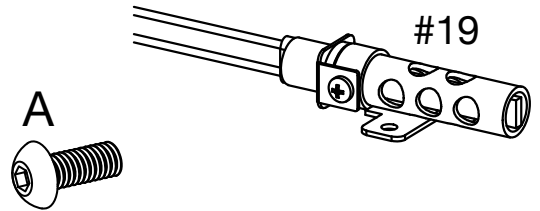
- Position the white fibre gasket to correctly align with all the screw holes.
- Pellet ignitor can remain inside the hopper.
- Slide the hopper into place, using the round auger tube as the main guide.
- While pushing the hopper tightly against the grill, use 4 x F screws to secure in place.
- Cycle through the four screws, tightening a little more each time until all are evenly tightened.



3.11. Ignition Rod

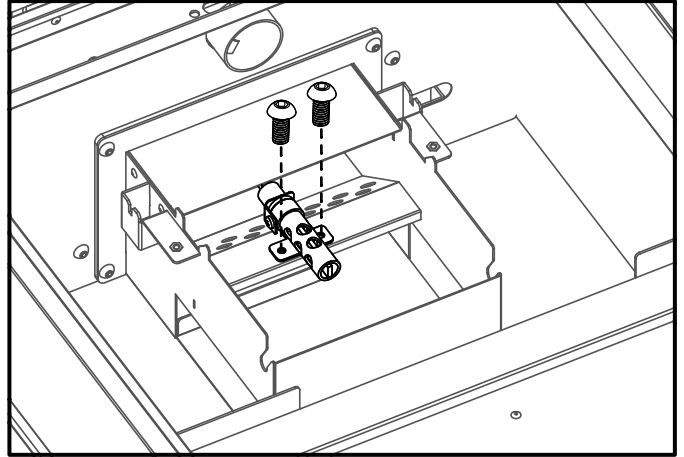
Components Used

- 2 x A (M4x10 HEX Screw)
- 1 x #19 (Pellet Ignitor - wired into hopper)



Attach Pellet Ignitor

- Gently pull Pellet Ignitor (#19) through into the fire box from within the hopper.
- Use 2 x A screws to secure in place, ensuring it is positioned straight.



3.12. Remove Hopper Cover

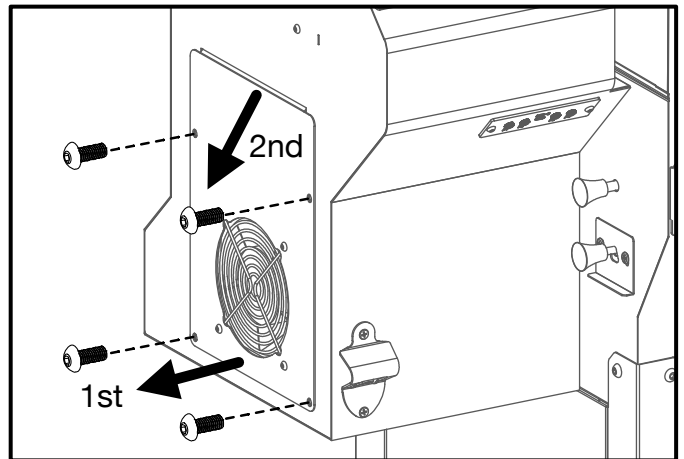


Unplug from Power

- Before proceeding with the next steps, ensure the hopper is unplugged from power.

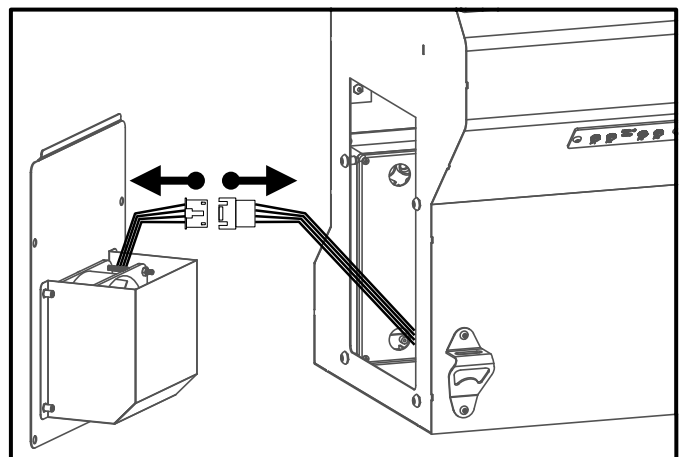
Step 1. Remove Hopper Cover

- Remove the 4 screws that secure the hopper cover in place.
- Tilt the bottom of the panel out, and then slide the top out.



Step 2. Unplug Outer Fan

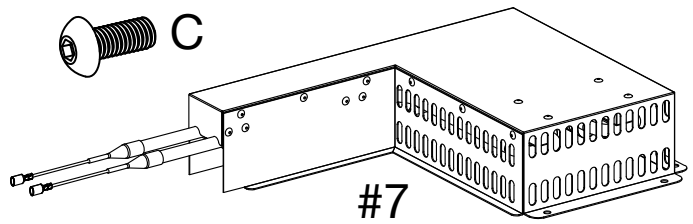
- Carefully unplug the outer fan cable (if connected) by squeezing the little hook on the side of the plug and gently pulling apart.
- This plug needs to be connected back together later in the assembly process.



3.13. Electric Heating Element

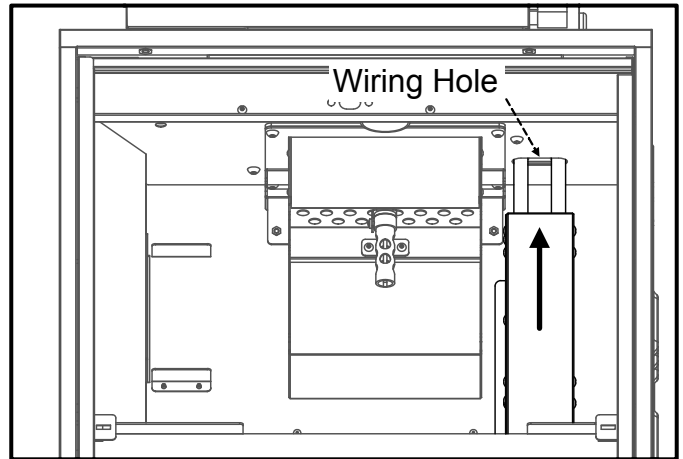
Components Used

- 1 x #7 (Electric Heating Element)
- 2 x C (M5x12 HEX Screws)



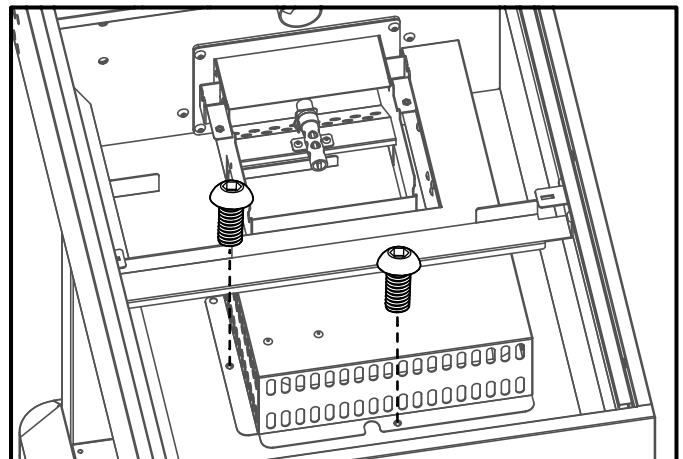
Step 1. Install Heating Element

- Carefully pass the two heating element wires through the elongated wiring hole into the hopper.
- As the wires are pushed through they may get stuck against other wires inside the hopper, so gently guide them through towards the side opening of the hopper.
- Push the heating element all the way into place.



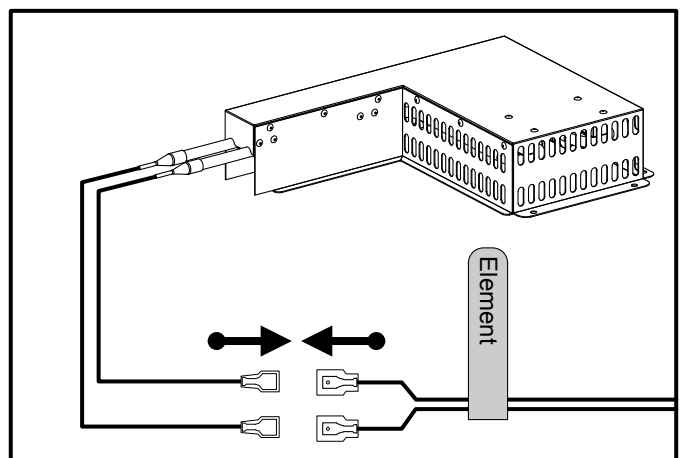
Step 2. Secure Heating Element

- Use 2 x C screws to secure in place.
- One C screw was previously securing the heating element in place.



Step 3. Connect Heating Element

- Inside the hopper, find the two wires labeled “Element” directly in front of the inner fan.
- Plug in the two wires.
- Push the wires back down the rear left side of the hopper away from the fans.

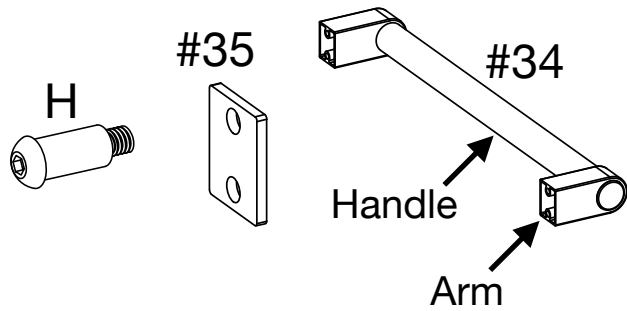


3.14. Lid Handle

Components Used

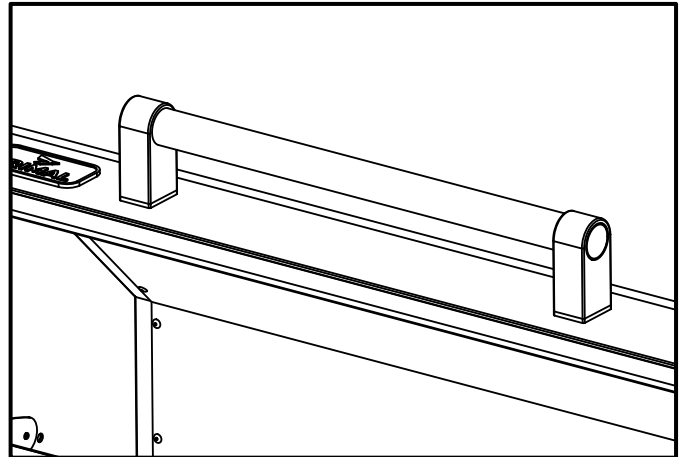
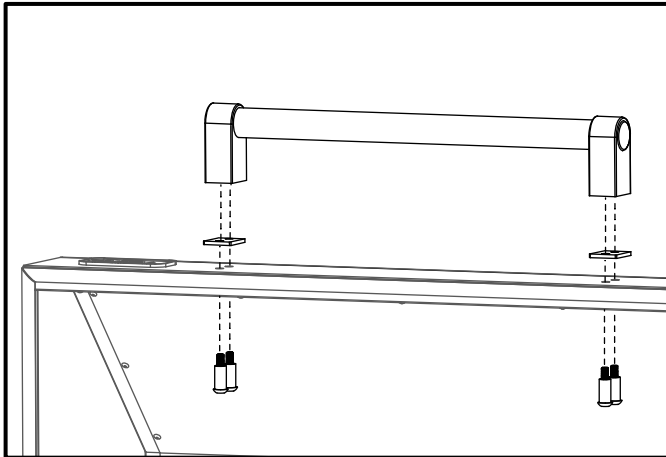
Below components are already assembled together on the #34 lid handle.

- 1 x #34 (Lid Handle)
- 2 x #35 (Lid Arm Pad)
- 4 x H (M6x5x30 Sleeved HEX Screws)



Attach Lid Handle

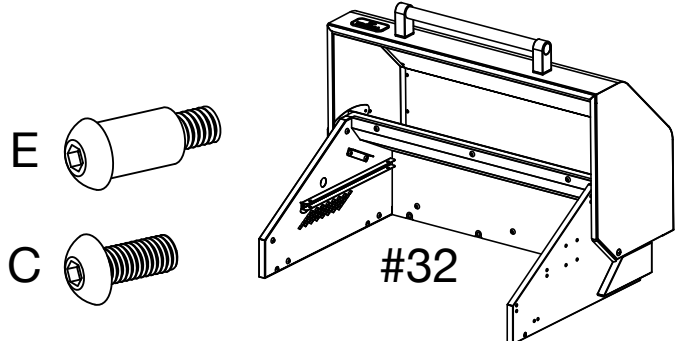
- Position the arm pads under each arm of the handle.
- Use 4 x H screws to attach the lid handle.



3.15. Grill Top

Components Used

- 1 x #32 (S1 Grill Top)
- 4 x E (M6x9x16 Sleeved HEX Screws)
- 3 x C (M5x12 HEX Screws)

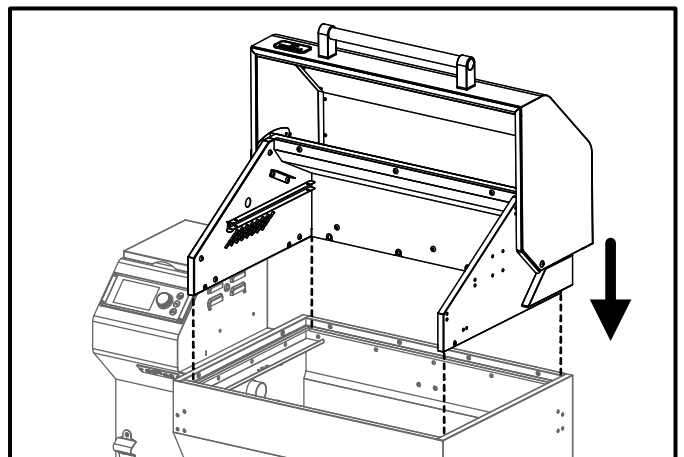


Helper Required!

- This step is most safely completed with the help of another person!
- Take care not to allow the lid assembly to tip backwards, or the lid to close while lifting.

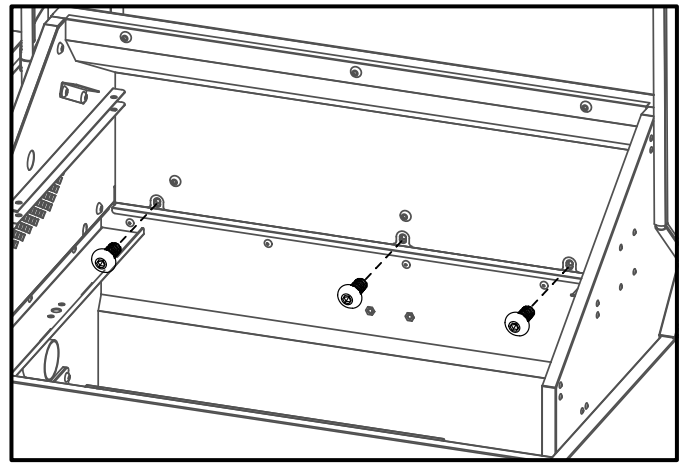
Step 1. Lower Grill Top into Grill Bottom

- Open the grill lid, and lower the assembly down into the grill bottom.
- Push the top of the grill down and back so the entire back of the grill is flush.



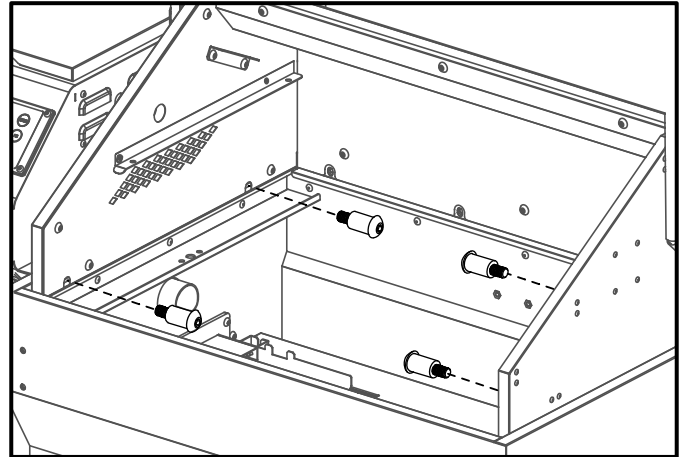
Step 2. Install Rear Screws

- Use 3 x C screws to secure the rear of the grill top.
- Do not do up tight until the side screws (in next step) are also in place.



Step 3. Install Side Screws

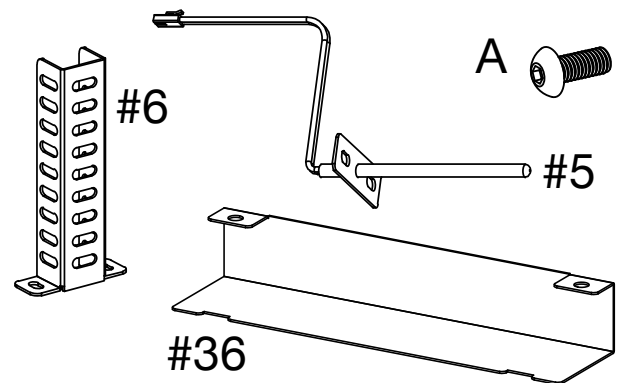
- Use 4 x E screws to secure the left and right.
- Once done up tight the screw head and sleeve will still extend out from the wall panel slightly. This is normal as the screw is making contact inside the wall panel.



3.16. Grill Temperature Sensor

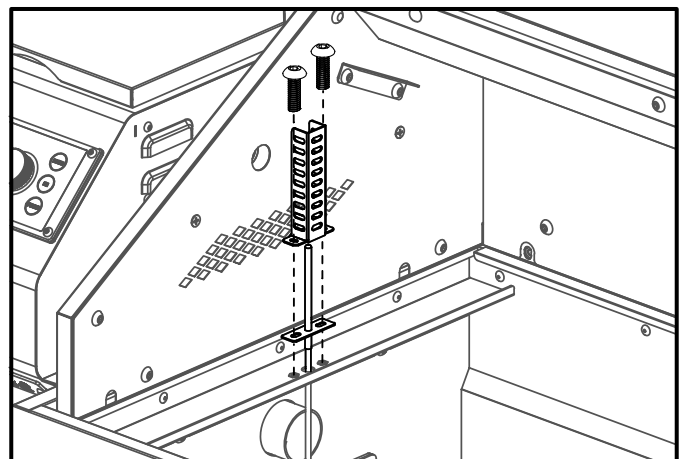
Components Used

- 1 x #5 (Grill Temperature Sensor)
- 1 x #6 (Temperature Sensor Cage)
- 1 x #36 (Temperature Sensor Cable Cover)
Removed earlier together with 2 x A screws
- 4 x A (M4x10 HEX Screws)



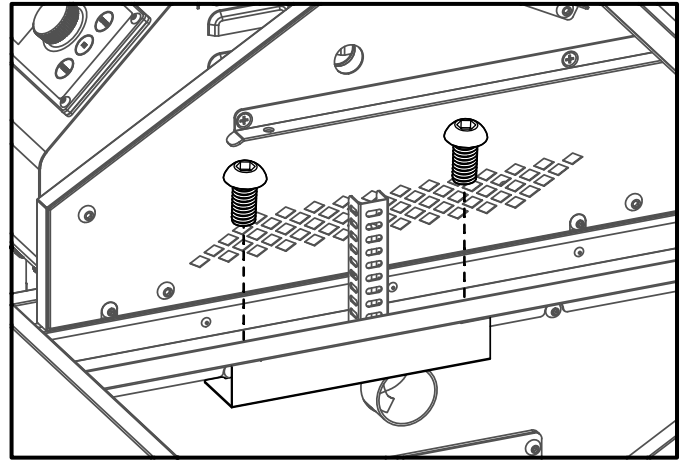
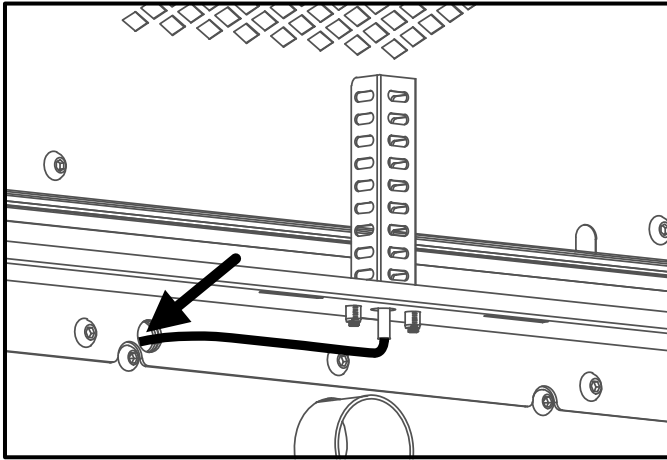
Step 1. Attach Sensor & Cage

- Pass the temperature sensor plug and cable down through the hole in the support plate.
- Place cage over the top and use 2 x A screws to secure.
- Ensure cage and sensor are pushed all the way to the left (towards hopper).



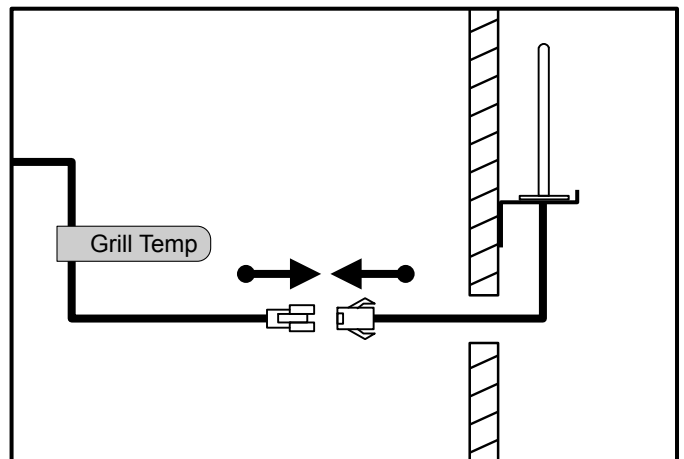
Step 2. Feed Cable Into Hopper

- Carefully feed the cable through the hole into the hopper.
- Gently bend the cable so it neatly runs through the hole.
- Inside the hopper, receive and gently pull the cable through.
- Replace the cable cover (removed earlier) using the 2 x A screws.



Step 3. Connect Cable

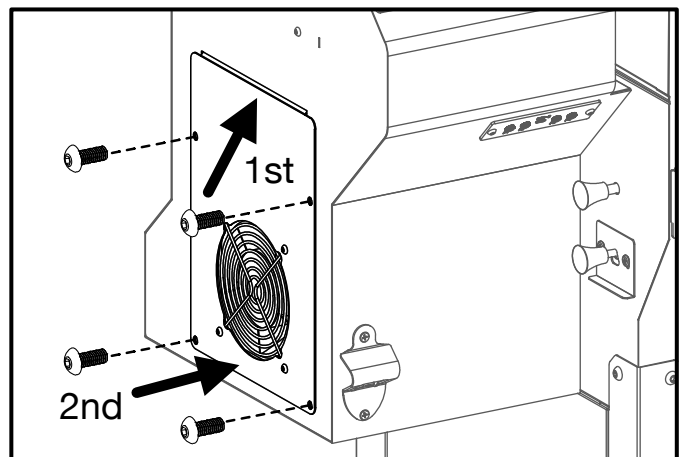
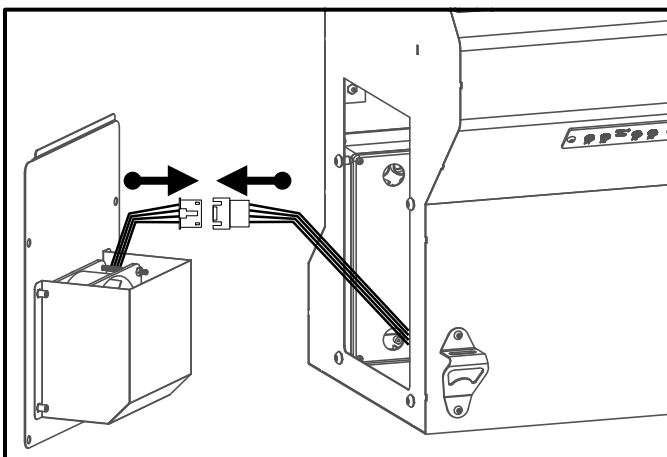
- Inside the hopper, find the cable labelled “**Grill Temp**” and plug into the temperature sensor cable.
- Take note of the plug orientation, as there is a clip that locks into place.
- Tuck the cables in beside the other wires down the right-rear side of the hopper.



3.17. Replace Hopper Cover

Replace Cover

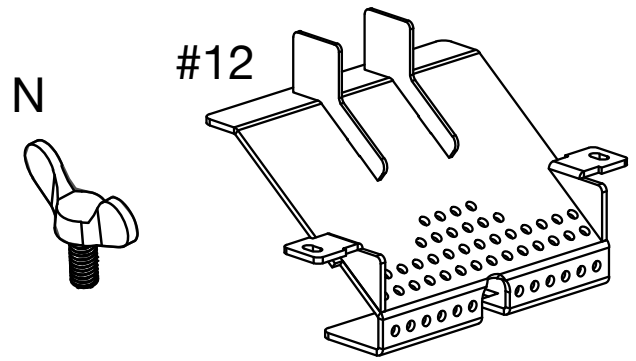
- Connect the **Outer Fan** and tuck the slack cable down the right side.
- Insert the top lip of the cover into place and then push the bottom in.
- Secure the panel with the 4 screws.



3.18. Left Fire Grate

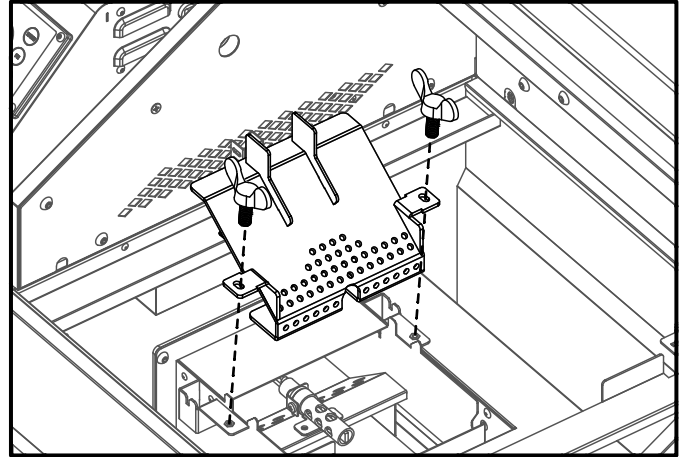
Components Used

- 1 x #12 (Left Fire Grate)
- 2 x N (M4x10 Butterfly Screw)
- Removed earlier with left fire grate*



Install Left Fire Grate

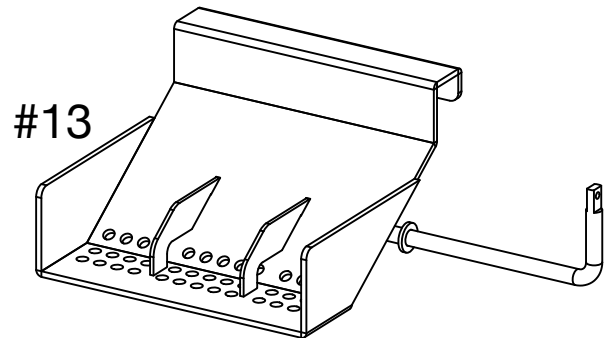
- Lower the left fire grate down into the fire box.
- First tuck the top edge under the round pellet feed tube, then lower down into the fire box.
- The left and right tabs slot into the fire box.
- Use 2 x N screws to secure in place (only finger tighten the screws).



3.19. Right Fire Grate

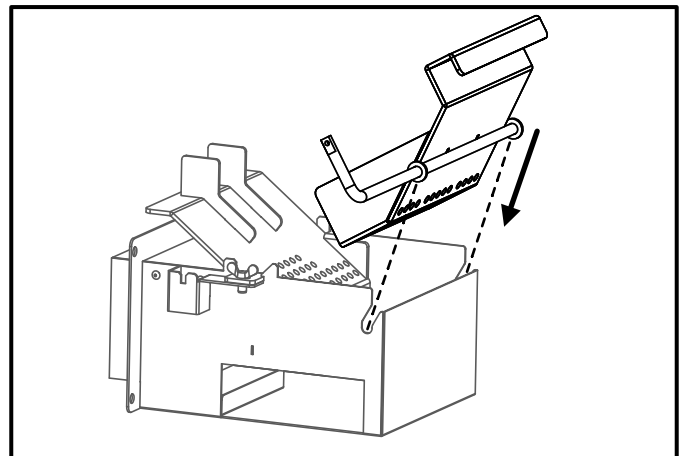
Components Used

- 1 x #13 (Right Fire Grate Assembly)



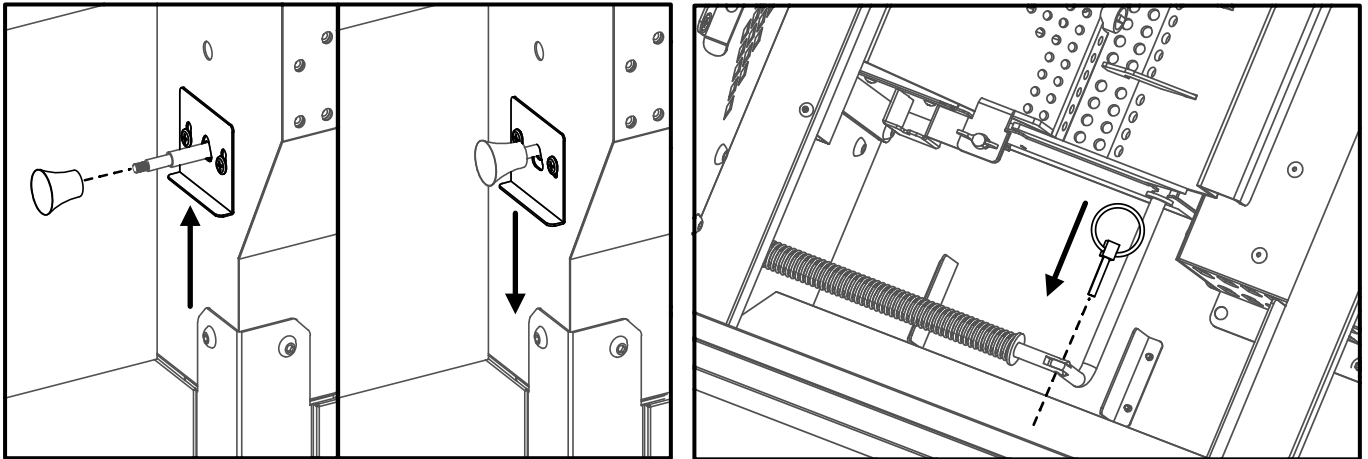
Step 1. Install Right Fire Grate

- Tilt the right fire grate forward and drop down into the fire box so it sits underneath the left fire grate and can swing freely.
- The two metal discs on the round shaft should sit on the outside of the box.
- Once in place the grate should be able to rotate freely.



Step 2. Install Arm and Handle Knob

- Unscrew the black knob off the end of the arm.
- Push up the lock plate and pass the end of the arm through the grill wall.
- Screw the handle knob back on.
- Let the lock plate drop back down.
- The ash can only be dumped while the lock plate is held up.
- Flip the ring on the lynch pin open, position the handle over the right fire grate arm with the holes aligned and then push the pin into place. Flip the ring back closed.



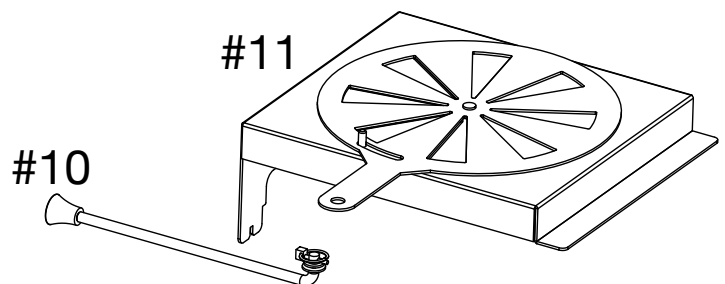
Ash Dump Safety

- Only use the dump feature and empty the bin once ash and embers are totally cold.
- The lock plate prevents the ash dump from accidentally being pulled.
- Never use the ash dump when the grill is operating or during the shutdown process.
- Never pour hot embers into a bin or on flammable materials!

3.20. Heat Baffle

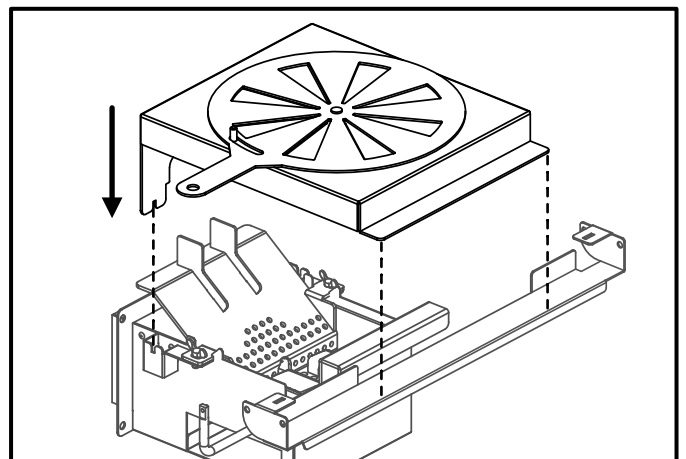
Components Used

- 1 x #10 (Heat Baffle Arm)
- 1 x #11 (Heat Baffle)



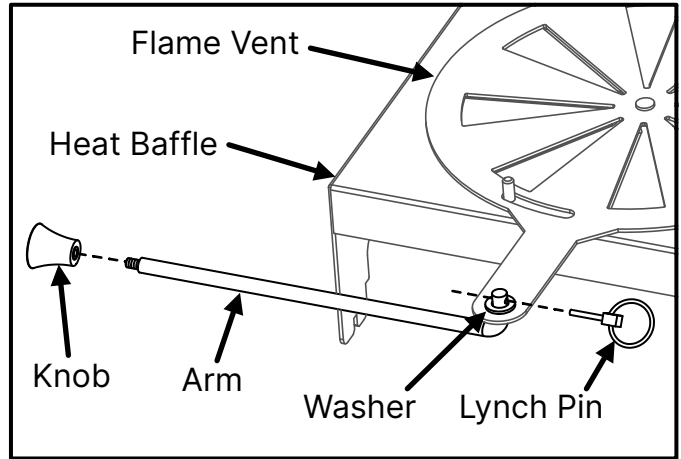
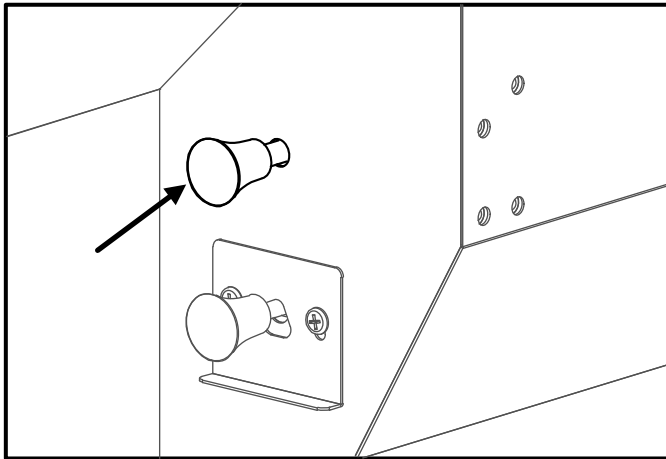
Step 1. Lower In Heat Baffle

- Lower the heat baffle down into place, with the legs slotted into the fire-box and right side resting on the mid baffle-support.



Step 2. Install Flame Vent Arm

- Remove the knob off the end of the arm and pass the arm through the hole in the grill wall.
- Screw the knob back on.
- Flip over the ring on the lynch pin to open it and then remove from the arm.
- Push the arm up through the flame vent and replace the washer on top and lynch pin.
- Flip the ring back over to lock the lynch pin.

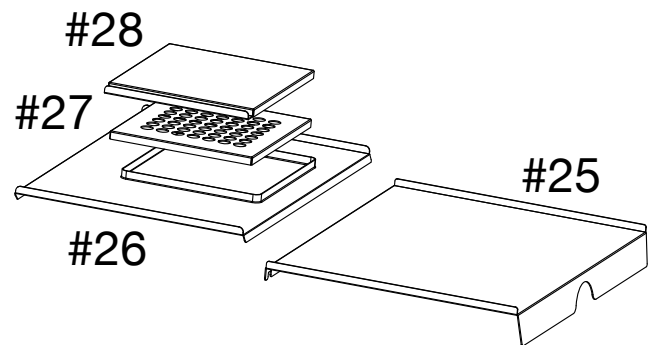


- Leave heat baffle in for all cooking modes, only removing if doing a deep clean.
- Fully open the flame vent by pulling the handle out for Pizza Oven and Open Flame cooking.
- When Hotplate cooking the vent can be partially opened for higher centre/left hotplate temperature.
- It is normal for the flame vent to warp slightly with heat and not remain perfectly flat.

3.21. Drip Trays

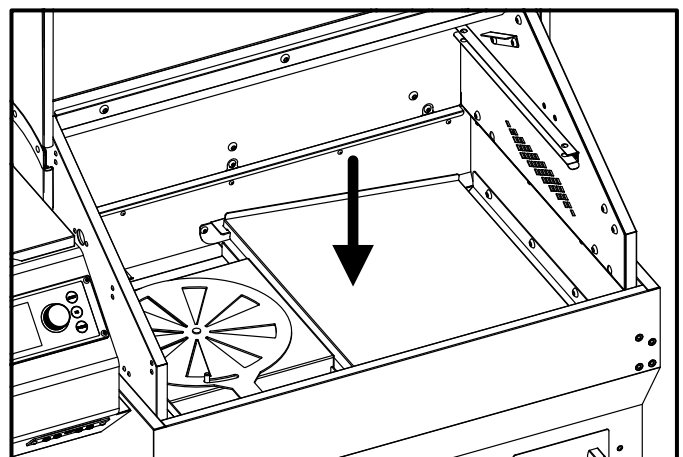
Components Used

- 1 x #25 (Right Drip Tray)
- 1 x #26 (Left Drip Tray)
- 1 x #27 (Vent)
- 1 x #28 (Cover)



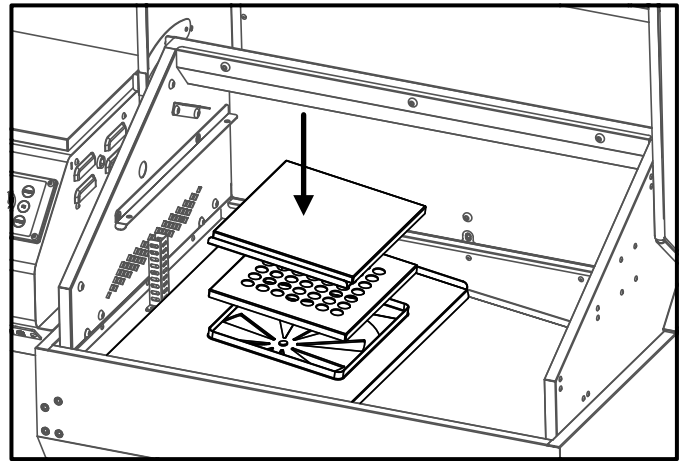
Right Drip Tray

- The right drip tray is positioned on the right side of the grill with the tail in the V shaped drain, so grease flows down into the bin.
- Leave the right drip tray in place for all cooking modes.



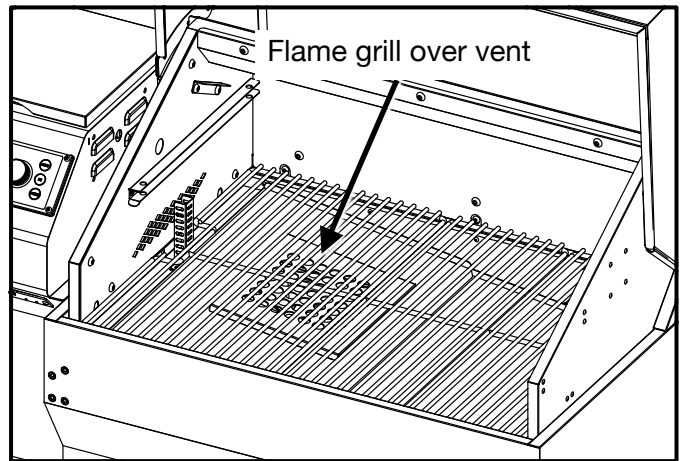
Left Drip Tray

- Place in the left drip tray AFTER the right drip tray is already installed.
- Hook the tray into the left rail where the grill temperature sensor is located, and on the right, rest on top of the right drip tray.
- The vent (plate with round holes) can be put in place if doing open flame searing. NOTE: The vent may warp with high heat exposure over time (normal) so may need to be removed when the top cover is placed over the hole.
- The cover can be placed over the vent, or directly over the big square hole if the vent is removed.
- With the top cover in place the heat across the grill racks is more even, ideal for indirect (no open flame) cooking.



Open Flame Grilling

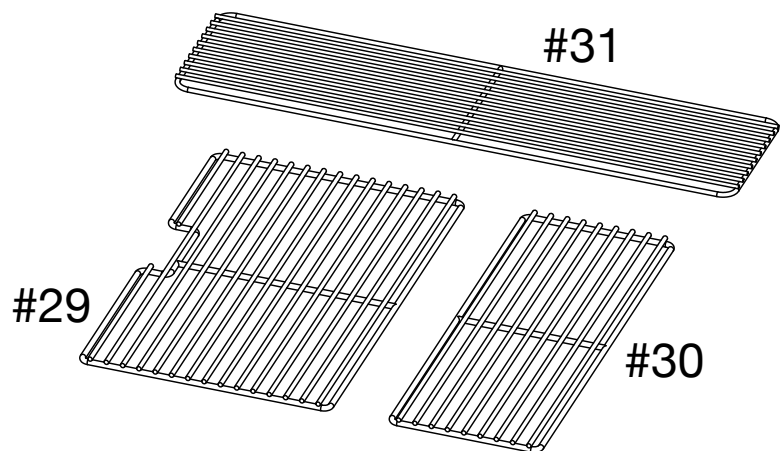
- Before starting the cook, lift up the left grill rack and remove the vent cover and put the vent in place (plate with round holes). Return the grill rack over the top.
- Open the flame vent (pull handle out) for more heat and flame exposure.
- The area above the vent will get very hot, and will provide flare ups from any grease dripping, perfect for cooking a flame grilled steak.
- Use the Open Flame Grilling cooking mode for best results.



3.22. Grill Racks

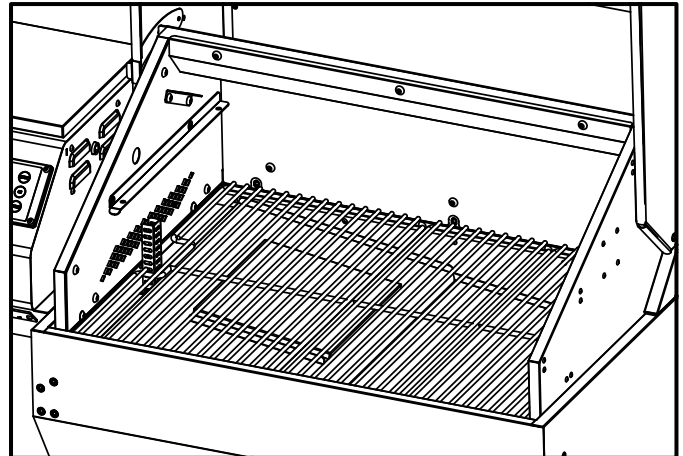
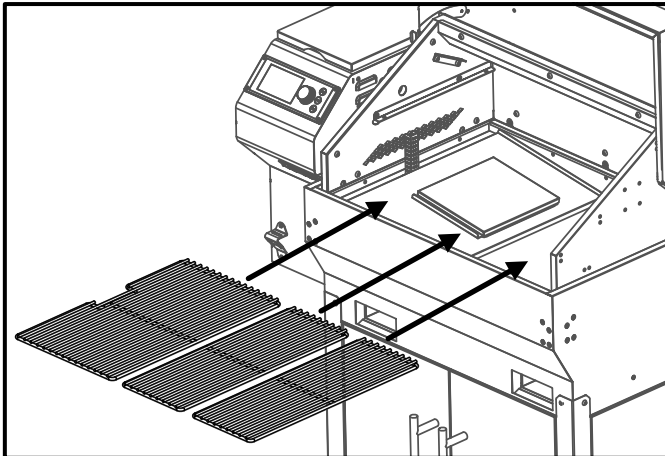
Components Used

- 1 x #29 (Bottom Left Grill Rack)
- 2 x #30 (Bottom Mid-Right Grill Racks)
- 2 x #31 (Top Grill Racks)



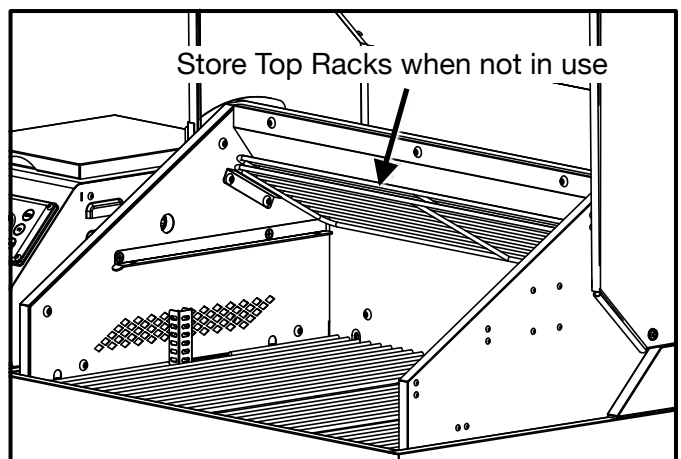
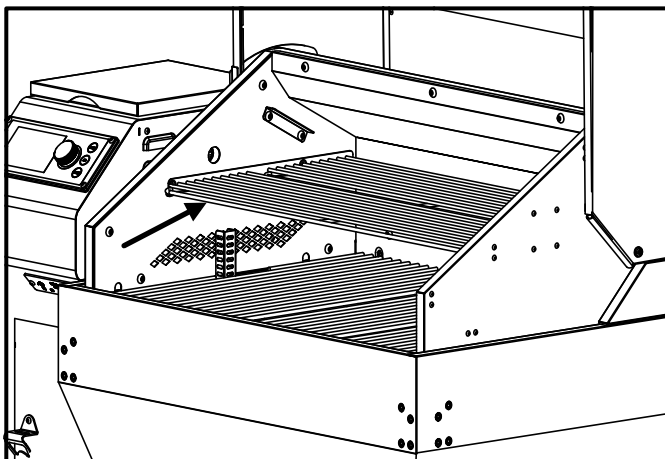
Bottom Grill Racks

- Lower in the left grill rack first and push all the way to the left
- Lower in the two remaining bottom grill racks on the right.



Top Grill Racks

- Lower one or both top grill racks into place for additional grill cooking area.
- The temperature of the grilling area will be slightly higher than the bottom grill racks, so use food temperature probes to monitor.
- When not in use, the top grill racks can be neatly stored away in the top of the grill.



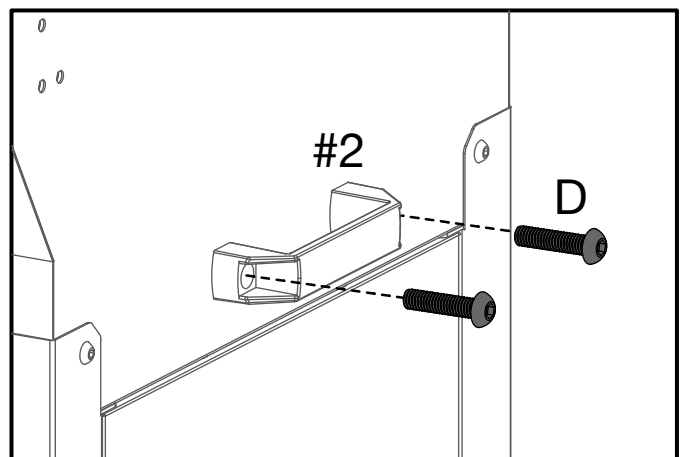
3.23. Side Handle

Components Used

- 1 x #2 (Side Handle)
- 2 x D (Black M6x16 HEX Screws)

Attach Handle

- Use 2 x D screws to attach handle to right side of the grill bottom.



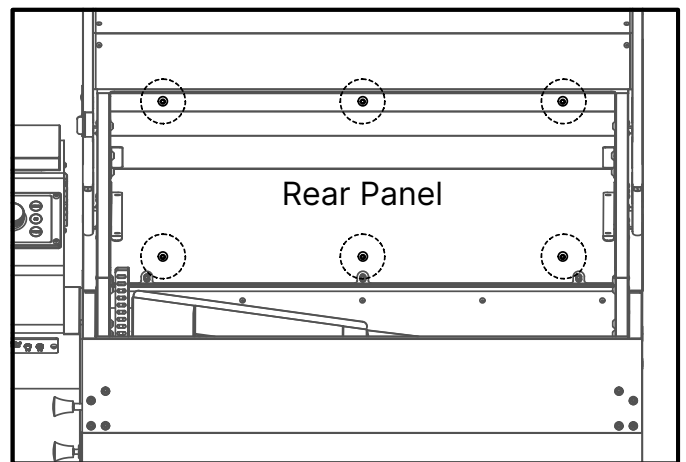
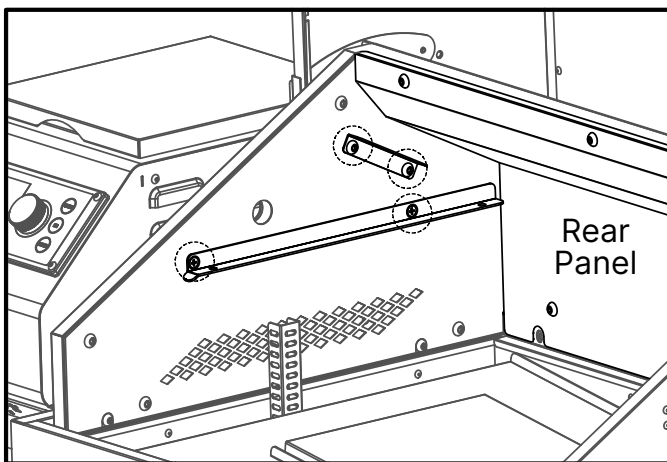
3.24. Rear Inner Insulating Panel

The Trimal S1 features double wall insulation which helps achieve fast heat up time and low wood pellet usage. However, in hot climates/weather the reduced heat loss can prevent low grill temperature from being reached. Removing the rear panel increases heat loss (less insulation) allowing lower temperature operation.

In regions that experience mild winters and hot summers (Northern Australia), it is recommended to remove the rear panel and leave it off all year round. In cooler regions it may be useful to remove the panel for the warmer months. In winter pellet usage can be reduced by having it installed.

Remove inner panel

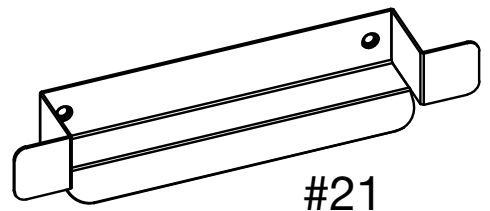
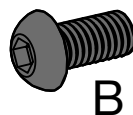
- Temporarily remove the left and right top rack support and storage rails (4 screws).
- Remove the 6 screws that secure the rear panel in place and slide it up and out.
- Thread the screws back into place so they are not lost.
- Replace the side grill rack rails.



3.25. Power Cable Bracket

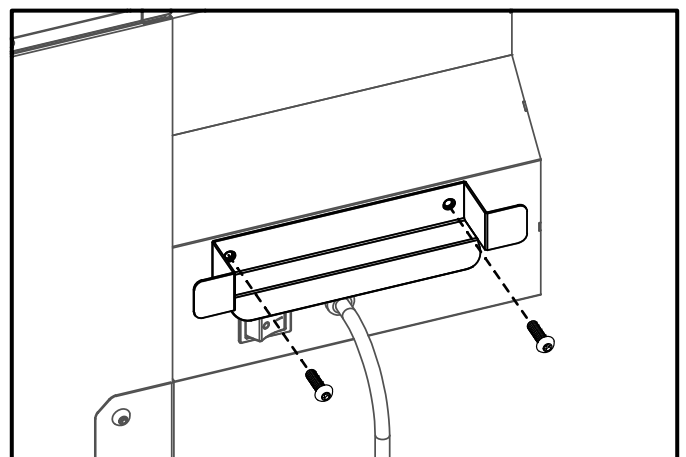
Components Used

- 1 x #21 (Power Cable Bracket)
- 2 x B (Black M5x12 HEX Screws)



Attach Bracket

- Use 2 x B screws to attach bracket to rear of hopper.

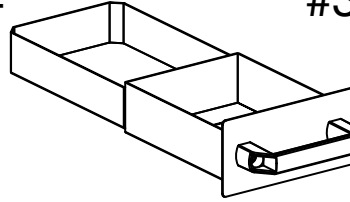


3.26. Ash & Grease Bins

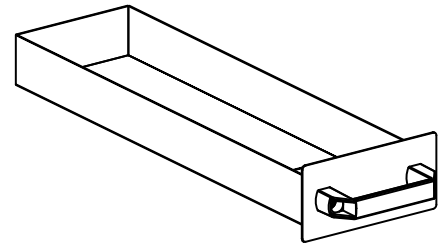
Components Used

- 1 x #3 (Grease Bin)
- 1 x #4 (Ash Bin)

#4

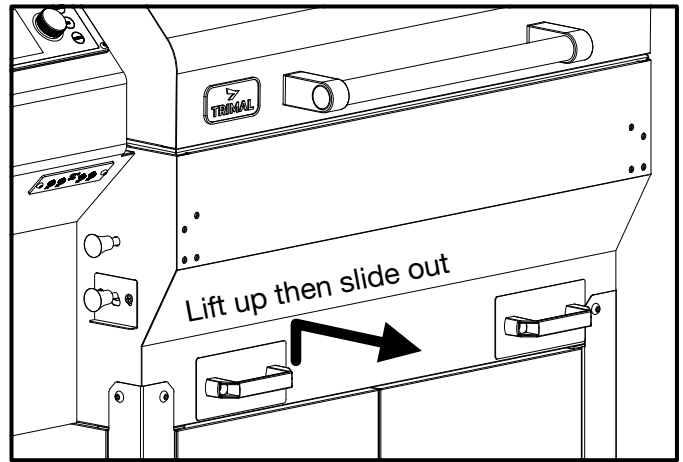
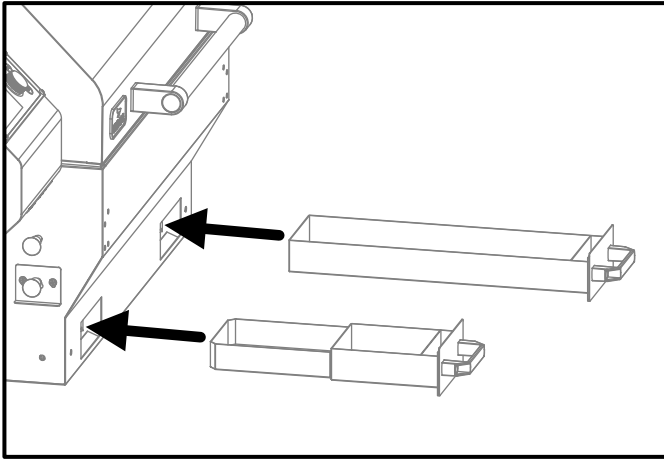


#3



Insert Bins

- Ash bin slides into the left hole.
- Grease bin slides into the right hole
- To insert, slide all the way in while slightly lifting up. Once fully in, drop down to lock in place.
- To remove, lift up and slide out.



Hot Bin Handles

- Bin handles and the metal bins themselves may be too hot to safely touch even for some time after the grill has been shut down.
- Wear heat proof gloves on both hands when removing the bins as contents may be hot.
- Use one hand to hold the handle, the other supporting the bin as it is slid out.



Ash Bin Safety

- Never use the ash dump or remove the ash bin when the grill is operating or during the shutdown process.
- Only empty the ash bin once ash and embers are totally cold.
- Never pour hot embers into a bin or on flammable materials.



Grease Bin Safety

- Always clean out the grease bin before starting a new cook.
- Never operate the grill at high (>250°C) temperatures with a dirty grease bin.
- Never remove and empty the grease bin when the grill is operating.
- Slide grease bin out slowly, and keep level to avoid spilling oil.

4. Connect & Update

4.1. Download the Trimal Aus App

- Scan the QR codes below to open up the Apple App Store (iOS version) or Google Play Store (Android version) to download the free Trimal Aus App.
- Sign up for a free account in the App using your mobile phone number.
- The App is required to connect the grill to the internet via WIFI, which allows important grill software updates to be downloaded and installed.
- Connection to WIFI also facilitates remote monitoring and control of the S1 grill as well as recording cooks.



Trimal Aus



Apple



Android

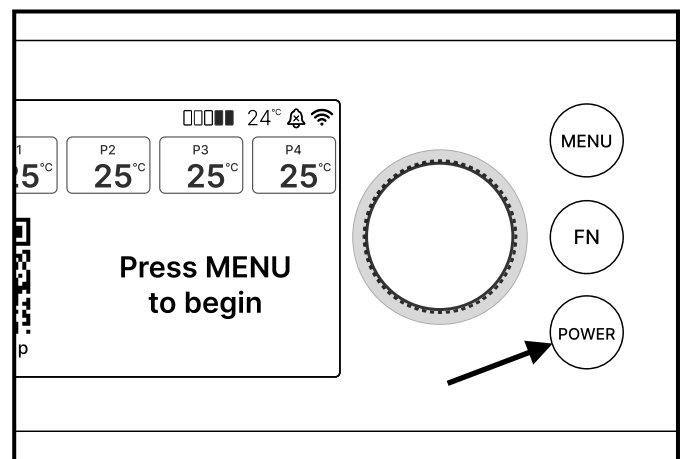
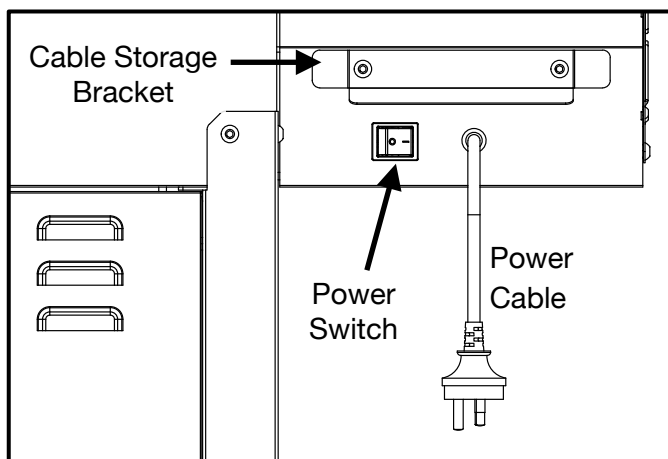
4.2. Plug Hopper into Power

Plug in Power Cable

- Plug the power cable into a standard household AC 240V 50Hz 10 Amp power socket.
- An extension cable may be used (10Amp).
- Turn the power switch on. A small beep will sound, indicating power is connected.

Turn Power On

- Press and hold the POWER button on the controller front panel to wake it up.
- The fans will quietly run whenever the grill is awake.
- After several minutes of no buttons being pressed, the controller will go back to sleep.



4.3. Connect App to Grill

- Scan the QR code for more detailed instructions on the connection process.
- Basic connection steps:
 - Power on the grill controller
 - Open the Trimal Aus App → Sign up for free account
 - Connect mobile device to a 2.4GHz (20MHz or 40MHz) WIFI network
 - Add New Device → Enter 4-digit code that appears on controller screen
 - Enter the WIFI password to allow the grill to connect
 - Start using the App to remotely monitor and control the grill



4.4. Update Software

- From time to time improvements will be released via software updates.
- There are three types of updates:
 - Grill (update time: 1-2 minutes)
 - WIFI (update time: 2-4 minutes)
 - Screen (update time: 10 minutes to 2 hours)
- It is advisable to complete grill updates before next using the grill.
- WIFI and Screen updates are less urgent and can be completed when not planning to use the grill immediately.
- Complete updates using the Trimal Aus App.
- Updates can't be done while the grill is cooking, but it must be powered on.
- Scan the QR code for more detailed instructions on the update process.



5. Controller

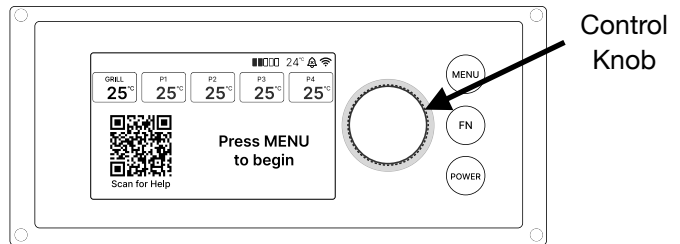


Update Before First Use!

- Connect the grill to WIFI and update the grill software before using the grill!

5.1. Buttons

- Most operations on the grill can be completed on the controller using the 3 touch buttons and large control knob.
- Advanced features such as recording cooks, setting trigger-actions and notifications require the Trimal Aus App.



MENU button

- Press to enter the menu to access all the operating functions and settings.

FN button

- Standby screen: Measure current wood pellet level.
- When cooking: Start and stop rotisserie shaft rotating (not available in all cooking modes)

POWER button

- Press and hold for 2 seconds to turn the controller on.
- Press once then select YES to **Turn Off** (standby) or begin **Shut Down Cycle** (when cooking).
- Use the physical on/off switch on the back of the hopper to permanently turn power off.
- Press once to wake the screen after it has gone to sleep (while grill is operating in hot weather).

Control Knob

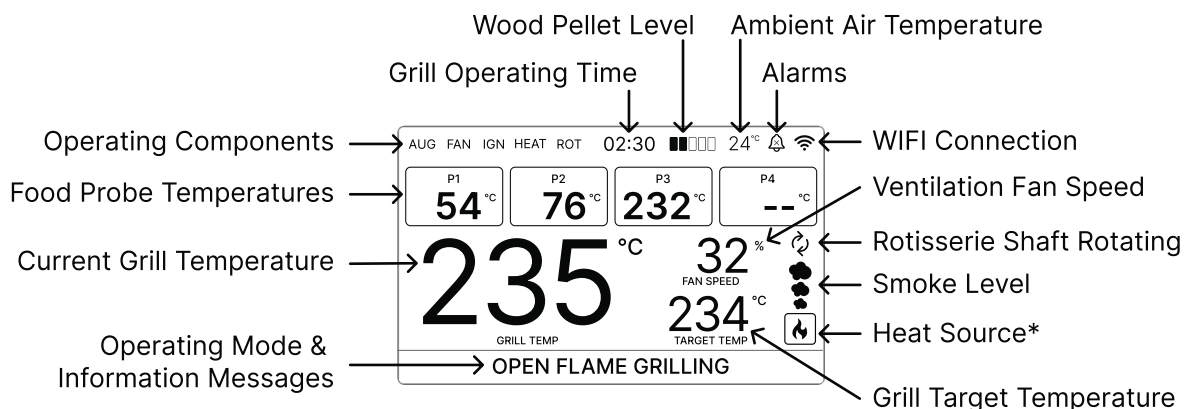
- Rotate knob to navigate through the menu options or change setting values.
- Single press knob to confirm a setting or selection.

5.2. Colour Screen

- To prevent overheating of the screen, in hot weather it will go to sleep after 90 seconds of no user input. Tap any button or rotate the knob to wake it up.
- The screen provides all key information related to the grill operation and temperatures. Below is a summary of the key displayed elements.



s1-controller



* Heat Sources



Wood Fire



Heating Element



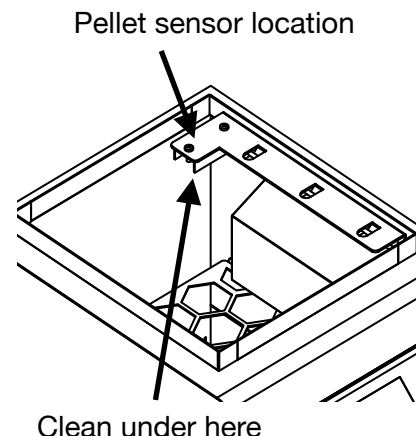
Charcoal



Heating Element & Wood Fire

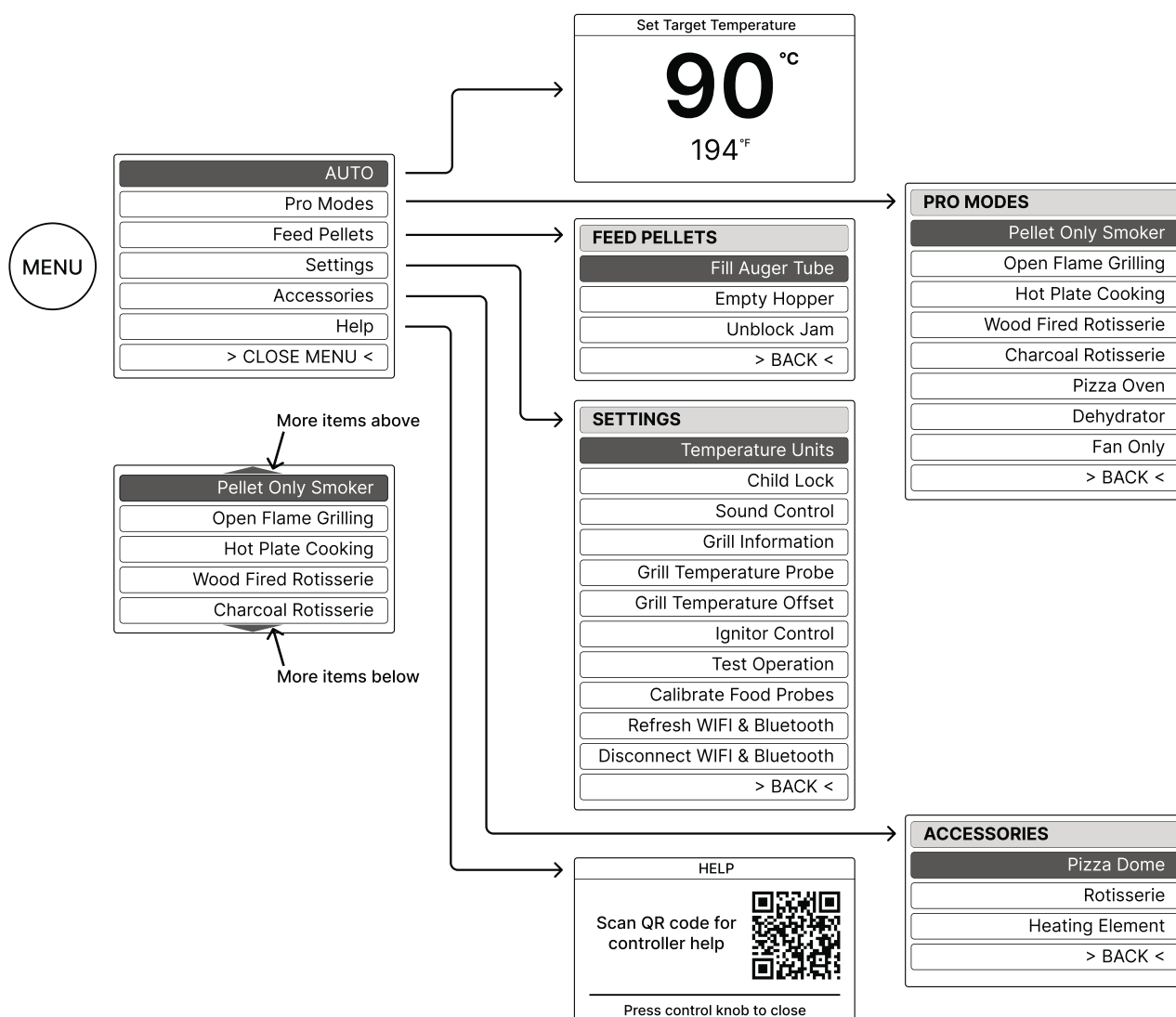
5.3. Wood Pellet Level

- The wood pellet level is measured by a laser inside the hopper.
- A measurement is taken when pellets are added to the hopper.
- For most accurate measurements, smooth out the wood pellets level with your hand once poured into the hopper.
- As pellets are consumed the auger operating time is used to estimate the remaining pellets in the hopper as well as total kilograms burnt in the current cook.
- The height is NOT used to estimate remaining pellets.
- If the pellet measurement is constantly showing as full, a thick layer of wood dust may have accumulated on the laser lens.
- Use a mirror (or phone selfie camera) underneath the pellet sensor to clearly see the pellet sensor.
- Use a soft, clean toothbrush to gently brush away any dust.



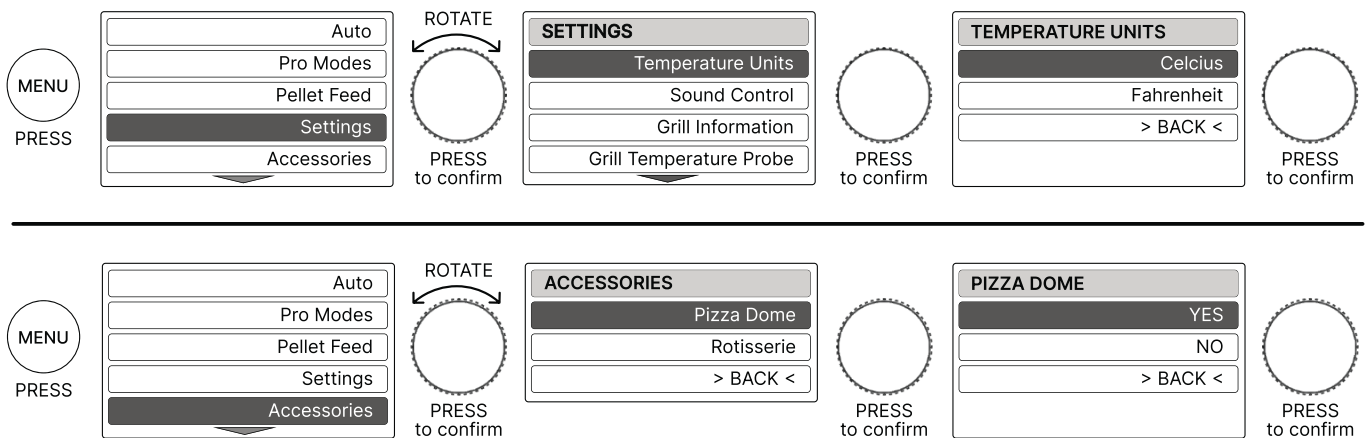
5.4. Menu

- Below is a summary of the top two levels of the controller menu.
- To access, press the MENU button, rotate the control knob and press to select.
- Menu items may change with screen software updates over time.
- Scan QR code for detailed overview of all menu functions.



Sub-Menu Items

- Certain MENU items have sub-menus with options.
- Below is an example for selecting temperature units and Pizza Oven option.



5.5. Pro Modes

- Enter the PRO MODES menu to use these additional cooking modes.
- Refer to section 6.4 for more information on each mode.

5.6. Feed Pellets

Fill Auger Tube

- Used to fill an empty auger tube when the hopper is completely empty.
- Never feed pellets when the auger tube is already full, as too many pellets in the fire grate can lead to lots of smoke and a temperature spike once the fire is lit.

Empty Hopper

- Runs the auger motor for two minutes to clear out any remaining pellets in the bottom of the hopper. Only do this after the majority of pellets have been emptied out via the dump chute.
- Once completed the ash dump must be used to empty pellets into the ash bin.
- Depending on how many pellets have been dumped, the bin may need to be emptied twice.
- Open the heat baffle flame vent to visually inspect the fire grate to ensure all pellets have been dumped into the bin.
- Do not fire up the grill with wood pellets in the ash bin as they will catch alight.

Unblock Jam

- Sometimes wood pellets can become jammed in the spiral auger shaft, preventing it from rotating to feed pellets.
- The Unblock Jam function rotates the auger shaft forwards and backwards to help clear the jam.
- If clearing does not work the auger shaft may need to be removed to clear the jam. Refer to the Troubleshooting section for more information.

5.7. Settings

Temperature Units

- Set Celsius or Fahrenheit as the temperature for grill control and all food probe measurements.

Child Lock

- Turn on to lock the controller panel from any input when buttons are pressed.
- Press and hold the control knob for 5 seconds to unlock.
- Child lock can also be enabled and disabled remotely using the Trimal Aus App.

Sound Control

- Control if notification sounds are made from the grill.
 - Fire lit (3 short beeps)
 - Grill approaching target temperature “ready to cook” (3 short beeps)
 - Errors (3 long beeps)
- By default all sounds are on (not muted).

Grill Information

- Display grill controller serial number, software version and wireless connection information.

Grill Temperature Probe

- Select between Grill (default), Probe 1 and Probe 2 for grill temperature measurement.
- If there is a problem with the temperature reading from main grill temperature sensor, a food temperature probe plugged into P1 or P2 can be used for the main temperature control until a replacement can be installed.
 - Plug the food probe into P1 or P2 and select in the settings.
 - Position the food probe next to the grill temperature sensor, or on the grill rack.

Grill Temperature Offset

- Used to fine-tune the offset between the grill temperature sensor and the actual temperature on the grill rack. This should only be used if the grill temperature sensor is consistently reading higher/lower than the average grill rack temperature.

Ignitor Control

- Used to control the operation of the pellet ignitor (aka. ignition rod or hot rod).
- If the pellet ignitor is not working properly, set to TURN IGNITOR OFF, and manually light the fire until replaced.
- To manually light the wood pellets:
 - Power on the grill so it is on the standby screen. This will turn on the fans at low speed.
 - Place 1/4 cup of pellets in the centre of the fire-grate.
 - Light the pellets with a butane torch or fire lighter (do not use flammable fluids).
 - Once a fire is established, fire up the grill as normal.

Test Operation

- AUTO TEST: Runs a 5 minute operational test. Remove all wood pellets from the hopper and auger feed tube before completing this test. A PASS or FAIL status will be presented at the end of the test, except for the rotisserie motor, which you can visually check to see if rotating.
- Manually run any of the electrical devices (auger motor, fans, rotisserie motor, pellet ignitor or heating element) for a set time period. This allows the devices to be observed for normal operation, plus a PASS or FAIL outcome will be presented (except for rotisserie motor).

Calibrate Food Probes

- Adjust the temperature of any of the food probes if reading higher or lower than normal.
- Test in ice cold water, calibrating to 0°C / 32°F and ideally also in hot water comparing to a reference thermometer (or multiple other probes).
- The food probe must be used in the same port each time for the adjustment to be valid.

5.8. Accessories

- Use this menu to turn ON/OFF which accessories are available for use.
- Rotisserie motor is factory installed and so already set to YES by default.
- If Pizza Dome is available, set to YES so this cooking option can be used.
- The heating element uses up to 1800W (7.4 Amps) so can be set to “NO” if using a battery to power the grill.

6. How To Use

6.1. First Use

Update Grill Software

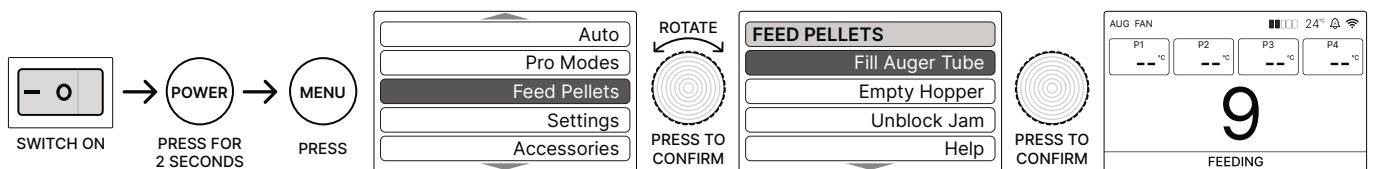
- Grill software is regularly updated with improvements so please update before first use.

Prepare The Grill

- Remove the stainless steel grill racks and wash with warm soapy water before first cook.
- Install the right drip tray (#25), left drip tray (#26), vent (#27) and cover (#28).
- Close the flame vent (push top handle in).

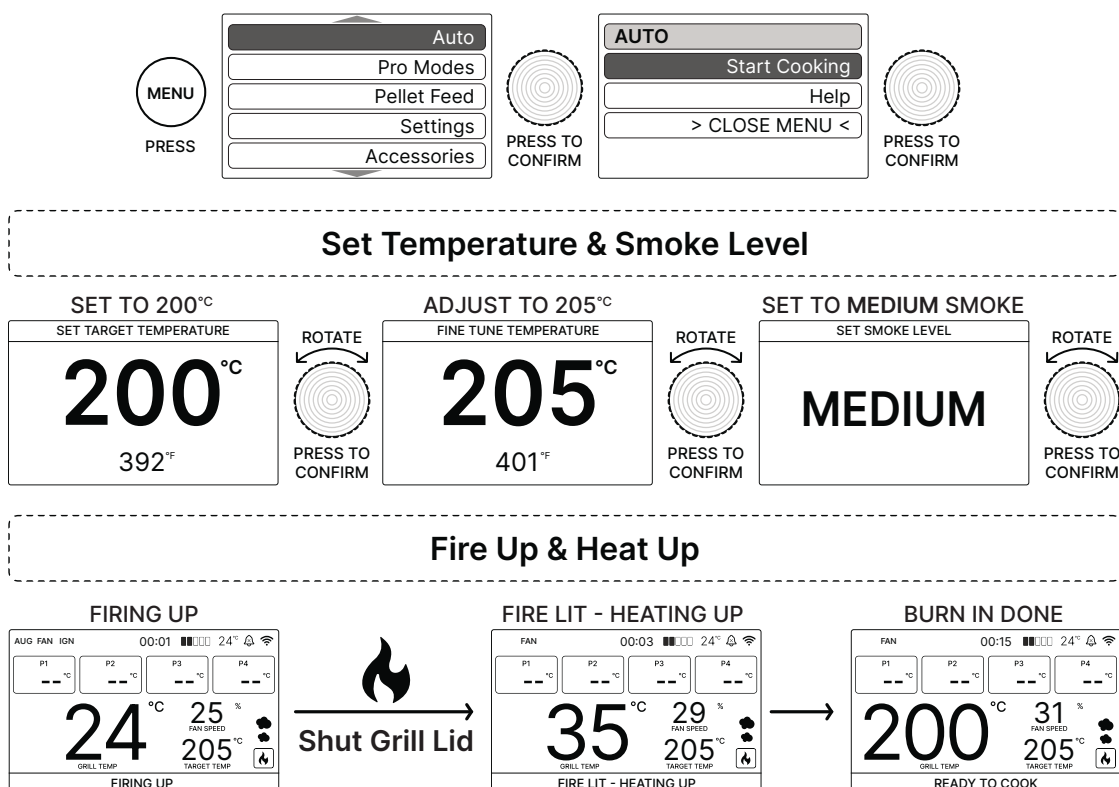
Prime Wood Pellets

- Pour 2~3 kilograms of wood pellets into the hopper.
- Follow the steps below to prime the auger tube with wood pellets.
- This process is only required if the hopper is totally empty, not before each cook.
- The auger will run for 10 seconds at a fast speed to fill the auger tube, ready for firing up.



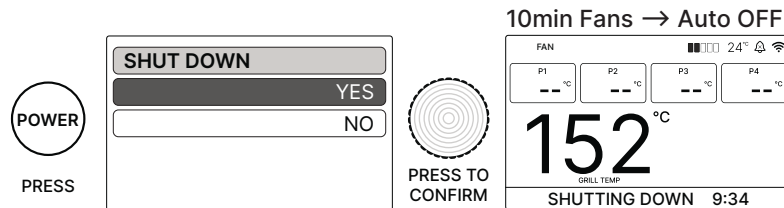
Fire Up & Burn In

- Before the first cook, the grill must be fired up and “burnt in” by heating to $>200^{\circ}\text{C}$ on medium smoke level for 15 minutes. Using medium smoke ensures the heating element is also activated.
- The high temperatures ensure all the internal components are clean of any oil or other contaminants that may be present from the production process.
- Part of the joy of owning a new Trimal S1 is seeing the flames reflecting off the shiny new stainless steel - so leave the lid open until flames are visible for this first fire up. Future cooks, fire up with the lid shut.
- Follow the steps below to fire up the grill and complete the burn in.



Finish Burn In

- Once the grill has heated up to 200°C for 15 minutes it can be shut down.
- Note that it is quite normal for the temperature to reach as high as 220-230°C before dropping back down.
- Follow the steps below to safely shut down the grill.



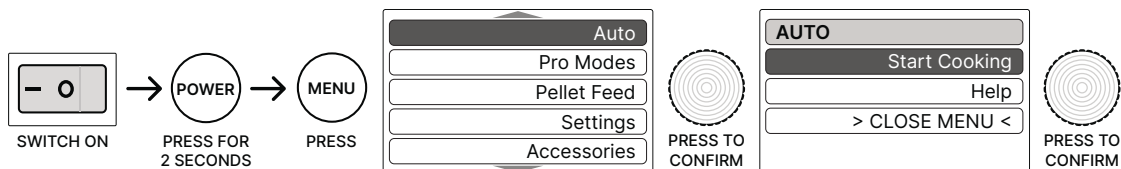
- Once the grill has finished the 10 minute shut down cycle (fans running), it will turn itself off.
- The grill is now ready for the first cook.

6.2. Completing a Cook

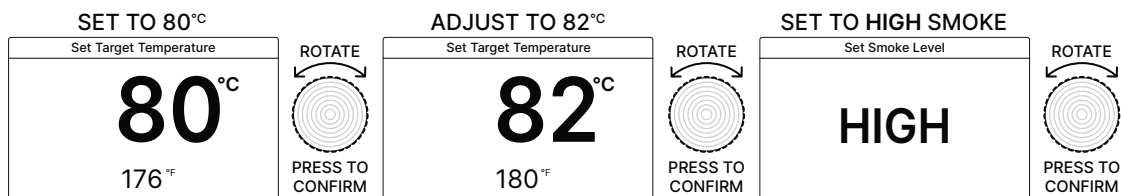
Firing Up

- The grill can be fired up with the lid shut.
- If firing up with the lid open, shut the lid as soon as smoke is released as the controller looks for a temperature rise to know if the fire has been lit.
- Below is a quick overview of how to start a low-temperature smoking cook using AUTO mode.
- Note that the minimum target temperature able to be set depends on the weather, so on a hot day the minimum is 100°C (212°F), as even the smallest fire can maintain that temperature.
- Refer to section 6.4 to understand all the cooking modes.

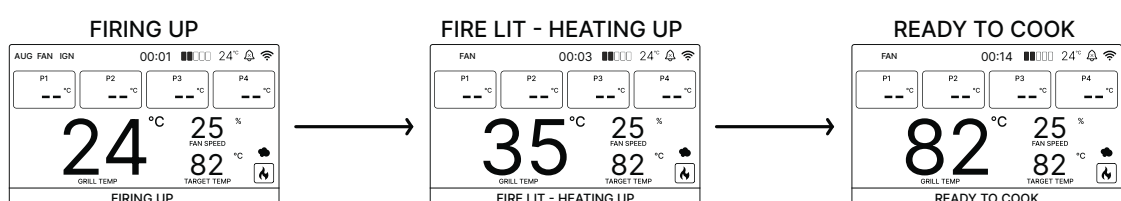
Empty ash and grease bins & top up wood pellets before each cook!



Set Temperature & Smoke Level

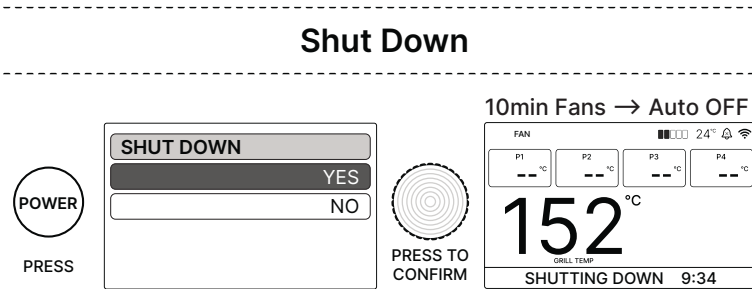


Fire Up & Heat Up



Shutting Down

- At the completion of a cook the grill needs to be safely shut down.
- Follow the process below.
- The fans will continue to run for 10 minutes then the grill will turn itself off.

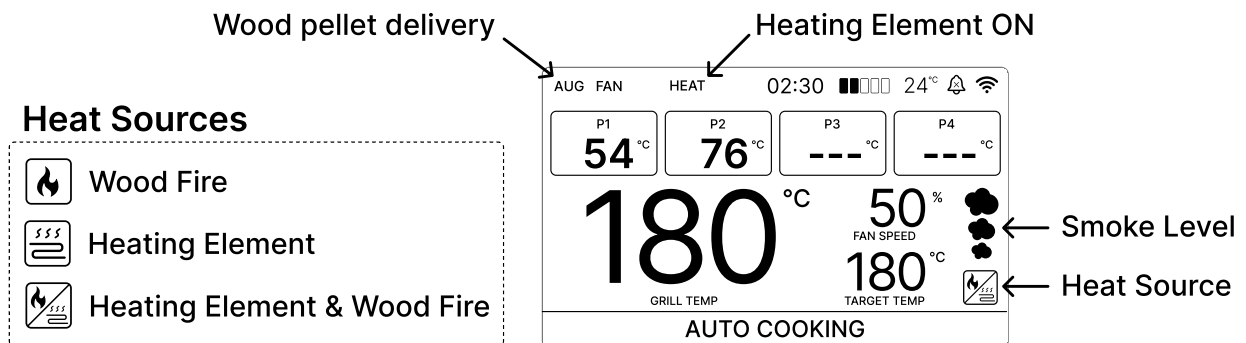


Cleaning

- Refer to section 7. **Cleaning** to learn how to empty out the ash and grease bins and other regular cleaning requirements.

6.3. Heat Sources

- Trimal S1 pellet smoker features two heat sources:
 - Wood pellet fire (provides smoke, wood fired flavour and high heat output)
 - Electric heating element
- The heat source that is being used at any time is shown on the controller screen via a small icon as shown below.
- Heat sources turn on/off in cycles based on the target grill temperature and smoke level setting. The status of each is shown in the top left of the controller screen:
 - AUG = Auger motor is on, delivering wood pellets to the fire.
 - HEAT = Heating element is on.



Dual Heat Source Benefits

- Dual heat sources provide the S1 with a number of advantages over wood pellet only smokers and grills:
 - Faster heat up time to high target temperatures
 - Wood smoked flavour (if desired) even when cooking at temperatures over 200°C / 392°F
 - Lower wood pellet usage = lower running cost
 - Electric heating only modes such as Dehydrator and Keep Warm

Heating Element Usage

- Target temperatures < 135°C / 275°F = Only wood pellets are used.
- Target temperatures > 135°C / 275°F = Heating element used for MEDIUM and HIGH smoke levels.
- PIZZA OVEN mode, the heating element will operate at high output together with a large fire to provide a fast heat up time and lower wood pellet usage.

Smoke Levels

- Smoke is produced when wood pellets that are delivered into the fire grate smoulder. Soon thereafter they ignite and burn with flames, at which point the smoke amount reduces.
- Smoke is produced in batches every 60 to 90 seconds and not continuously.
- More smoke is produced at low temperature settings when the fire is small compared to higher temperatures with a larger, cleaner burning fire.
- At temperatures below 135°C / 275°F, LOW, MEDIUM and HIGH smoke settings are achieved by modulating pellet delivery frequency and fan levels. The difference between the smoke levels at these low temperatures is subtle. By default it is recommended to use LOW.
- At temperatures above 135°C / 275°F the heating element is used for MEDIUM and HIGH smoke settings to supplement the heat, allowing a smaller fire which produces more smoke.
 - LOW = wood pellet only (larger fire produces less smoke)
 - MEDIUM = heating element will contribute some heat with medium wood pellet fire
 - HIGH = heating element will contribute more heat with small wood pellet fire

6.4. Cooking Modes

What Are Cooking Modes?

- The S1 supports a wide variety of cooking styles, so for convenience a range of cooking modes are built into the controller menu.
- AUTO mode is suitable for most cooking.
- PRO modes are more specialised cooking methods, such as Pizza or Rotisserie.
- Note that some cooking modes require certain accessories, such as the Hotplate, Pizza Oven or Rotisserie kit. These items can be purchased from the Trimal online store.
- Scan the QR code for more information on all the cooking modes, and review the summary of each below.



AUTO Mode

- AUTO mode is suitable for most indirect heat cooking on the grill rack, including low 'n' slow smoking, roasting, grilling and baking.

PRO Modes

- Access PRO modes through the controller menu.
- It is possible to change between Auto and Pro Modes that use wood pellets (fire already lit).

Pellet Only Smoker

- Only wood pellets are used for heat - the heating element is not used.
- This mode may be useful if running off a battery (less power draw).
- To disable the heating element (advisable on battery) set to NO in MENU > ACCESSORIES.

Open Flame Grilling

- Cook food using direct open flame heat from the wood pellet fire.
- The lid should be open when cooking in this mode (once the fire is lit).
- Set to LOW FLAME or TURBO FLAME. No temperature or smoke levels can be set.
- Fully open the flame vent (pull the top handle) and remove the cover off the left drip tray.

Hot Plate Cooking

- Cook on the stainless steel hot plate (optional accessory)
- Remove left drip tray; leave right drip tray in place so grease can drain onto it.
- Place in the hotplate and slide all the way to the left.
- The left half is the hottest, while the right is cooler, ideal for keeping food warm once cooked.
- Start with the flame vent shut as this normally provides sufficient heat.

Wood Fired Rotisserie

- Only available if the Rotisserie Kit is installed and set to YES in MENU > ACCESSORIES.
- Wood pellet fire provides indirect heat.
- Rotisserie shaft rotation can be started/stopped by tapping on the FN button.

Charcoal Rotisserie

- Only available if the Rotisserie Kit is installed and set to YES in MENU > ACCESSORIES.
- Charcoal is used as the only heat source, lit externally in a charcoal chimney and poured into the trays once it has turned white and no longer has visible flames.
- Fan speed can be changed to modulate the heat output from the charcoal. Higher fan speeds (and air flow) will reduce the heat inside the cooking chamber.
- The grill can be operated with the lid open, or with the lid closed for higher temperatures.
- If cooking with the lid closed beware of flare-ups which may burn the food.
- Rotisserie shaft rotation can be started/stopped by tapping on the FN button.

Pizza Oven

- Only available if the Pizza Oven set to YES in MENU > ACCESSORIES.
- Plug a food temperature probe into P4 and the probe shaft into the rear of the Pizza Oven to read the internal temperature.
- Open the flame vent, remove left drip tray, keep right drip tray in place.
- Lift the Pizza Oven into the centre of the grill then hang in place the left and right heat baffles.
- Slide the oven all the way to the left of the grill.
- The lid should be shut to reach the desired temperature quickly, but can remain open for a minute or two at a time when placing in, rotating and removing pizzas.

Dehydrator

- Only available if the Heating Element is installed.
- Heat is provided by the Heating Element for temperatures of ambient air +20°C to +120°C.
- Fan speed can be adjusted up to 50% (25-30% normally is ideal). Higher fan speeds will blow the heat out of the grill faster and so will limit the maximum temperature the grill can reach.

Fan Only

- Fan speed can be adjusted, ideal for doing cold smoking (with our SmokeGen® or smoke tube)
- No heat or smoke is produced.

6.5. Changing Between Modes

- It is possible to change between certain cooking modes.
- When the grill is operating, press MENU, rotate to Change Mode, select the new mode, press to confirm then set target temperature and smoke setting, or heat level (as applicable).

6.6. Keep Warm

- If the electric heating element is installed, the Keep Warm function can be activated to use only the heating element (no fire) to maintain temperature, keeping food safely hot until ready to serve.
- Default temperature is 80°C, but is adjustable from 20°C to 80°C above the ambient air temperature (as measured inside the hopper).
- If the heating element is NOT installed, then the Keep Warm function will just set to AUTO operation with target temperature of 80°C and LOW smoke level.
- The Keep Warm function is accessed through the menu when the grill is already fired up, and is available in the following operating modes:
 - AUTO, Pellet Only Smoker, Hot Plate Cooking, Wood Fired Rotisserie and Pizza Oven.
- To finish using the Keep Warm function, press MENU and then Shut Down. The fan will run for 10 minutes before automatically turning the grill off.

6.7. Cooking Mode Temperature Ranges

- Below is a summary of the heat settings available for each cooking mode.

Operating Mode	Setting Range
Auto Mode	(70 ~ 100°C) ¹ to 300°C (158 ~ 212°F) ¹ to 572°F
Pro Cooking Modes	
Pellet Only Smoker	70°C to 250°C 158°F to 482°F
Open Flame Grilling	Low Flame, Turbo Flame (no specific heat settings)
Hot Plate Cooking	Low (~180°C / 356°F), Medium (~220°C / 428°F), High (~260°C / 500°F)
Wood Fired Rotisserie	Same as Auto mode
Pizza Oven	200°C - 400°C 392°F - 752°F
Dehydrator	Ambient temperature ² +20°C to 120°C +36°F to 218°F

- Lowest temperature setting that can be set changes based on the ambient temperature, as minimum fire provides around 70°C / 126°F temperature rise.
- Ambient temperature is measured inside the hopper, so may be slightly higher than actual outside ambient temperature.

6.8. Cooking Hardware Guide

- Each cooking mode will set the appropriate heating source, suggested target temperature and display relevant information on the screen.
- The table below outlines how to use or position the drip trays, grill racks, open flame vent and vent cover for each mode.

Operating Mode	Heating Source ¹	Flame Vent ²	Drip Trays ³	Grill Racks ⁴
Auto Mode	Wood Pellet Fire & Heating Element	Closed	Left & Right (cover on)	Left & Right
Pro Cooking Modes				
Pellet Only Smoker	Wood Pellet Fire	Closed	Left & Right (cover on)	Left & Right
Open Flame Grilling	Wood Pellet Fire	Open	Left & Right (cover off)	Left & Right
Hot Plate Cooking	Wood Pellet Fire & Heating Element	Start Closed Adjust as required	Right	—
Wood Fired Rotisserie	Wood Pellet Fire & Heating Element	Closed	Left & Right (cover on)	—
Charcoal Rotisserie	Charcoal (manually placed in trays once white and no flames - do not light in grill)	Closed	—	—
Pizza Oven	Wood Pellet Fire & Heating Element	Open	Right	—
Dehydrator	Heating Element	Closed	Left & Right (cover on)	Left & Right
Fan Only	—	Closed	Left & Right (cover on)	Left & Right

- Heating Element must be installed and set to YES in the Settings > Accessories menu to be available for use. Heating element only active when target temperature >135°C and MED or HIGH smoke setting.
- Heat baffle flame vent is opened with the top handle on the left side of the grill, allowing heat to rise up through the vents for higher temperatures.
- Drip trays are divided into left and right. Cover the hole in the left drip tray unless doing open flame grilling.
- Grill racks (left and right) should be removed when using the HOTPLATE, PIZZA OVEN or ROTISSERIE CHARCOAL TRAY.

7. Cleaning

7.1. Cleaning Frequency

- The following cleaning frequency guide is a suggested minimum.
- Clean grill surfaces regularly to remove grease and prevent grease fires.
- Clean thoroughly after very long or greasy cooks.



s1-cleaning

Regular Cleaning Tasks	Frequency
Dump fire grate and empty ash bin	Before every cook
Empty grease bin	Before every cook
Vacuum grill bottom	Every 100kg of pellets burnt
Wipe down grill surfaces	Regularly to remove accumulated grease
Clean exhaust panels & vents	Brush every few cooks, deep clean every 250kg of pellets burnt
Empty wood pellet hopper	If not using for more than a week (particularly in humid climates).

7.2. Cleaning Tasks

Fire Grate & Ash Bin

- Dump ash from the fire grate after each cook (or before next cook)
- Ash may be dumped only once the shut down cycle has been completed.
- Follow these steps:
 - Lift up the lock plate and pull the knob back firmly (and lower gently) several times to tip the ash into the bin.
 - Slide lock plate back down.
 - Lift up and slide out the ash bin and tip out the ash.
 - Ensure there are no hot embers that could cause a fire if tipped onto flammable materials.
 - If there are still hot embers, pour water on the ash before safely disposing.
 - Slide the ash bin back into place (lift and slide, then lower to lock into place).
- Once every few long cooks check to see if there is an accumulation of ash on the right fire grate. If there is, remove the heat baffle and scrape or brush the fire grate clean.

Drip Trays & Grease Bin

- Always clean out the grease bin before any high temperature cooks (>250°C / 482°F).
- Empty the grease bin after any cooks that produced enough oil to run down the drip tray.
- Follow these steps:
 - Lift and slide out the grease bin.
 - Wash out the bin with warm soapy water.
 - Slide the grease bin back into place.
 - Wipe out any grease in the V channel and spout.
 - Clean grease trays with hot soapy water or BBQ cleaner.
 - Use a scourer or scraper to remove any burnt grease and food.

Grill Bottom

- Ash is blown out by the fan and accumulates in the bottom of the grilling area. This can impact the passive air flow to the Heating Element if it becomes too thick.
- Remove the grill racks, grease trays and heat baffle and thoroughly vacuum out any ash.
- If grease has dripped down into the grilling bottom, use BBQ cleaner and paper towel or soft cloth to clean up.

Grill Surfaces

- Use BBQ cleaner and paper towel or soft cloth to clean grill surfaces. The focus should be removing any accumulated grease which could lead to a grease fire if not removed.
- Do not use harsh chemicals such as oven cleaners, mineral turpentine or paint thinners on any of the black painted surfaces.
- Internal stainless steel panels can be scrubbed more aggressively (as no paint coating), but will scratch if a scourer or wire wool is used.

Stainless Steel

- Although high quality 304 grade stainless steel is used for the grill lids, it can still develop “tea staining” brown corrosion spots if near the coast or swimming pool.
- To clean, polish along the brushed grain with kitchen grade stainless steel cream or powder to remove any rust or other blemishes.
- Ultra-fine wire wool can be used to remove stubborn stains. Take care to rub with the brushed surface pattern where applicable.
- Do not use a stainless steel cleaning ball or coarse cleaning pad or brush as it will scratch the stainless steel.

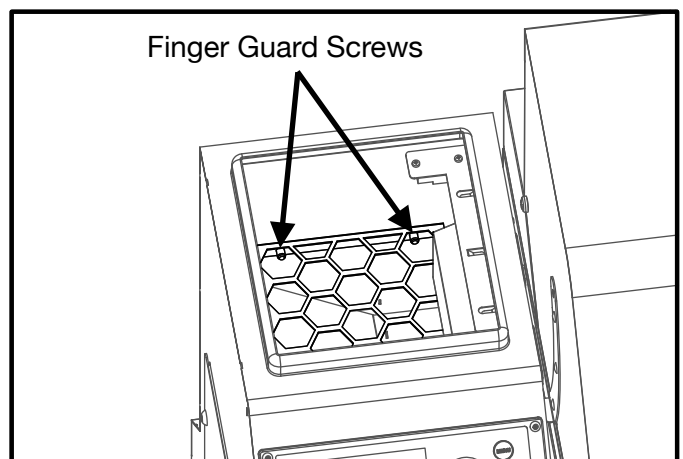
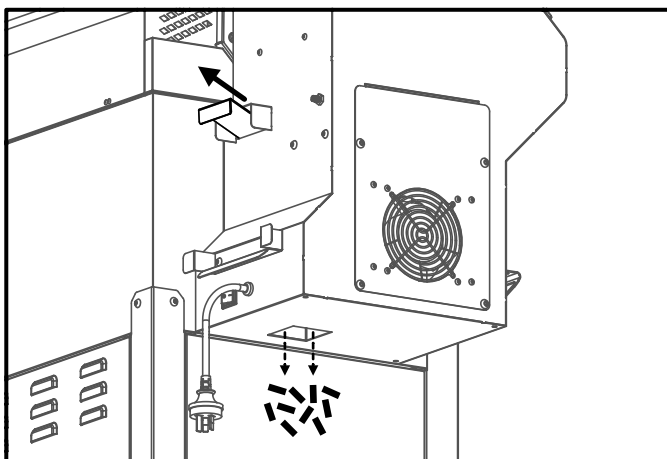
Exhaust Vents

- Exhaust vents in the side walls can accumulate soot and creosote, eventually restricting air flow which negatively affects the operation of the grill.
- Every few cooks use a large soft bristle hand brush to clean the inner and outer exhaust vents. Strike the inner side walls firmly to free up loose soot.
- Every 250kg of pellets (or as required) the rear and side inner panels can be removed to allow thorough cleaning to be completed.
- Use a brush or flat scraper to clean off soot.
- Clean the air vent holes in the rear wall panels with a small soft bristle brush.
- Clean the stainless steel panels with BBQ cleaner and a soft cloth and then return into place.

Wood Pellet Hopper

If not planning to use the grill for more than a week it is advisable to dump out all of the wood pellets in the hopper to store in a sealed container.

- Place a bucket high up under the hopper dump chute and pull the trap door slider, located on the rear of the hopper. Use a long blunt object to help push the pellets towards the dump hole.
- Once as many pellets as possible have been dumped out, enter the controller menu and select: **Pellet Feed → Empty Hopper** The auger will push remaining pellets into the fire grate.
- Dump the pellets out of the fire grate into the ash bin and dispose.
- Always dump out all pellets before trying to close the trap door slider.
- If required, use a vacuum to clean out thoroughly. The finger guard inside the hopper can be temporarily removed (2 screws on rear of hopper) to give better access.



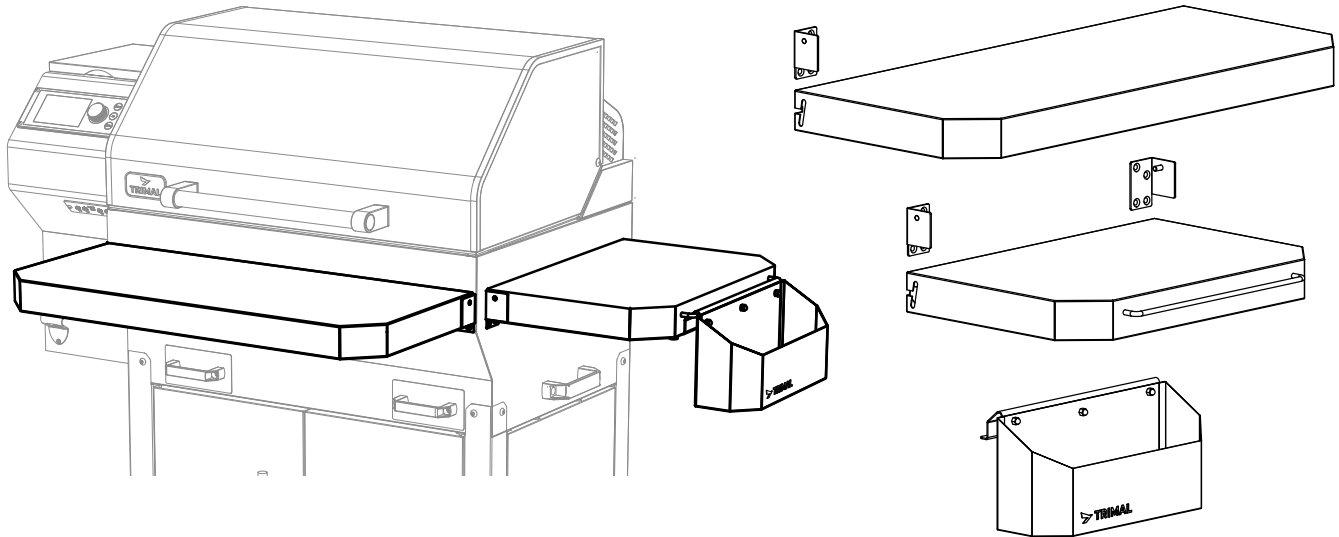
8. Accessories

8.1. Front & Side Bench Kit

- Mounts to the front and right side of the grill providing large bench area.
- Both benches can be folded down and easily lifted in/out.
- Right bench has rail that the large condiment basket hangs on.



benches

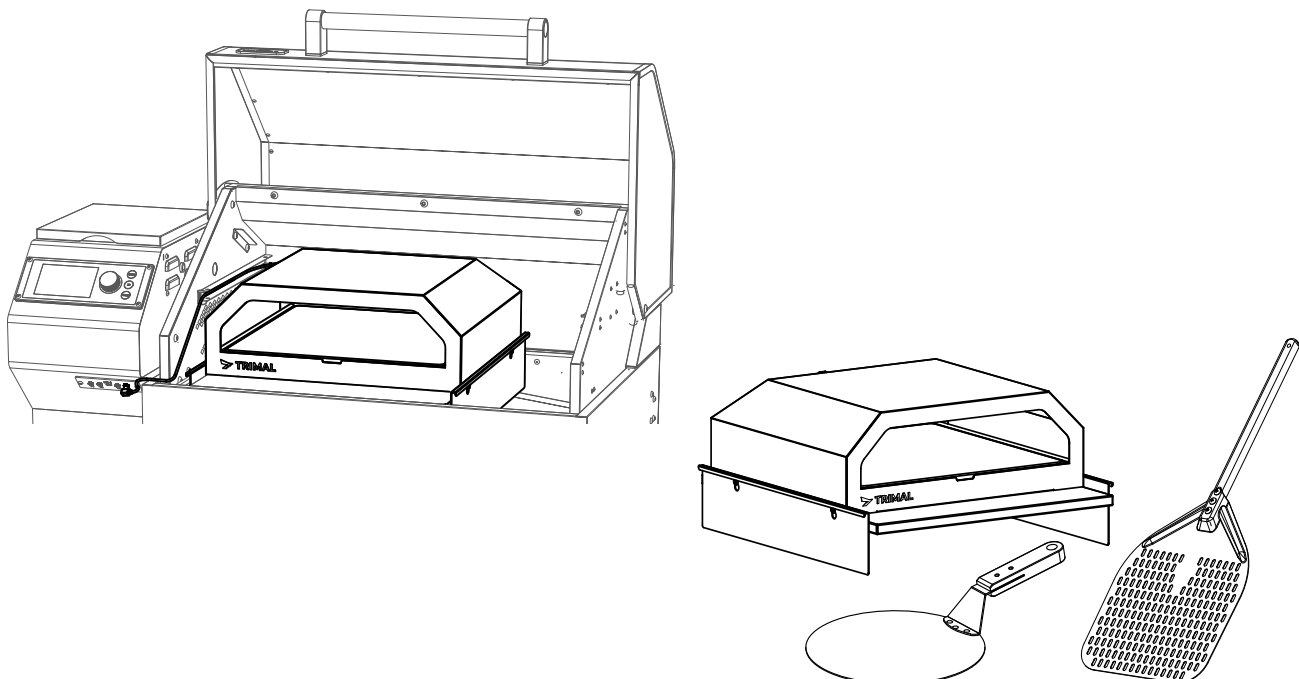


8.2. Pizza Oven

- The oven sits inside the grill heated by direct open flames and the heating element.
- Can reach temperatures of 400°C / 752°F.
- Manage and monitor pizza oven temperature on the controller screen or through the Trimal Aus App.

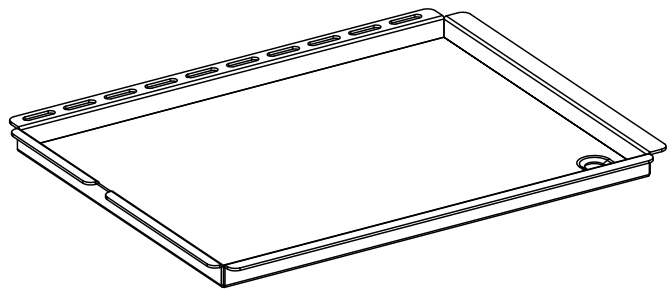
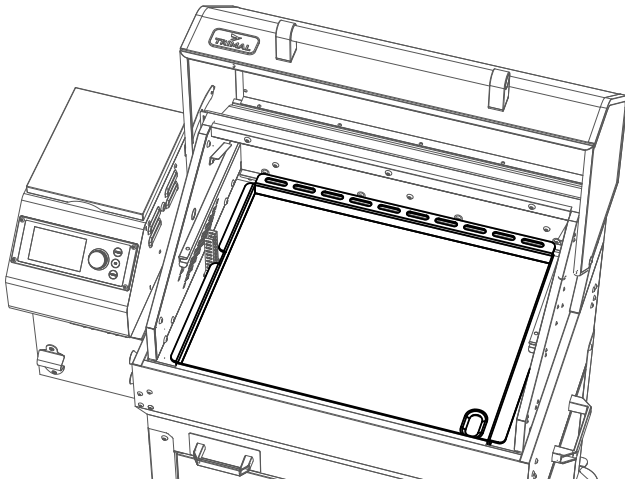


pizza-oven



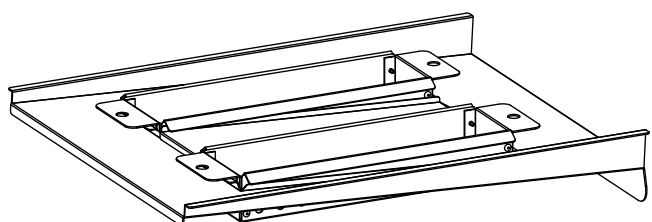
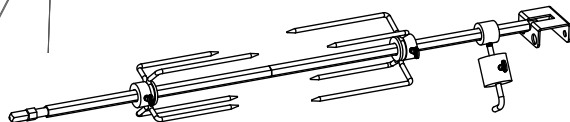
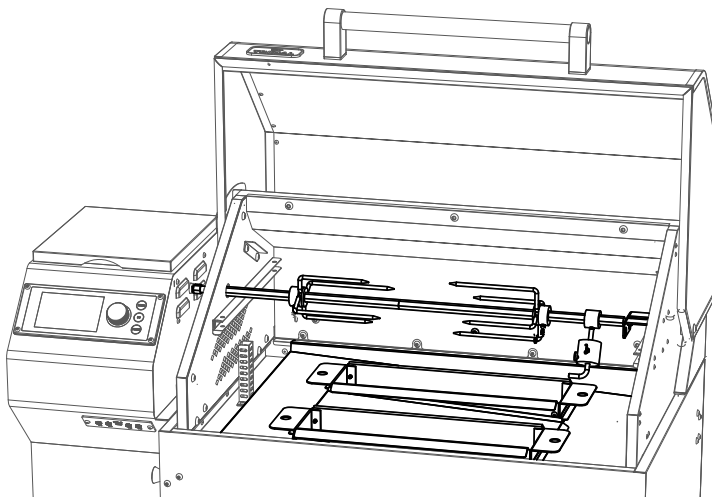
8.3. Hot Plate

- Drop in the stainless steel hot plate for even more cooking versatility.
- Leave the hot plate in place when doing low and slow cooking for more even and stable temperatures and easy clean up.
- Drain hole feeds directly onto the drip tray for easy clean up.



8.4. Charcoal Rotisserie Kit

- The S1 has a rotisserie motor built into the hopper operated directly from the controller or Trimal Aus App.
- Use the rotisserie with wood pellet smoke and heat, or over charcoal.
- Use the charcoal tray to cook flame grilled food directly on the grill rack.



9. Troubleshooting

9.1. Error Codes

The S1 features advanced error detection providing alerts if electrical components stop working or other abnormal operation occurs, as outlined below.

Scan the QR code for more detailed explanation of each error and actions to take.



s1-errors

Error	Error Problem, Actions by Grill & Solution	Spare Part Code
ERROR 21 Grill temperature sensor	• Problem: No signal from grill temperature sensor. • Action: Fans on 10 minutes, then grill power off. • Solution: Replace temperature sensor. Temporarily use food probe 1 and select in the controller settings.	GR-EL-002-01
ERROR 22 Ambient temperature sensor	• Problem: No signal from ambient temperature sensor. • Action: Continue normal operation, but use default value of 30°C as ambient temperature. • Solution: Replace temperature sensor.	GR-EL-002-01
ERROR 24 Wood pellet sensor	• Problem: No signal from wood pellet sensor. • Action: Continue normal operation, but hide pellet sensor icon on the screen and in the App. • Solution: Replace wood pellet sensor.	GR-EL-011-01
ERROR 31 Auger motor failure	• Problem: Auger motor is not using power when on. • Action: Fans on 10 minutes, then grill power off. • Solution: Check for jam or loose plug. Replace motor.	GR-EL-005-01
ERROR 32 Inner fan motor failure	• Problem: Inner fan is not using power when on. • Action: Outer fan on 10 minutes, then grill power off. • Solution: Check plug connection. Replace fan.	GR-EL-006-01
ERROR 33 Outer fan motor failure	• Problem: Outer fan is not using power when on. • Action: Grill power immediately off. • Solution: Check plug connection. Replace fan.	GR-EL-006-01
ERROR 41 Pellet ignitor failure	• Problem: Pellet ignitor is not using power when on • Action: Fans on 10 minutes, then grill power off. • Solution: Replace pellet ignitor. Turn off pellet ignitor in controller menu and manually light fire until replaced.	GR-EL-010-01
ERROR 42 Heating element failure	• Problem: Heating element is not using power when on • Action: Heating element will not be used. All modes that use wood pellet heat can operate as normal. • Solution: Check plug connection. Replace element.	GR-EL-008-01
ERROR 51 Grill High Temperature	• Problem: Temperature exceeded 340°C for >1 minute, or large temperature spike. • Action: Fans on 10 minutes, then grill power off. • Solution: Check grill operation.	N/A
ERROR 52 Flame Out	• Problem: Temperature dropping; likely fire is out • Action: Fans on 10 minutes, then grill power off. • Solution: Check grill operation.	N/A
ERROR 53 No Fire Established	• Problem: Temperature not rising; likely no fire established • Action: Fans on 10 minutes, then grill power off. • Solution: Check grill operation.	N/A

9.2. Troubleshooting Guide

The table below provides guides for most common issues.

Scan the QR code for more detailed troubleshooting guidance.



s1-troubleshoot

Problem	Reason	Investigation/Solution
Grill not turning on. Screen not lighting up.	No Power	- Check power supply to the grill. A beep will sound when power is turned on. - Power requirement is standard residential 10Amp 240V AC. - If using a portable power supply, ensure minimum 400Watt power output with at least 700Wh battery capacity (240V AC). Heating element must be set to NO in Accessories menu.
	AC power box failure	- Look through the fan cover on the side of the hopper to see if a green light can be seen. This will indicate that the AC power box has power supply. If no light, the AC power box may be faulty. - Contact Trimal customer service to get a replacement part.
Error 51 Grill high temperature	Grill temperature sensor signal issue	- If grill temperature was not possibly $>340^{\circ}\text{C}$, or a large spike did not occur, the temperature sensor may be giving bad readings. - Temporarily use food probe 1 (P1) as the grill temperature sensor (Scan QR code). - Contact Trimal customer service to get a replacement part.
	High temperature setting with lid open	- If grill set to high temperature with lid frequently open the maximum size fire will result. When the lid is shut the temperature can spike above $>340^{\circ}\text{C}$. - Use the open flame grilling or hot plate modes if cooking with the lid open (which are not monitoring the temperature).
Error 52 Flame out Error 53 No fire established	No wood pellets	- Check to ensure there are pellets in the hopper. - Check to see if there are wood pellets are in the fire grate
	Auger jammed	- Use test grill function to manually run the auger - if it is not turning use the Unblock Jam function. - If still not turning, clean out all pellets and check to see if auger shaft is loose (good) or stuck (jammed).
	Too much ash	Visually check to see if there is ash accumulated in the fire grate. Dump out as required.
	Moist pellets	- Visually check to see if there are partially burnt wood pellets accumulated in the fire grate. Dump out as required. - Dump out pellets and use fresh, clean pellets.
Grill not maintaining temperature	Normal operation?	- Grill temperature will cycle above and below the target temperature by as much as 10°C at low ($<100^{\circ}\text{C}$) temperature settings and 30°C at high ($>200^{\circ}\text{C}$) settings. - Keep the lid shut and let the temperature stabilise. - Wind and direct sunlight can also impact the temperature.
	Fire going out and relighting?	- At lowest temperature settings the fire is very small. - If pellets are very long, or moist the fire can go out every 10-15 minutes resulting in the temperature dropping as low as 60°C, then relighting and spiking back up again. - Change pellets (or mix different types) and test operation.
Grill never reaching temperature	Moist pellets	Dump out pellets and use fresh, clean pellets.
Smoke from hopper	Pellet and ash accumulations in fire grates	- Open grill lid and open flame vent (pull handle out) - Switch power off (to stop operation) then immediately back on. - Power grill on and use the Feed Pellets function to push pellets from hopper until smoke from hopper stops. - Remove drip tray and check fire grate for pellet accumulation. - Dump and remove any pellets. - Once cooled down clean thoroughly.

9.3. Grill Repairs

⚠ DANGER

- **HIGH VOLTAGE ELECTRICITY:** Unplug the grill from power supply (switch off and unplug) before completing any cleaning or repairs.

- Most components can be safely and easily replaced by a “handy person”, following the step by step guides on the Trimal Knowledge Centre.
- Scan the QR code for access to instructions.



s1-troubleshoot

9.4. Spare Parts

Refer to exploded diagrams and parts lists in sections 2.2, 2.5 and 9.1 for spare part names. Scan the QR code above for a full troubleshooting guide. Please contact the Trimal support team for availability and pricing of spare parts.

9.5. Get Support (contact us)

Start by visiting the Trimal Help Centre by scanning the QR code.

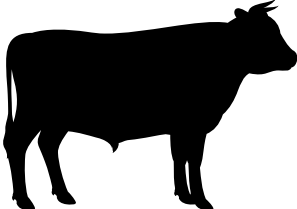
Fill out the support form there for any product operational or warranty issues. This helps provide our team with your correct contact and product information.

Contact us anytime at support@trimalgrill.com or call 1300 390 703

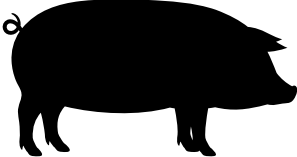


help

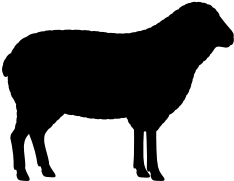
10. Food Temperature Guide



Rare:	52°C / 125°F	
Medium Rare:	57°C / 135°F	
Medium:	63°C / 145°F	
Medium-well:	68°C / 155°F	
Well:	74°C / 165°F	
Ribs:	90°C / 195°F	
Brisket:	99°C / 210°F	



Medium Rare:	63°C / 145°F	
Medium:	66°C / 150°F	
Medium-well:	68°C / 155°F	
Well:	71°C / 160°F	
Ribs:	90°C / 195°F	
Pulled:	96°C / 205°F	



Rare:	52°C / 125°F	
Medium Rare:	57°C / 130°F	
Medium:	63°C / 145°F	
Medium-well:	68°C / 155°F	
Well:	74°C / 165°F	
Pulled:	96°C / 205°F	

Safe Food Time Guide		
Food sitting between 5-60°C / 41-140°F for:		
<2 hours	2-4 hours	>4 hours
Refrigerate or use immediately	Use immediately	Throw out

Meat Type	Safe Cook Temp
Chicken	74°C / 165°F
Fish	63°C / 145°F
Eggs	72°C / 162°F
Sausages	75°C / 167°F
Ground Meat	78°C / 173°F
Reheat Leftovers	74°C / 165°F

Meat Type	Cooking Temp
Beef Brisket	107-135°C / 225-275°F
Beef Ribs	107-135°C / 225-275°F
Beef Steak	107-135°C / 225-275°F
Pork Butt / Ribs	107-135°C / 225-275°F
Pork Tenderloin	107-163°C / 225-325°F
Chicken / Turkey	121-149°C / 250-300°F
Fish	107-121°C / 225-250°F

Cooking times can vary greatly even for the same sized cut of meat. For slow cooked meat, check the internal temperature and probe for tenderness to determine if ready. This information is provided as a reference guide only. Review local authority guidelines for detailed food safety information.

11. Limited Product Warranty

Thank you for choosing Trimal. We stand behind the quality and performance of our wood pellet smoker grills and are committed to providing our customers with excellent service and support. This warranty is provided by Trimal Pty Ltd and is in addition to your rights under the Australian Consumer Law.

WHAT THIS WARRANTY COVERS

Trimal Pty Ltd provides a 3-year parts warranty coverage from the date of purchase by the original owner for domestic (non-commercial) use within Australia. This warranty applies to defects in all materials and workmanship. During the warranty period, Trimal will at its option repair or replace defective parts or units.

WHAT THIS WARRANTY DOES NOT COVER

- Defects or damage resulting in failure to assemble or operate in accordance with this instruction manual.
- Damage resulting from misuse, abuse, accident, alteration, or improper maintenance.
- Rust, corrosion, or coated finish discolouration.
- Damage caused by lack of cleaning or improper storage.
- Commercial use (unless explicitly covered by a separate commercial warranty).
- Normal wear and tear including surface scratches or dents.

HOW TO MAKE A WARRANTY CLAIM

To make a claim please contact our customer service team with:

- Proof of purchase (order number), email and phone number used to order the grill.
- Serial number of the grill (see sticker under hopper lid)
- Description and photos (if applicable) of the issue.

We will guide you through the claims process and provide support as needed.

Contact us by scanning the QR code and submitting a support request.



Customer Support

☎ 1300 390 703

support@trimalgrill.com

This TRIMAL S1 Electric Pellet Smoker BBQ has been tested and certified to meet the requirements of the following standards:

IEC 60335-2-6: 2014 + A1: 2018
IEC 60335-2-102: 2017
IEC 60335-1: 2010 + A1: 2013 + A2: 2016
EN 60335-1: 2012 + A11:2 014 + A13: 2017 + A1:2 019 + A14: 2019 + A2: 2019 + A15: 2021 + A16: 2023
EN IEC 60335-2-102:2024 + A11:2024
EN 60335-2-6: 2015 + A1: 2020 + A11: 2020;
EN 62233: 2008
AS/NZS 60335.1: 2020 + A1: 2021
AS/NZS 60335.2.102: 2018
AS/NZS 60335.2.6: 2014 + A1:2015 + A2:2019



Made in China by Wuxi Ever Grill Metal Products Co., Ltd

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