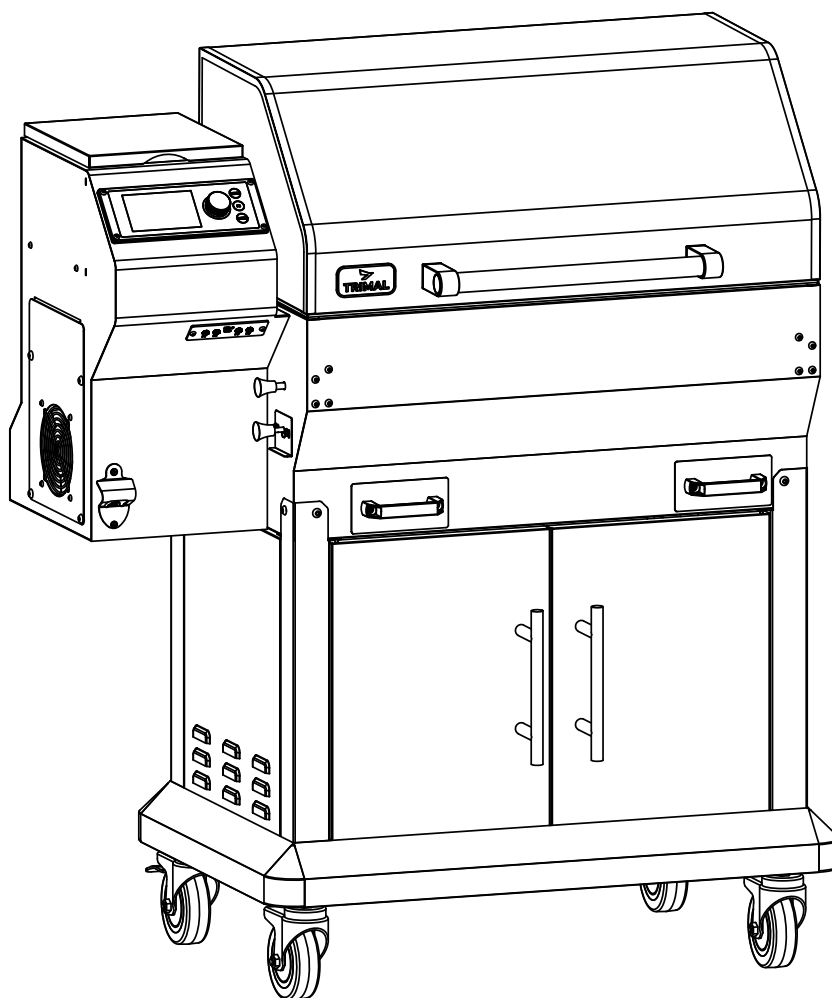




S1 Smoker Grill

Instruction Manual



Scan for more assembly and
how to use instructions



s1-assembly

This manual is for Trimal S1 Wood Pellet Smoker Grill model GR-S1-01

Edition 2 - 04-05-2025

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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 pitmaster, the Trimal S1 makes it easy to achieve mouthwatering results. Engineered for consistent heat control and effortless smoke management, 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.

Trimal Knowledge Centre



help

Join the Trimal Community



community

\$50 gift voucher giveaway each month!

Now you're part of the Trimal crew, we can't wait to see the epic food you cook up on your S1!

Email a photo of your cook to support@trimalgrill.com with the subject **My Trimal Cook** for a chance to win a \$50 gift voucher to the trimal shop, paid to one randomly chosen photo submission each month.

T&Cs apply trimalgrill.com/au1/photo-tc

1. Grill Safety

1.1. Safety Warnings

⚠ WARNING

Read and follow all warnings and instructions before assembling and using this appliance.

DO NOT DISCARD THIS INSTRUCTION MANUAL

⚠ CAUTION

- **PELLET STORAGE:** Always store wood pellets in a dry location, away from heat or ignition sources. Only add wood pellets into the hopper when being used and remove all wood pellets if not planning to use the grill for a week or longer.
- **PELLET TYPE:** Only use wood pellets which are made specifically for pellet grills and no larger than 6mm in diameter and 30mm long.
- **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.
- **TIP OVER RISK:** 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.
- **FLAT SURFACE:** The grill must be positioned on a flat, level surface for safe and clean operation.

⚠ WARNING

- **HOT SURFACES:** This grill will be extremely hot during operation and for some time after turning off. Take care to avoid burns. Use heat resistant gloves.
- **CHILDREN:** Never leave the grill unattended when young children are present.

⚠ GRILL CLEARANCES

- Minimum clearance from combustible material to the side or rear of the grill body is 300mm.
- Minimum clearance from combustible material above the grill's closed grill is 800mm.
- Minimum clearance from non-combustible materials to the side or rear of the grills body is 100mm.

⚠ WARNING

FOR OUTDOOR USE 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.

⚠ DANGER

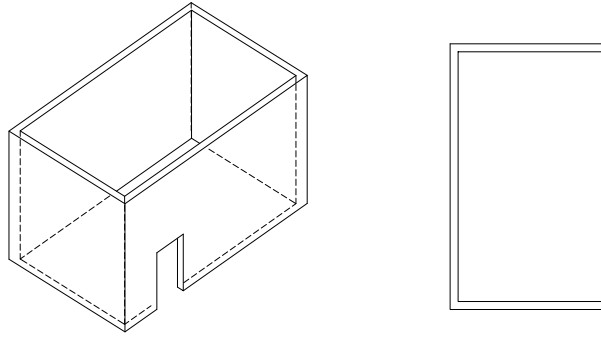
- **FLAMMABLE LIQUIDS:** Never operate this grill within 7.5 metres of any flammable liquids, or use flammable liquids to light the grill.
- **RAINING:** Do not operate outside in the rain. The electrical components are not water proof and wood pellets must be kept dry and never exposed to water.
- **HIGH VOLTAGE ELECTRICITY:** 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) installed in the household switchboard. A 10 Amp or higher-rated extension lead may be used if required.
- **DISCONNECT POWER:** Always disconnect the power supply (switch off and unplug) before attempting any cleaning or repairs.

PLEASE SAVE THESE INSTRUCTIONS!

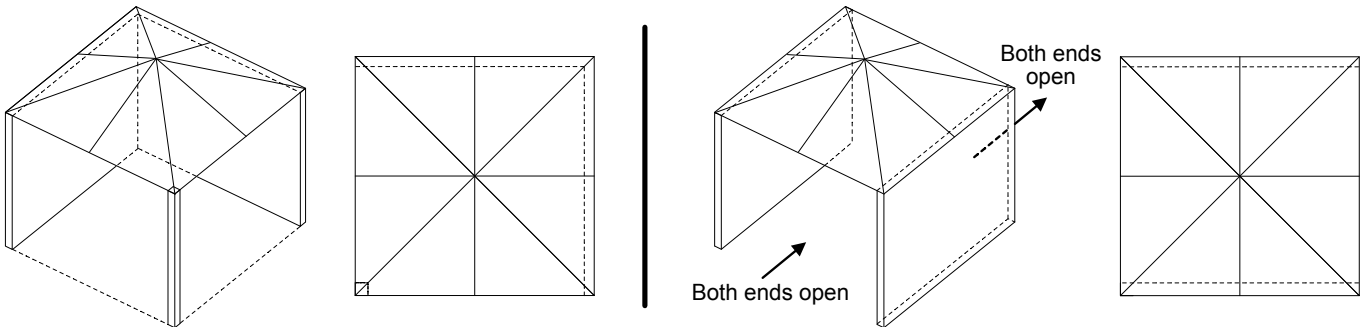
1.2. Outdoor Enclosure Guidelines

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.

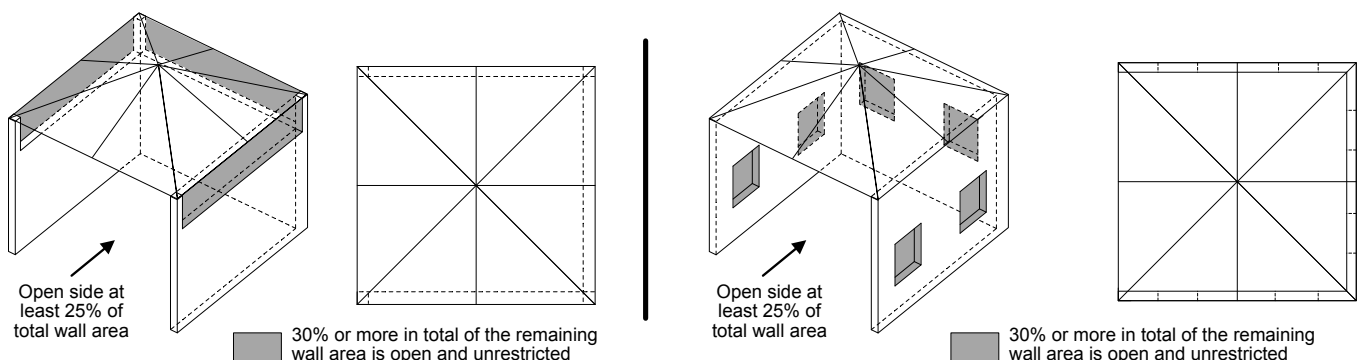
The area has walls on all sides but at least one permanent opening at ground level and no overhead cover.



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.



1.3. Total Fire Ban Days

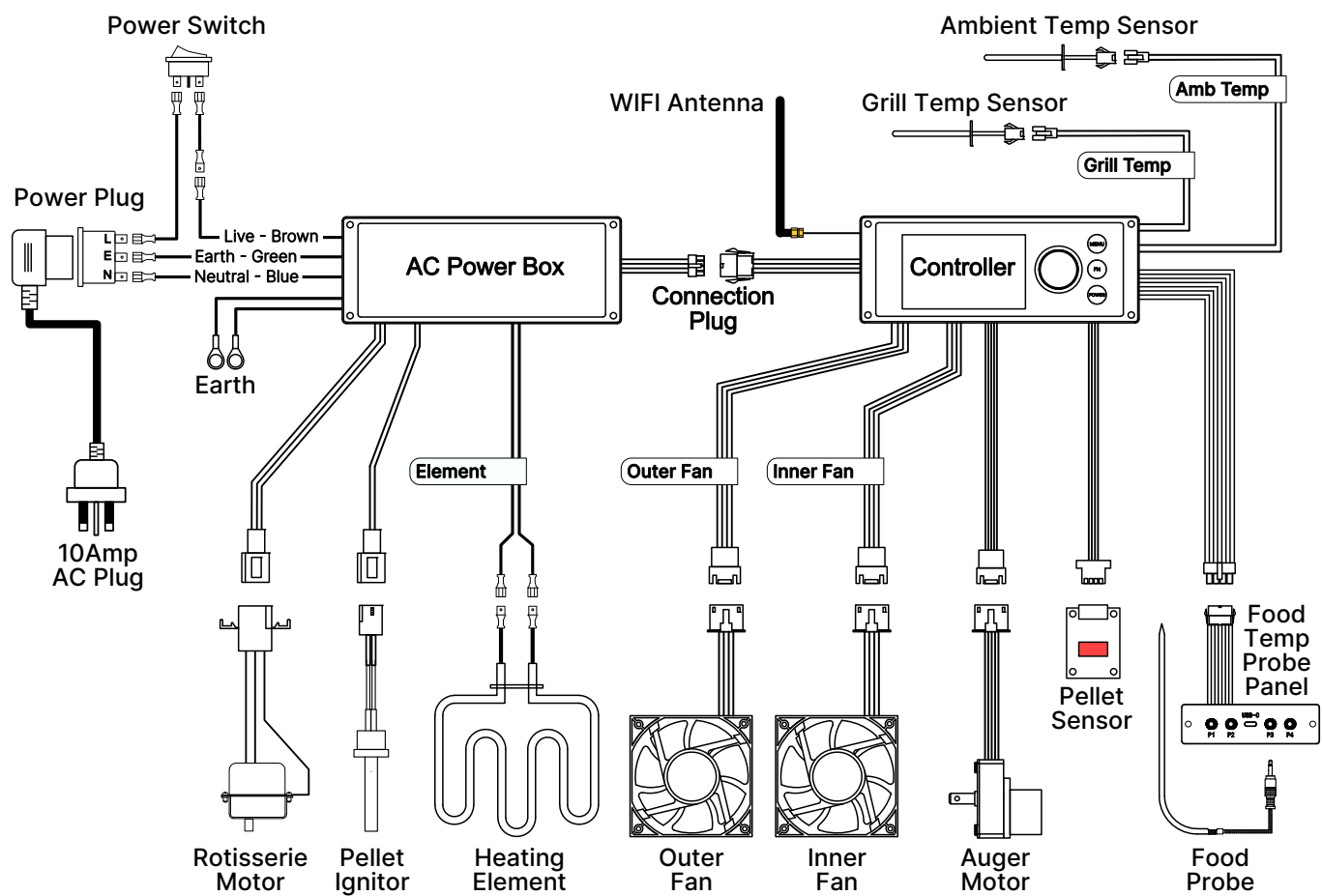
- This grill uses solid fuel wood pellets which are generally not permitted for use on total fire ban days.
- Use of the Dehydrator and Fan Only modes that don't burn wood pellets may be permitted.
- Check with local authorities for fire ban and related safety guidelines.

2. Grill Information

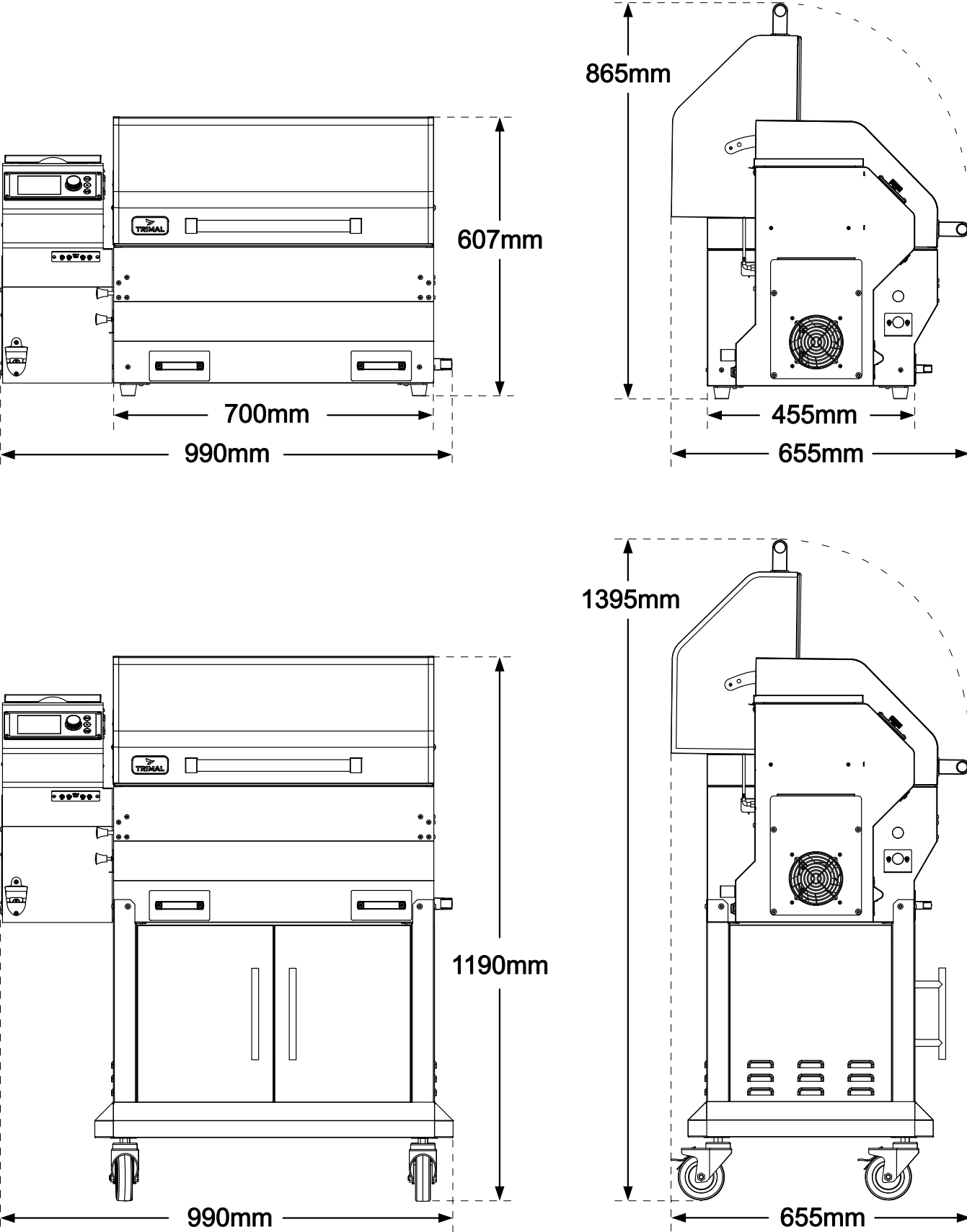
2.1. Specifications

Grill Model	GR-S1-01 (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
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	2200W (heating element installed) 250W (no heating element)
Hopper Capacity	6 kg
Assembled Dimensions	990mm wide x 655 deep x 1190 tall

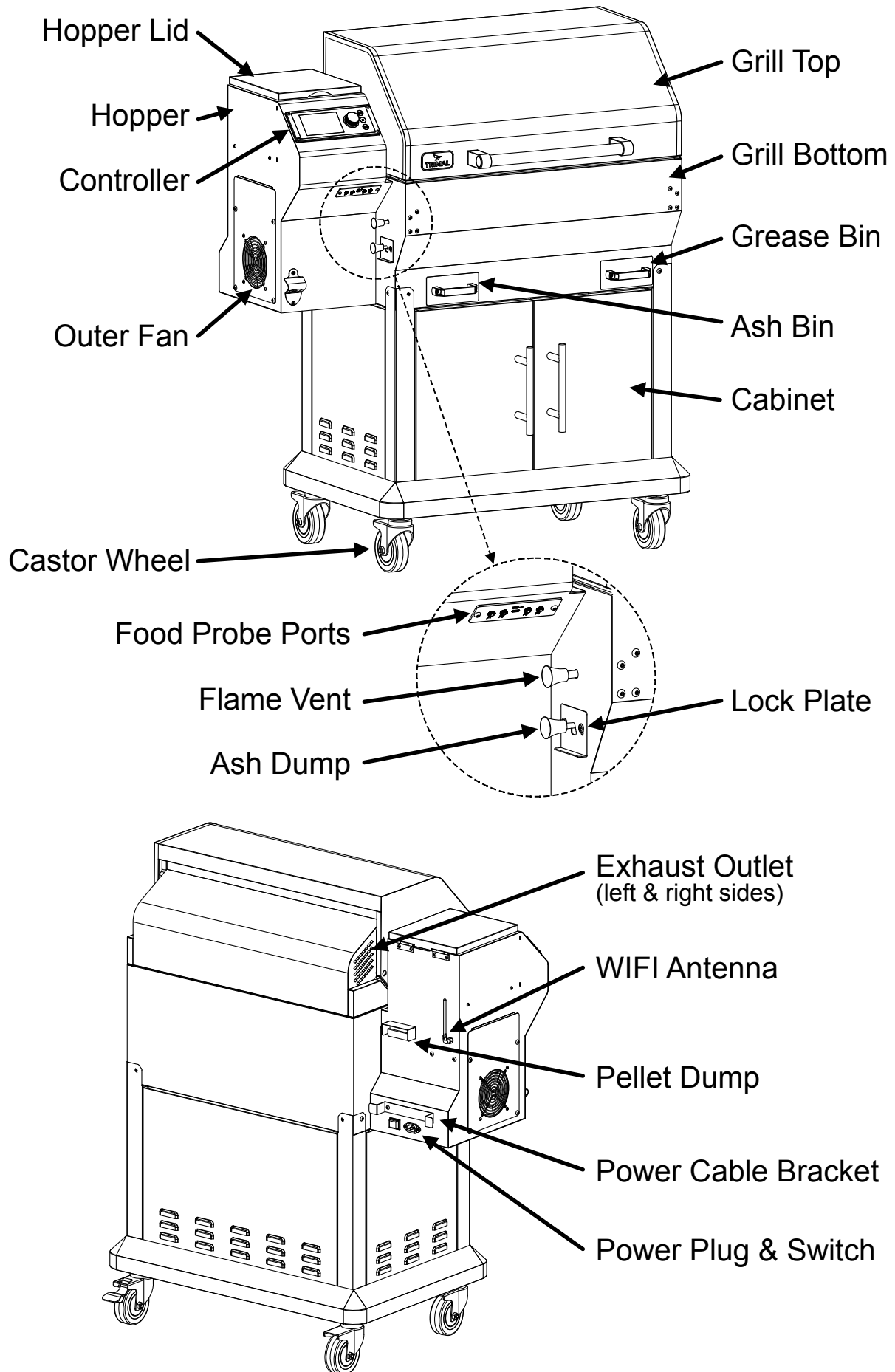
2.2. Electrical Wiring Diagram



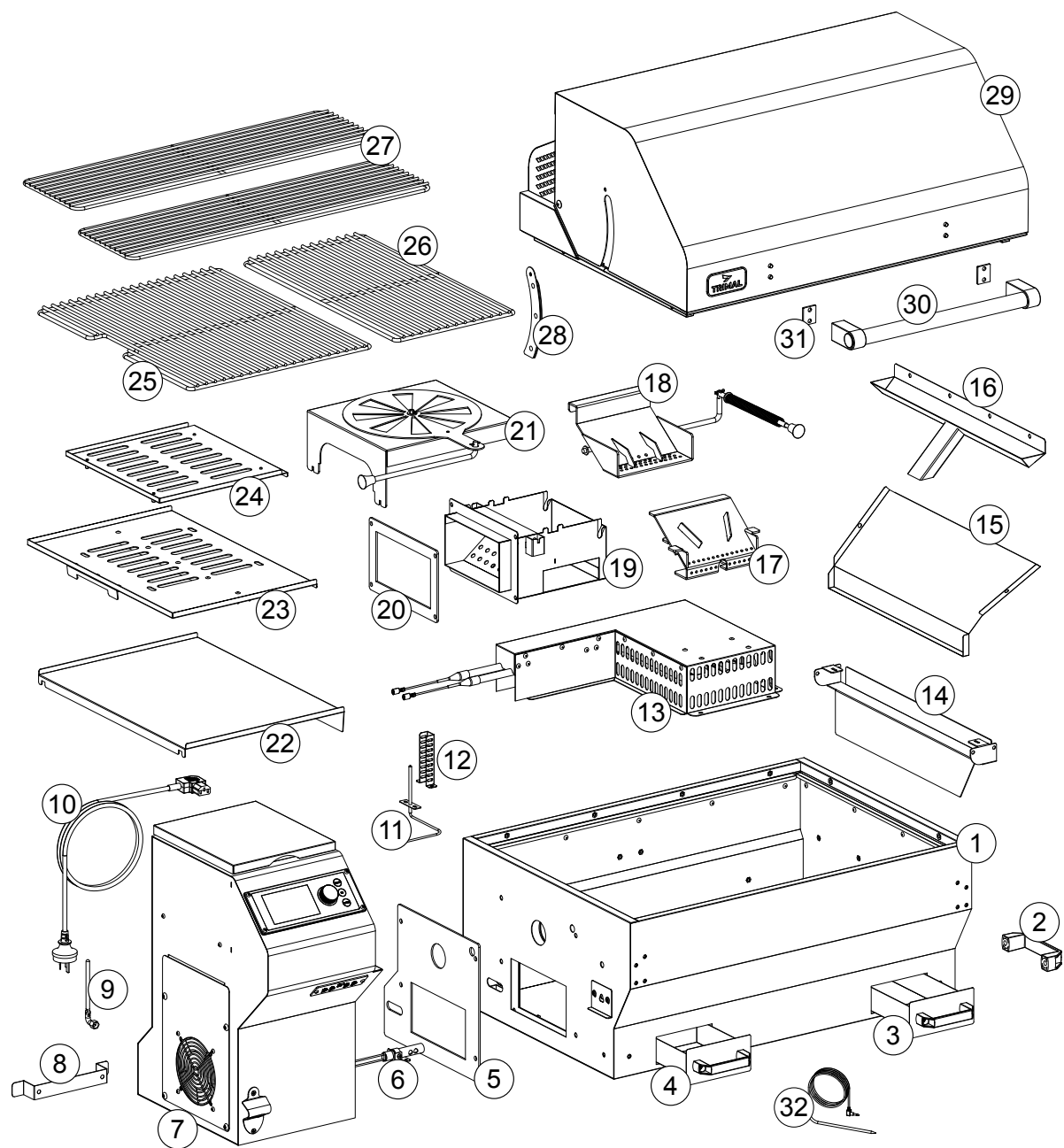
2.3. Grill Dimensions



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	Hopper Gasket	GR-CP-008-16	1
6	Pellet Ignitor (mounted in tube)	GR-CP-005-28	1
7	S1 Hopper	GR-CP-008-01	1
8	Power Cable Bracket	GR-CP-008-15	1
9	WIFI Antenna	GR-EL-009-01	1
10	AC Power Cable (1.5m 10 Amp)	GR-EL-003-01	1
11	Grill Temperature Sensor	GR-EL-002-01	1
12	Temperature Sensor Cage	GR-CP-003-12	1
13	Electric Heating Element	GR-EL-008-01	1
14	Mid Support-Baffle	GR-CP-007-24	1
15	Grease Wall	GR-CP-007-23	1
16	Grease Drain	GR-CP-007-27	1

No.	Part Name	Part SKU	Qty
17	Left Fire Grate	GR-CP-005-20	1
18	Right Fire Grate Assembly	GR-CP-005-03	1
19	Fire Box	GR-CP-005-01	1
20	Fire Box Gasket	GR-CP-005-40	1
21	Heat Baffle Assembly	GR-CP-006-02	1
22	Right Drip Tray	GR-CP-007-22	1
23	Left Drip Tray	GR-CP-007-20	1
24	Vent Cover	GR-CP-007-21	1
25	Bottom Left Grill Rack	GR-CP-004-20	1
26	Bottom Right Grill Rack	GR-CP-004-21	1
27	Top Grill Rack	GR-CP-004-22	2
28	Lid Rotisserie Slot Cover	GR-CP-001-11	1
29	S1 Grill Top	GR-CP-002	1
30	Grill Lid Handle	GR-CP-009-01	1
31	Lid Arm Pad	GR-CP-009-22	2
32	Food Temperature Probe	GR-EL-002-03	2

3. Grill Assembly

3.1. Unpacking Boxes

Trimal S1 Includes

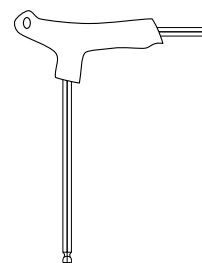
- GR-S1-01-BOT: contains bottom half of the grill and hopper. **Open this box first!**
- GR-S1-01-TOP: contains the lid, top section of the grill, grill racks, drip trays and small parts.
- GR-S1-01-FIRE: contains fire-box, heat baffle, screws and hex wrench tools and small parts.
- GR-S1-01-FEET: contains bench-top feet; **or** GR-S1-01-LCAB: contains cabinet and legs.

Unpacking Tips

- Unpack and layout 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 be 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. Hex sockets are used as more durable than Phillips head 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 the thread!
- Some accessories require a standard Phillips head screwdriver (not supplied)



3.3. Fastening Screws

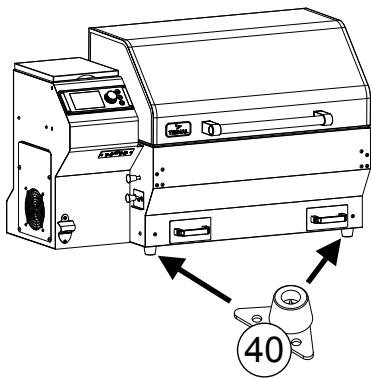
- Refer to the table below for all the screws used to assemble the grill and mounting options.
- Screws are packed in clearly labelled (A, B, C....) plastic ziplock bags.

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	M6x5x20 Sleeved Hex Screw (SS)	FA-003-26

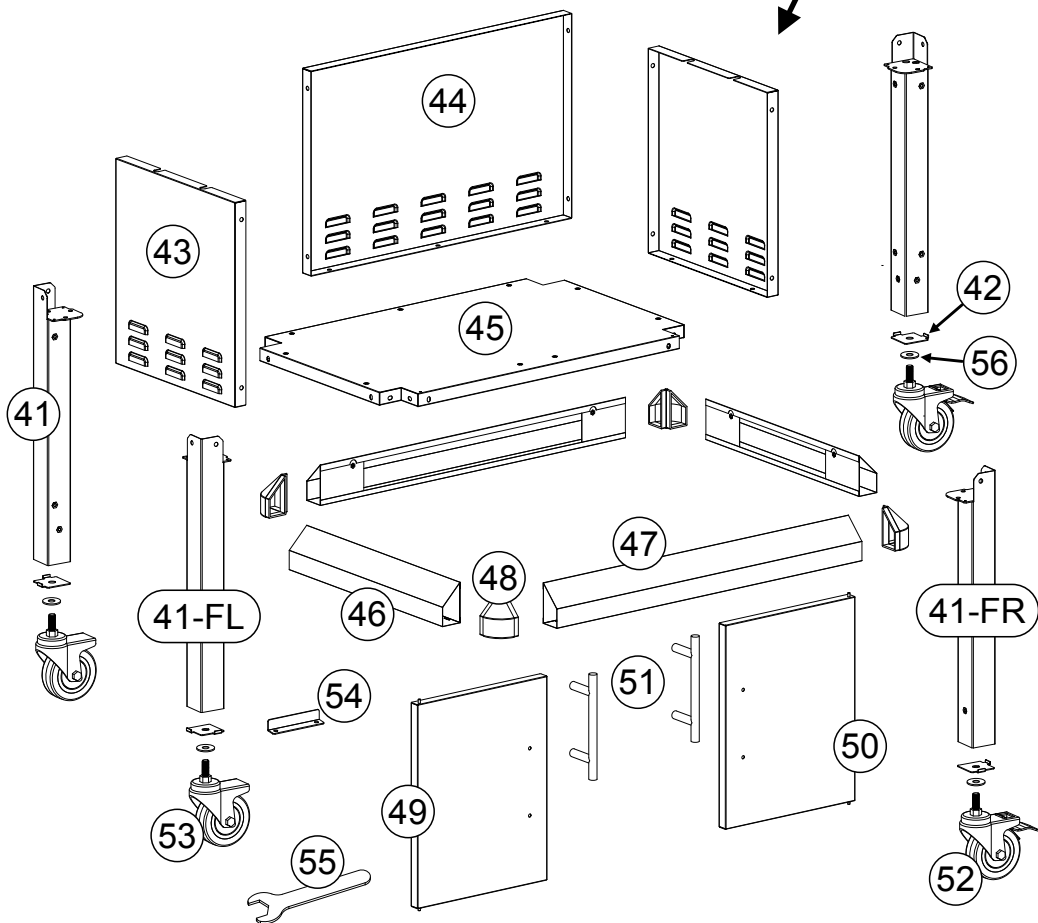
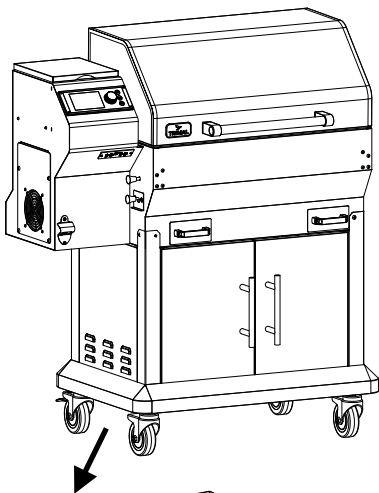
3.4. Mounting Options

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

Bench-top Feet (GR-CP-014-01)



Cabinet with Castor Wheels (GR-S1-01-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	1
55	18mm Spanner	TL-002-10	1
56	M12x24 Flat Washer	FA-101-20	4

3.5. Benchtop Feet Assembly (optional)

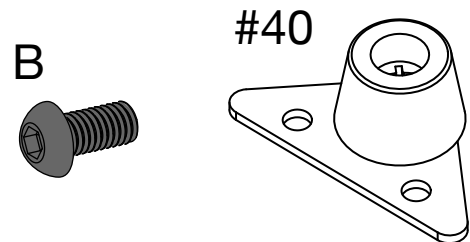
Recommended Use

- The benchtop feet are designed for situations where the grill is placed on a flat bench surface.
- An ideal bench height is between 570 mm and 600 mm, resulting in an approximate main cooking rack height of 900 mm 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.



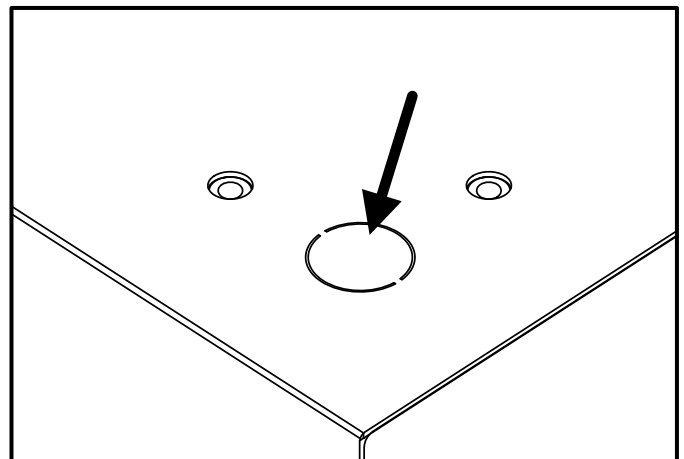
Components Used

- 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.



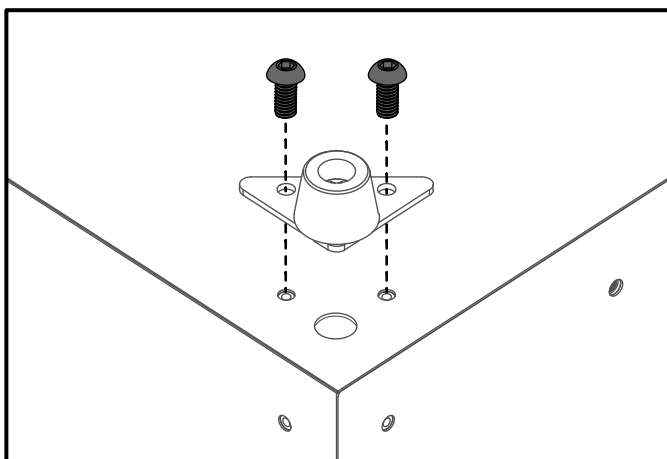
Step 1. Punch Out Panel

- 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.



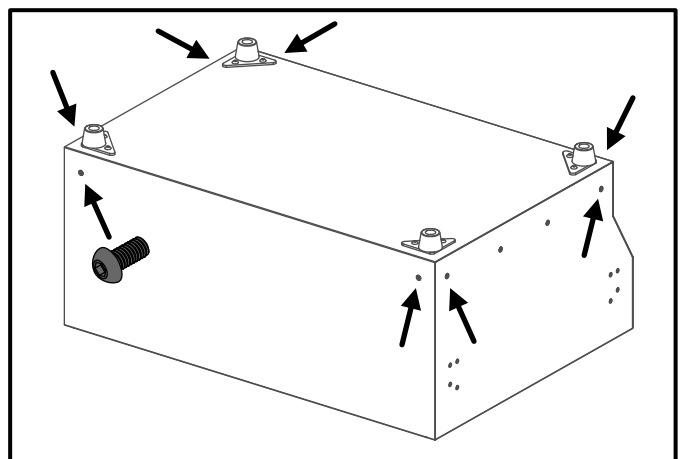
Step 2. Assemble Feet

- Use 2 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.

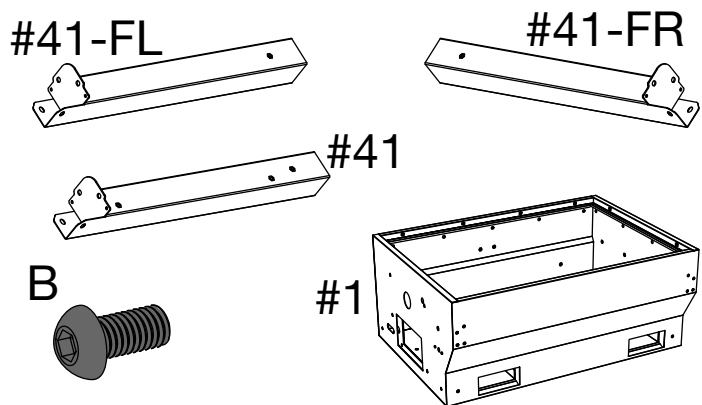


3.6. Cabinet Assembly (optional)

3.6.1. 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)

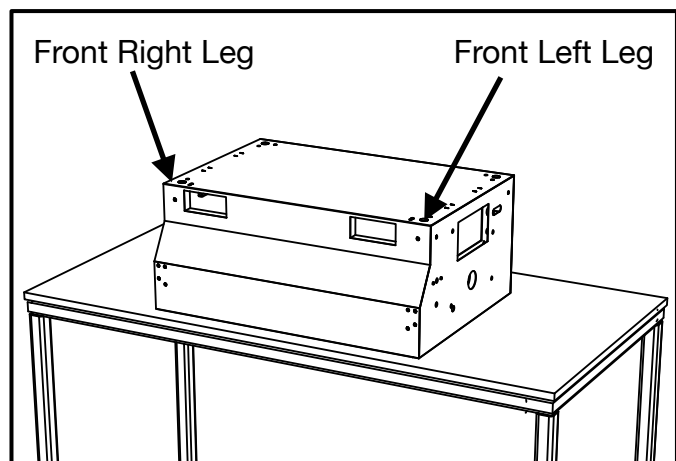


Helper Required!

The next stage of assembly is most safely completed with the help of another person!

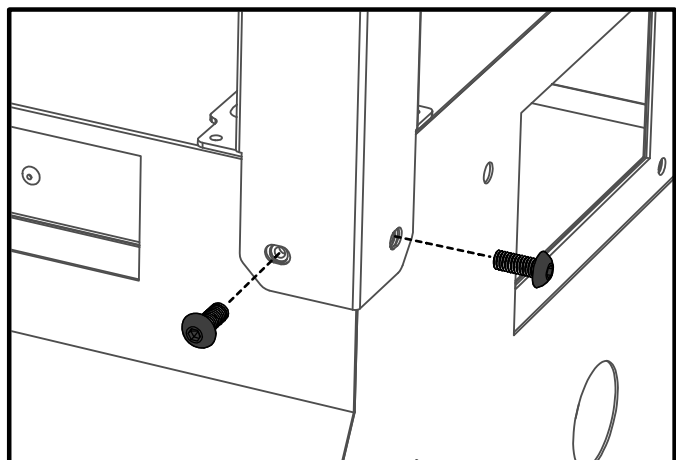
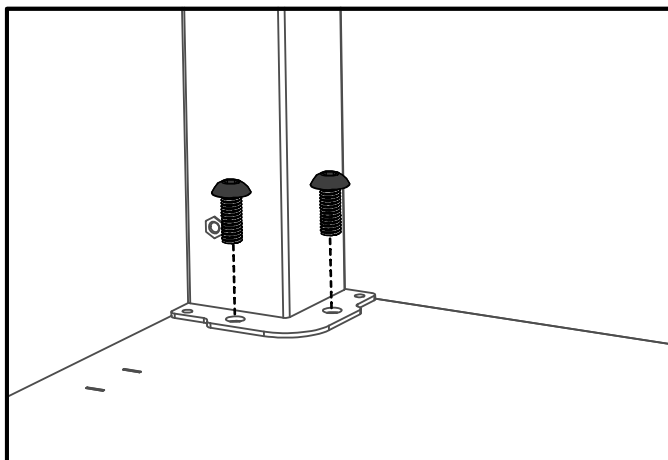
Step 1 - Place on Table

- 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 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

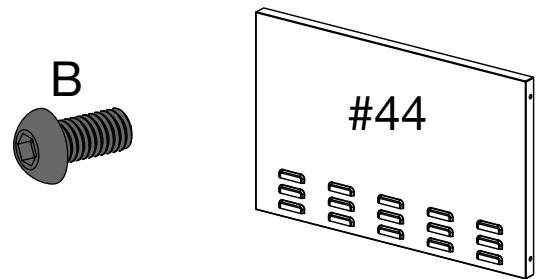
- Use 4 x B screws to secure each leg to the base and sides of the grill bottom.



3.6.2. Cabinet Rear Panel

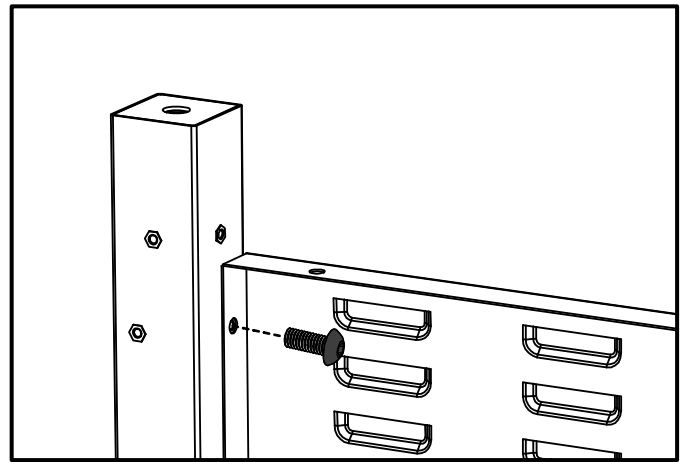
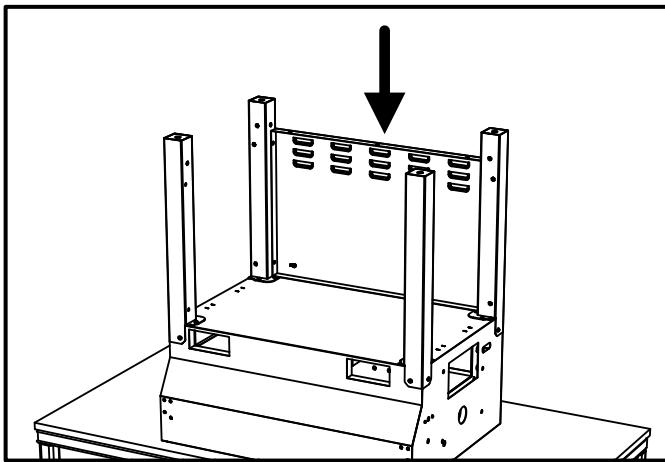
Components Used

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



Attach Cabinet Rear Panel

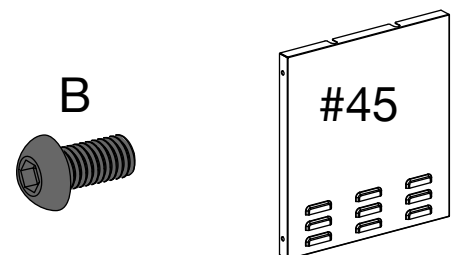
- Lower the cabinet rear panel in between the rear legs.
- The legs may need to be pulled apart slightly to allow the panel to fit in.
- Use 7 x B screws to secure in place, ensuring the panel is flush with the rear of the grill and legs.
- Leave the top left and right screws loose for the moment. They can be tightened once the base panel has been attached.



3.6.3. Cabinet Side Panels

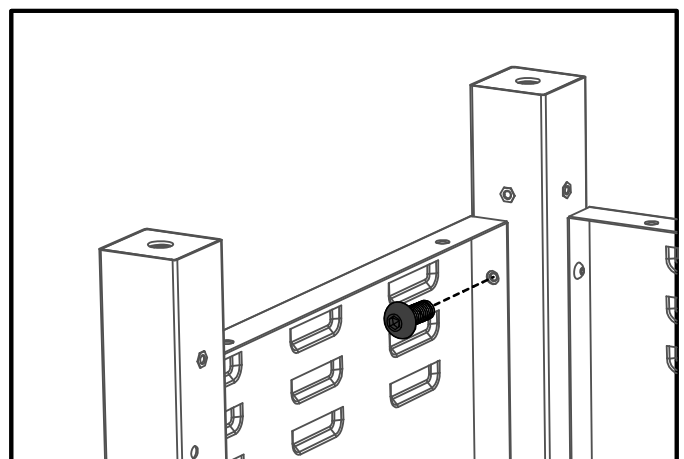
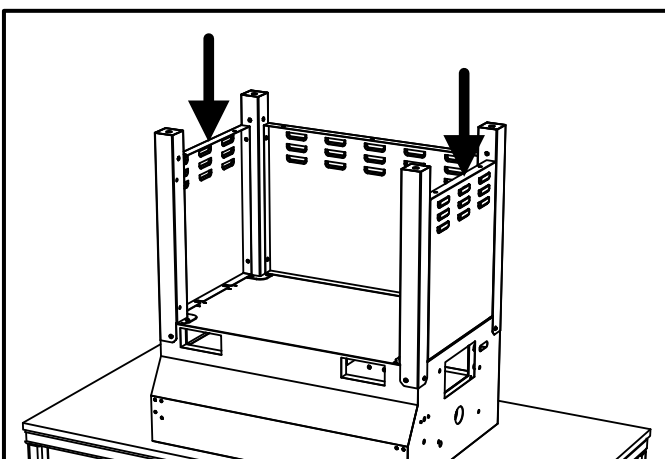
Components Used

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



Attach Cabinet Side Panels

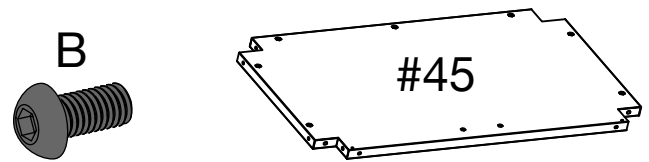
- Lower the cabinet side panels in between the front-rear legs.
- Use 4 x B screws to secure each side panel in place, ensuring they are flush with the sides of the grill and legs. Leave the top screws loose for the moment.



3.6.4. Cabinet Base Panel

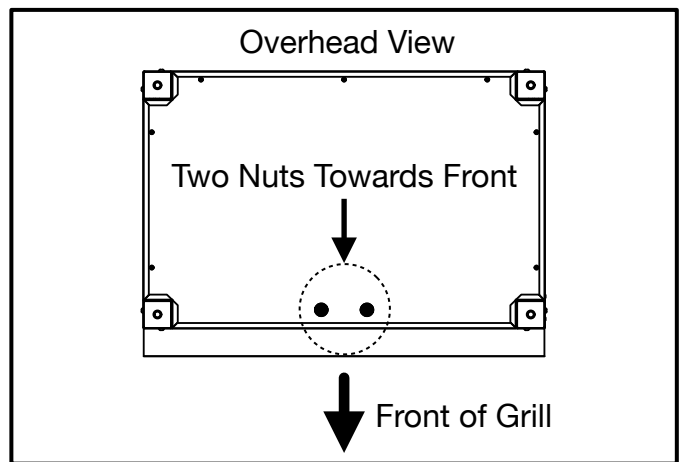
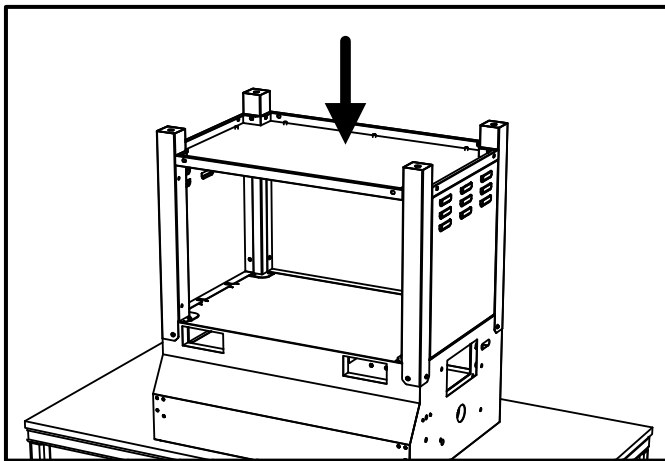
Components Used

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



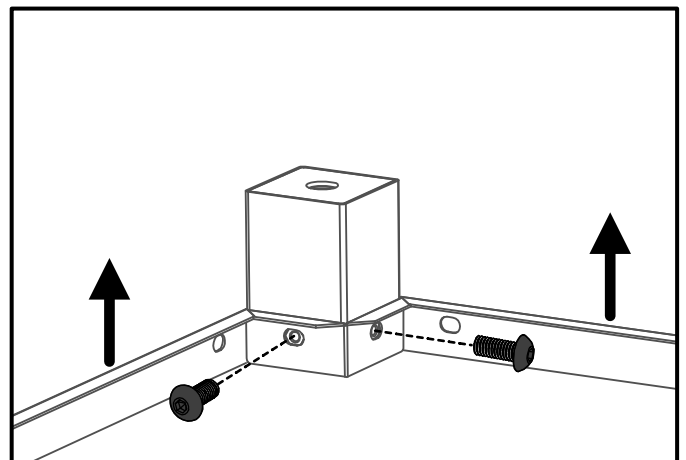
Step 1 - Position Base Panel

- Lower the cabinet side panels 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.



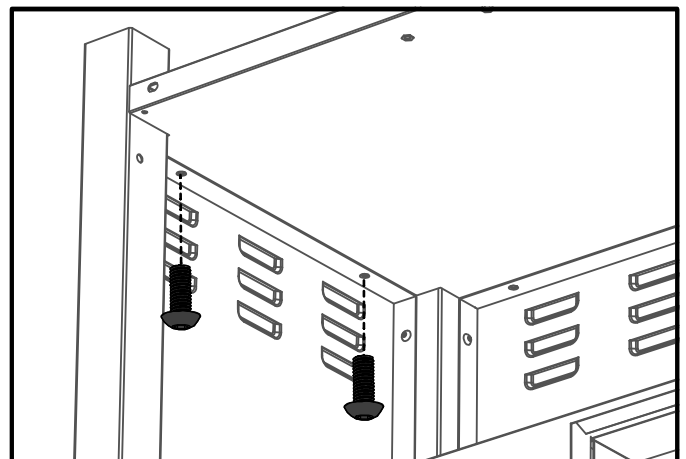
Step 2 - Attach Cabinet Base

- 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

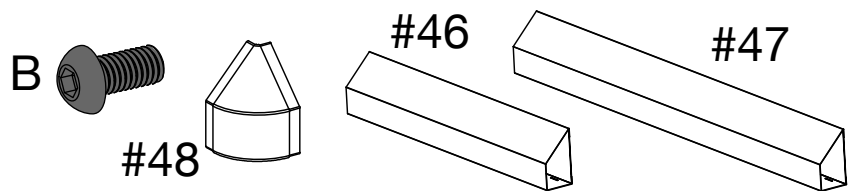
- Use 7 x B screws to attach the side and rear panels to the base panel.



3.6.5. Cabinet Skirting

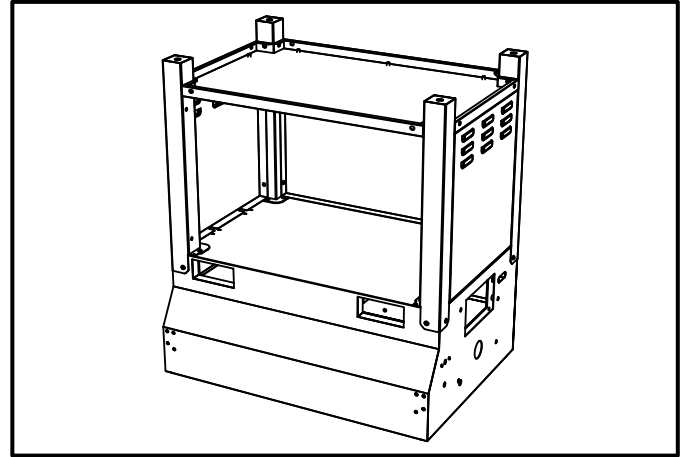
Components Used

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



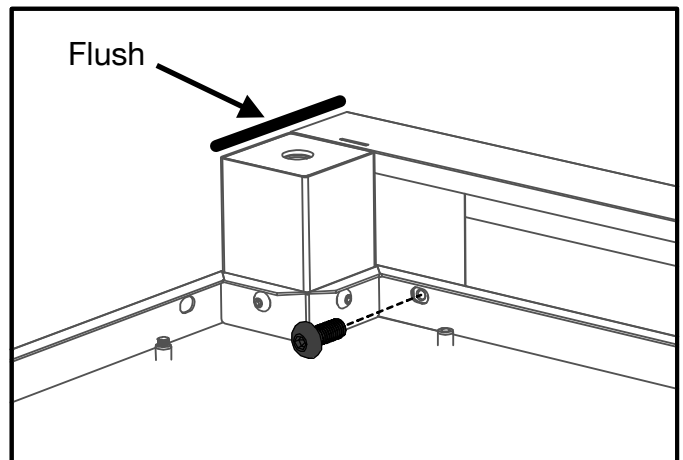
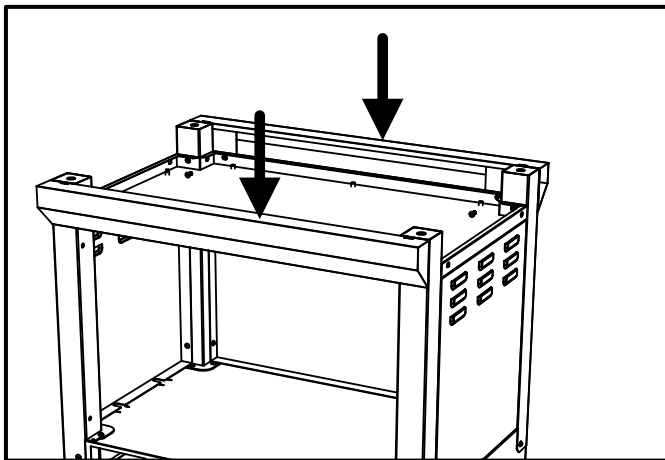
Step 1. Place on Ground

- 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.



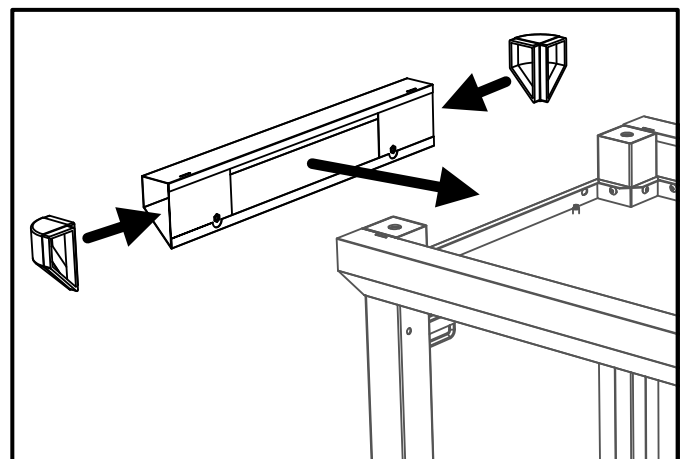
Step 2. Attach Front & Rear Skirts

- Use 4 x B screws to attach the front and rear skirts.
- Align the skirts flush (level) with the side and bottom of the legs.



Step 3. Attach Side Skirts

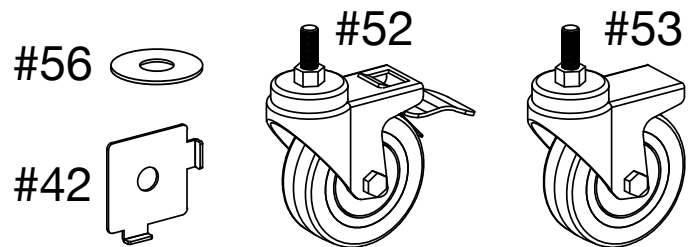
- Push the skirt corners into the ends of the side skirts.
- The corners may need to be pulled back out slightly to align when inserting into the front-rear skirts.
- Push into the front-rear skirts.
- Tap with hand or rubber hammer if required.
- Use 4 x B screws to attach the side skirts to the cabinet base panel.



3.6.6. Wheels

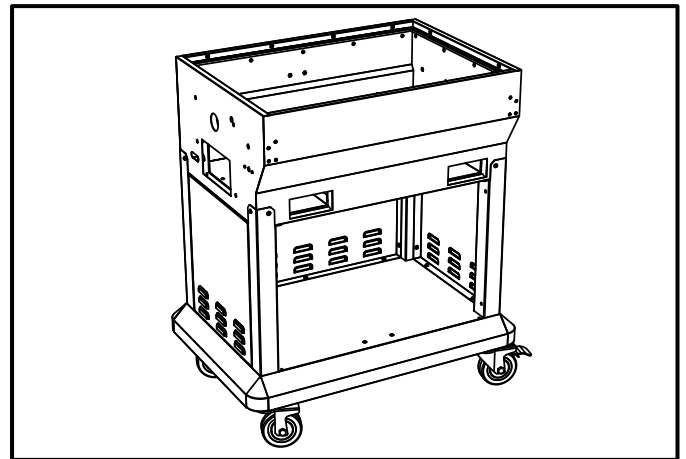
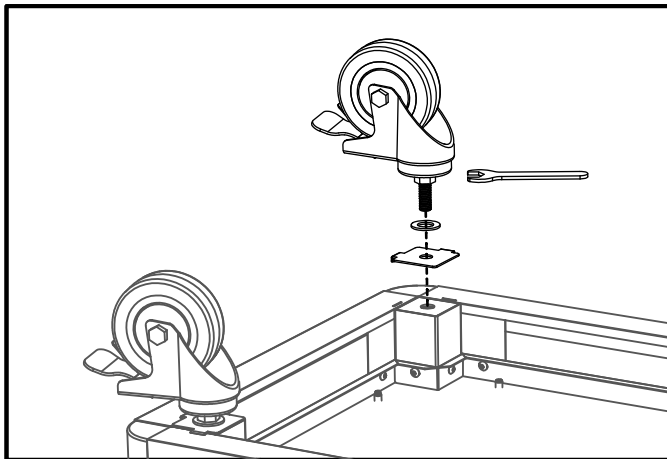
Components Used

- 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

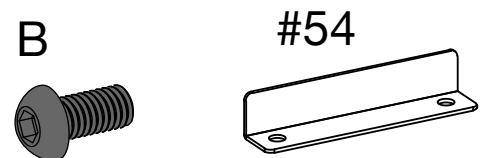
- Position the skirt locking plates over each leg with tabs inserted into the slots in the skirts.
- Locking wheels are generally best installed on the right side of the grill (left when up-side-down).
- Screw in each wheel by hand (rotating the base, not wheel) and tighten with spanner.
- Carefully stand the entire grill back upright.



3.6.7. Door Stop

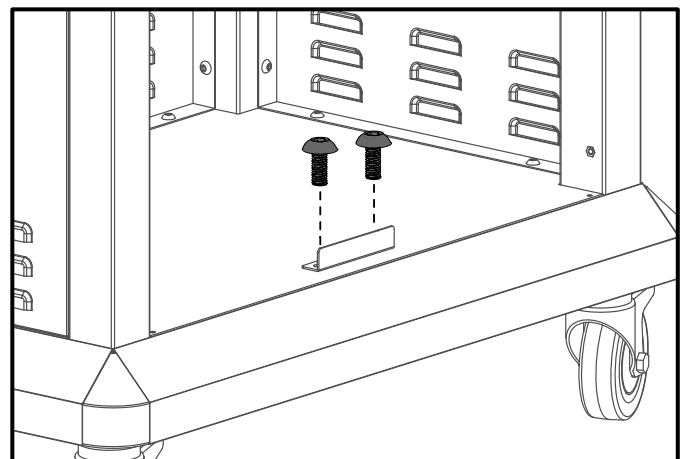
Components Used

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



Attach Door Stop

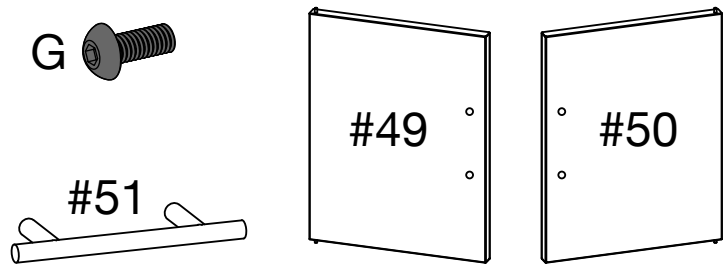
- Use 2 x B screws to secure the door stop with the flat face towards the front.



3.6.8. Cabinet Doors

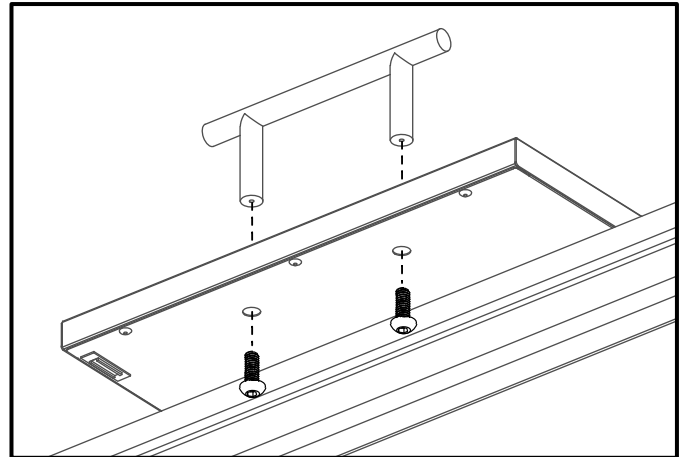
Components Used

- 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)



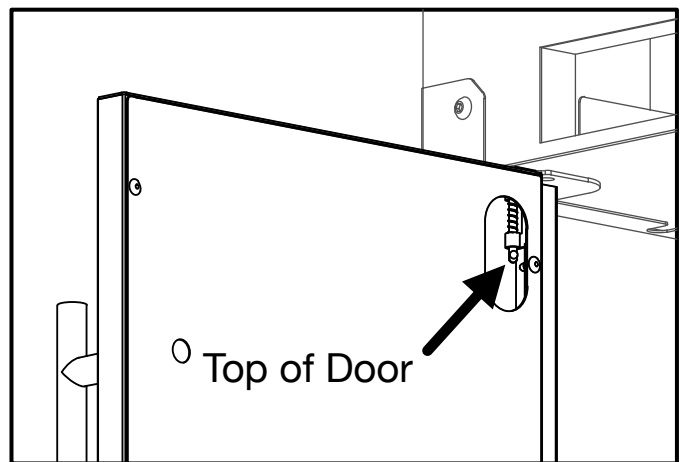
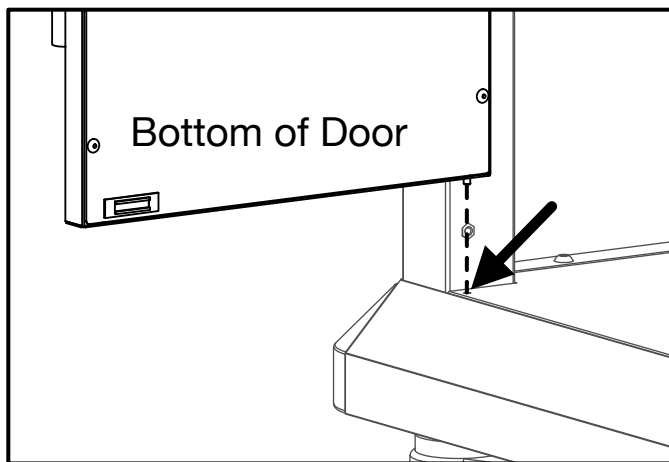
Step 1. Attach Handles

- 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

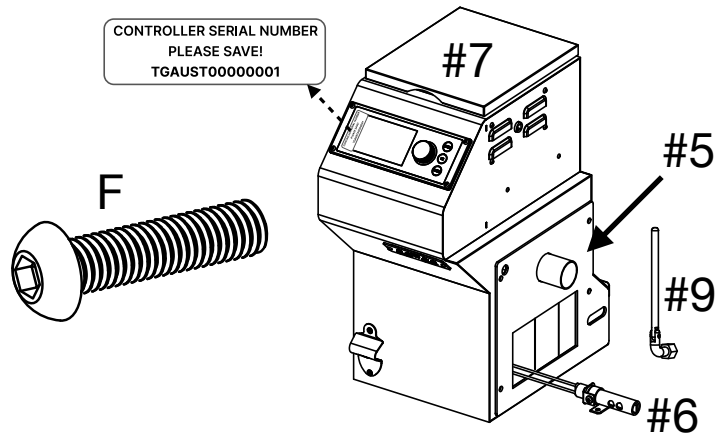
- BOTTOM: Insert the round pin in the bottom of the door into the cabinet base panel.
- TOP: Pull the spring pin down, align with the top hole underneath the grill bottom and push the pin up into place.



3.7. Hopper

Components Used

- 1 x #7 (S1 Hopper)
- 1 x #5 (Hopper Gasket - packed on hopper)
- 1 x #6 (Pellet Ignitor - packed in hopper)
- 4 x F (M6x30 HEX Screws)



WiFi Antenna

Part #9 (WiFi Antenna) is packed together with Pellet Ignitor. Put antenna aside as this will be attached to the rear of the hopper later in the assembly process.

Screen Protector

Peel off the protective film on the screen together with controller serial number sticker and store with this instruction manual for future reference.

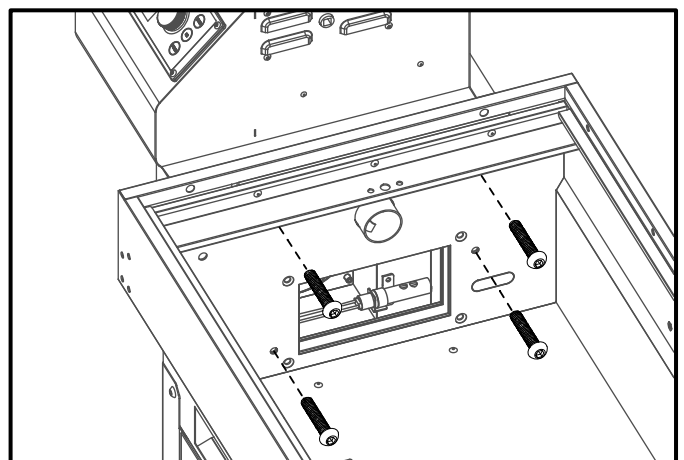
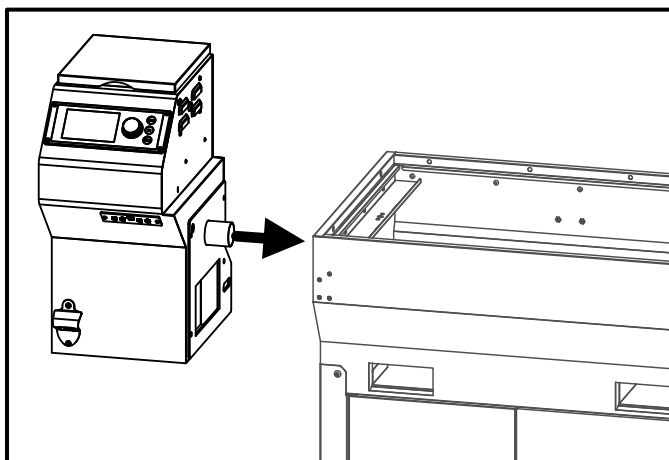


Do NOT Plug into Power

- Do not plug the AC power cable into the back of the hopper until the Trimal S1 is fully assembled.

Attach Hopper

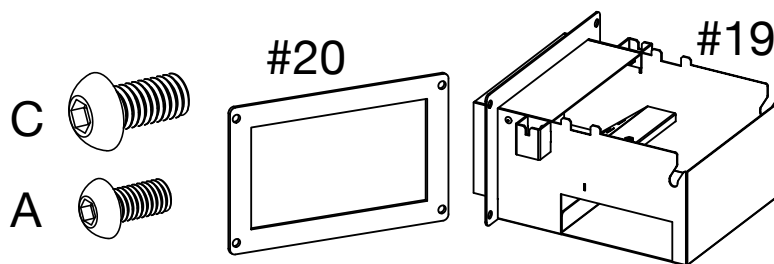
- Position the white fibre gasket to correctly align with all the screw holes.
- Pellet ignitor can remain inside the hopper. WiFi antenna (#9) will be attached at a later stage.
- Slide the hopper into place, using the round auger tube as the main guide.
- While pushing the hopper tightly against the 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.



3.8. Fire Box & Ignition Rod

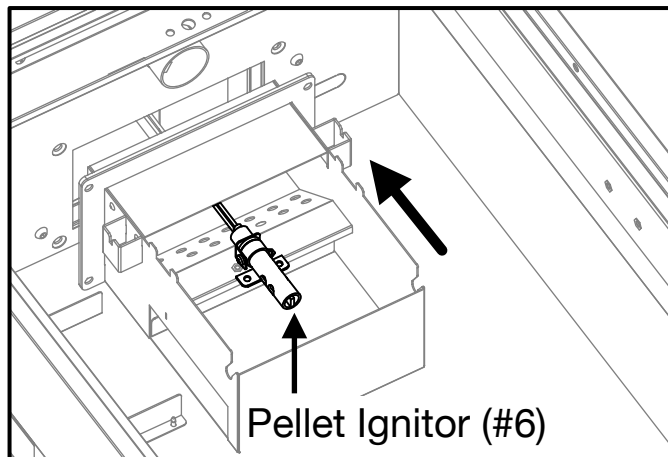
Components Used

- 1 x #19 (Fire Box)
- 1 x #20 (Fire Box Gasket)
- 4 x C (M5x12 HEX Screw)
- 2 x A (M4x10 HEX Screw)



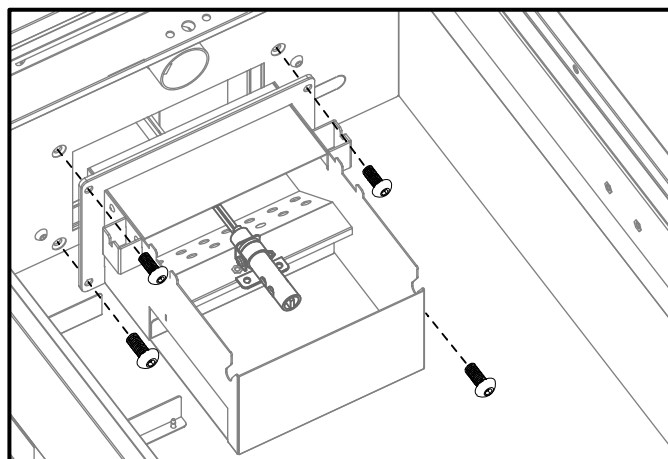
Step 1. Position Fire Box

- Position the white gasket on the left end of the fire box.
- Gently pull Pellet Ignitor (#6) through into the fire box from within the hopper.



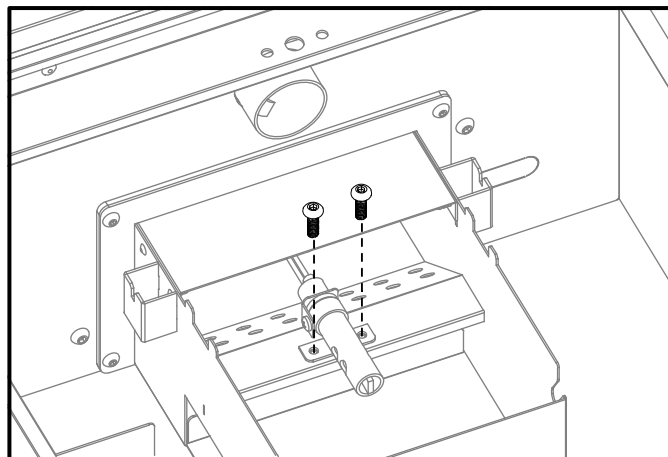
Step 2. Attach Fire Box

- Push fire box until flush against the grill bottom inner wall.
- Use 4 x C screws to secure in place.
- Cycle through the four screws, tightening a little more each time until all evenly tightened.



Step 3. Attach Pellet Ignitor

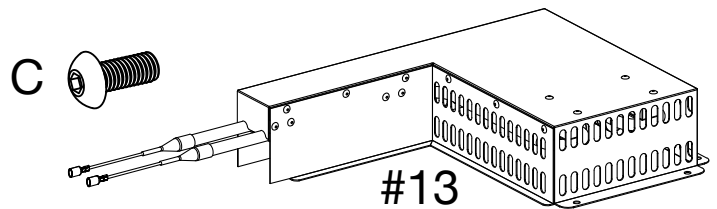
- Position the pellet ignitor in the fire box.
- Use 2 x A screws to secure in place.



3.9. Electric Heating Element

Components Used

- 1 x #13 (Electric Heating Element)
- 5 x C (M5x12 HEX Screws)

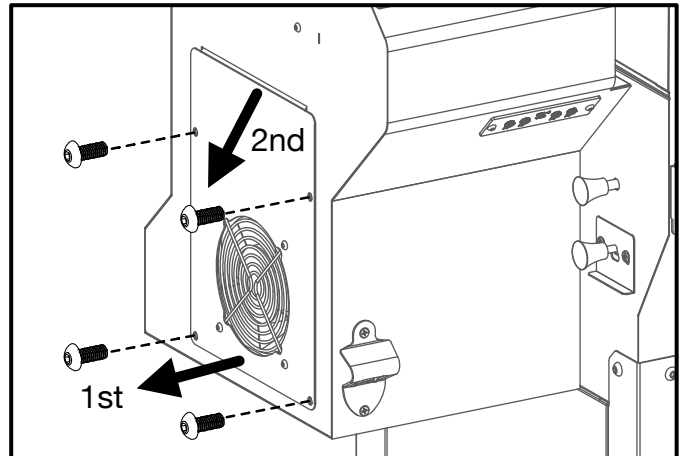


Do NOT Plug into Power

- Do not plug the AC power cable into the back of the hopper until the Trimal S1 is fully assembled.

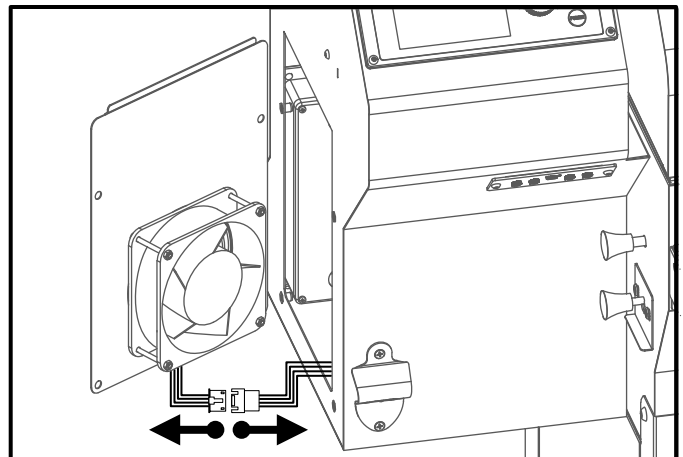
Step 1. Remove Hopper Cover

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



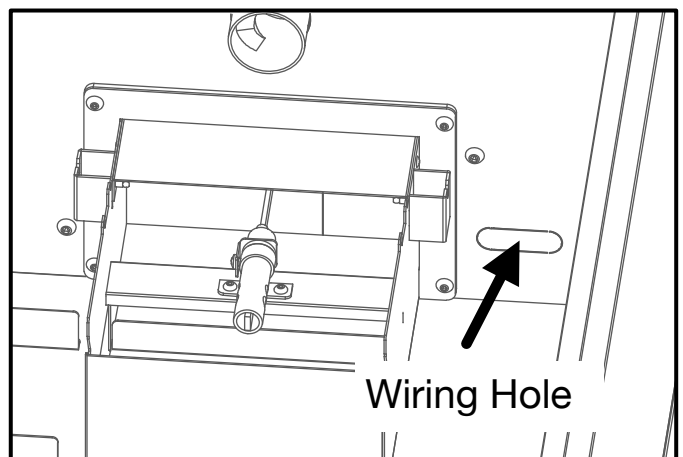
Step 2. Unplug Outer Fan

- Carefully unplug the outer fan cable (if connected) by squeezing the latch and gently pulling apart.
- This plug will be connected back together at a later assembly stage.



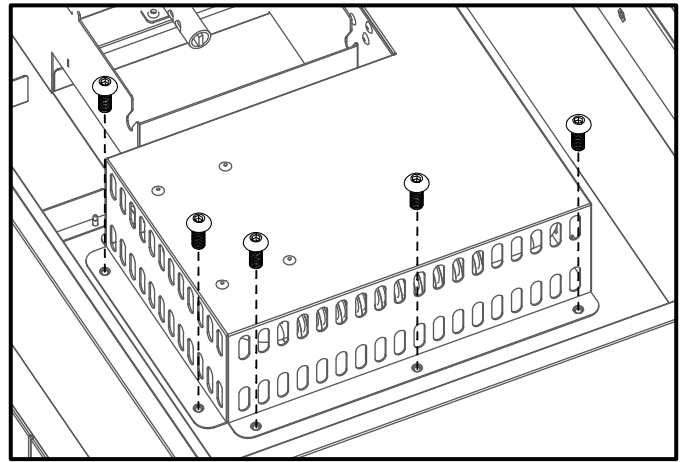
Step 3. Install Heating Element

- Carefully pass the two heating element wires through the 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.



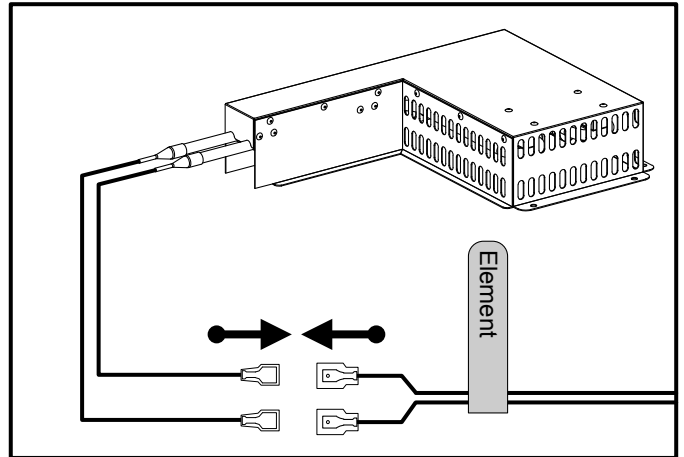
Step 4. Install Heating Element

- Push the heating element all the way in until the mounting holes in the floor panel align.
- Use 5 x C screws to secure in place.



Step 5. Connect Heating Element

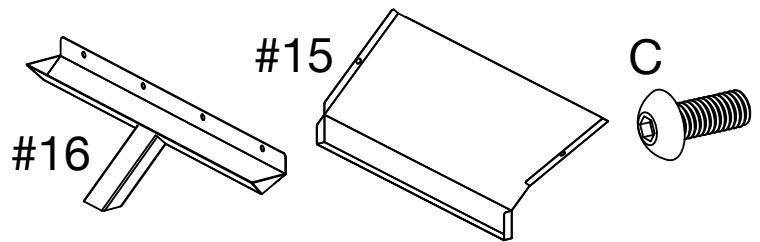
- Connect to the two red wires from the heating element to the wires labeled “Element”.
- Push the wires back down the rear left side of the hopper away from the fans.
- Leave the fan cover OFF, as another pair of wires still need to be connected in a later stage.



3.10. Grease Drain & Wall

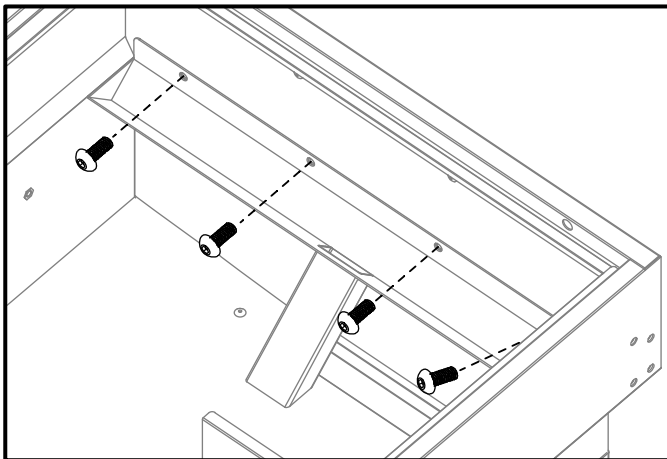
Components Used

- 1 x #16 (Grease Drain)
- 1 x #15 (Grease Wall)
- 6 x C (M5x12 HEX Screws)



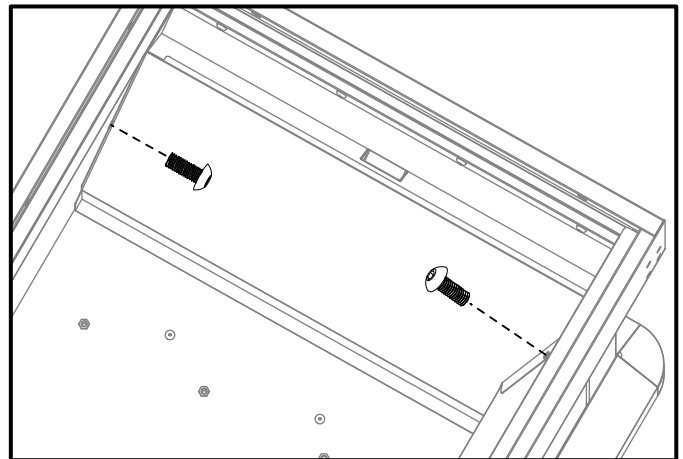
Step 1. Attach Grease Drain

- Position grease drain on inner right wall of grill bottom.
- Use 4 x C screws to secure in place.



Step 2. Attach Grease Wall

- Position grease wall so the top fold hooks over the front edge of the grease drain.
- Use 2 x C screws to secure in place.

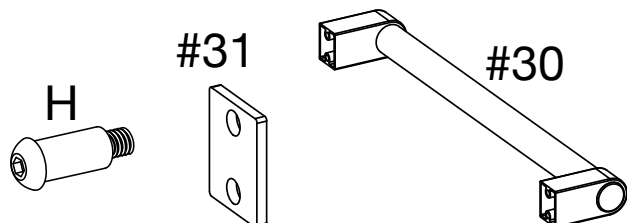


3.11. Lid Handle

Components Used

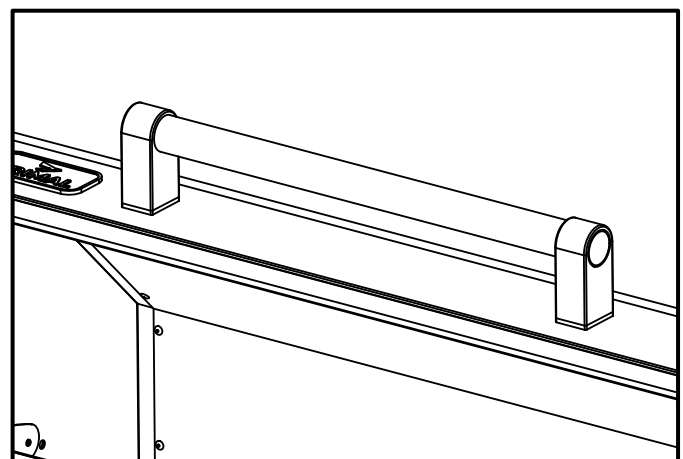
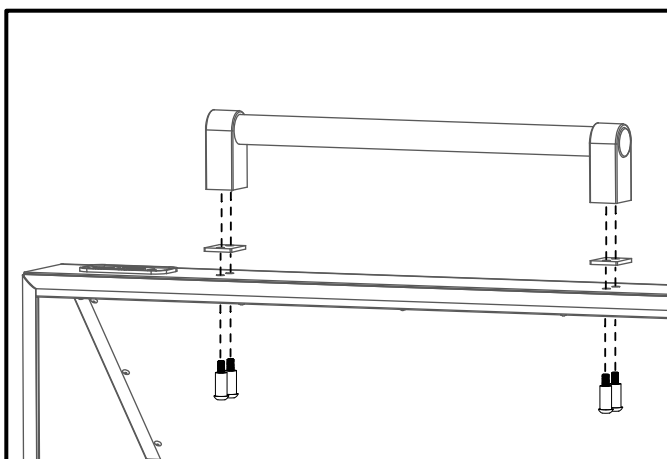
Below components are already assembled together on the #30 lid handle.

- 1 x #30 (Lid Handle)
- 2 x #31 (Lid Arm Pad)
- 4 x H (M6x5x30 Sleeved HEX Screws)



Attach Lid Handle

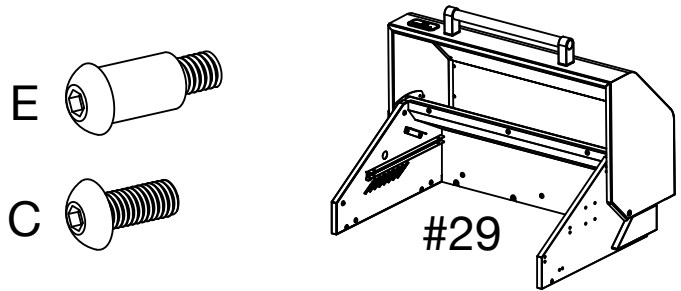
- Position the arm pads under each arm of the handle.
- Use 4 x H screws to attach the lid handle.



3.12. Grill Top

Components Used

- 1 x #29 (S1 Grill Top)
- 4 x E (M6x9x16 Sleeved HEX Screws)
- 4 x C (M5x12 HEX Screws)

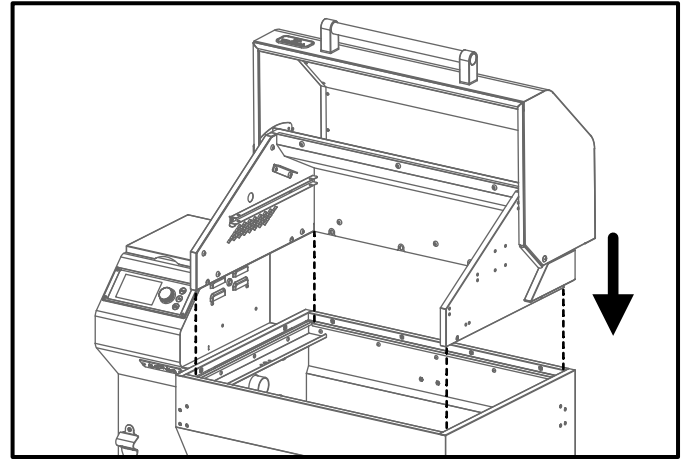


Helper Required!

- 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.

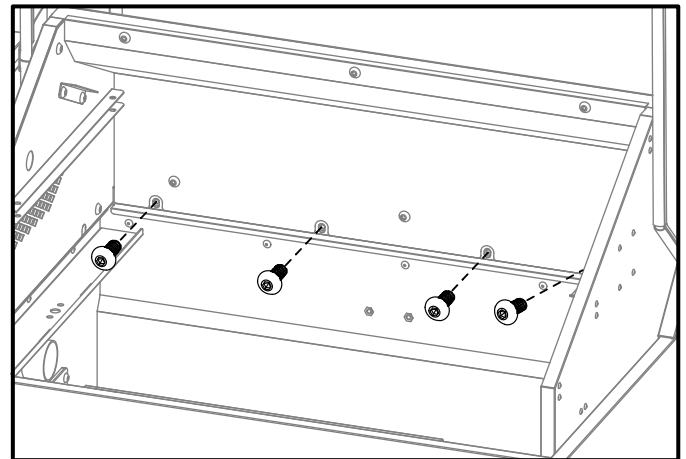
Step 1. Lower Grill Top into Grill Bottom

- 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.



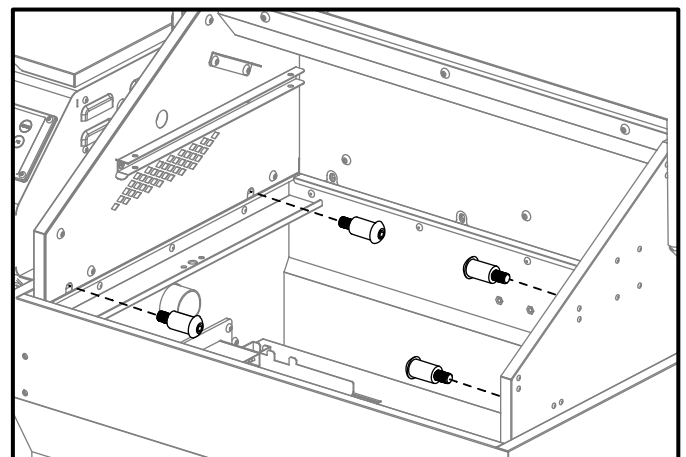
Step 2. Install Rear Screws

- Use 4 x C screws to secure the rear of the grill top.



Step 3. Install Side Screws

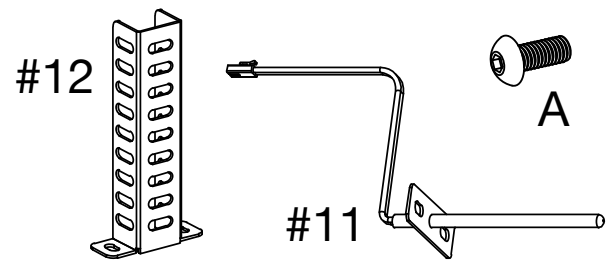
- Use 4 x E screws to secure the left and right.
- Once done up tight the screw head and sleeve will still extend out from the wall panel slightly. This is normal as the screw is making contact inside the wall panel.



3.13. Grill Temperature Sensor

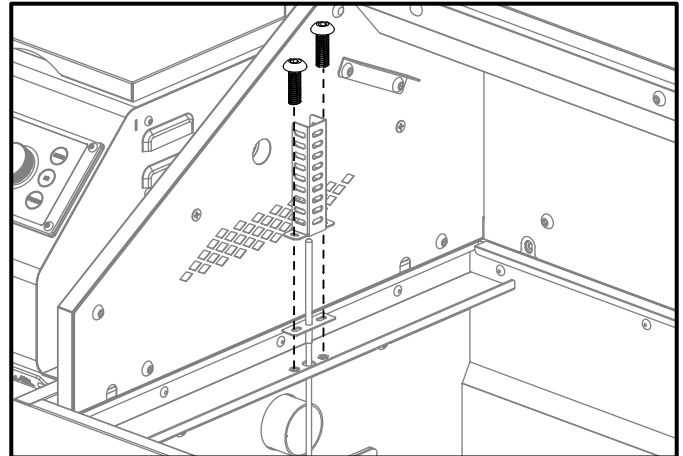
Components Used

- 1 x #11 (Grill Temperature Sensor)
- 1 x #12 (Temperature Sensor Cage)
- 2 x A (M4x10 HEX Screws)



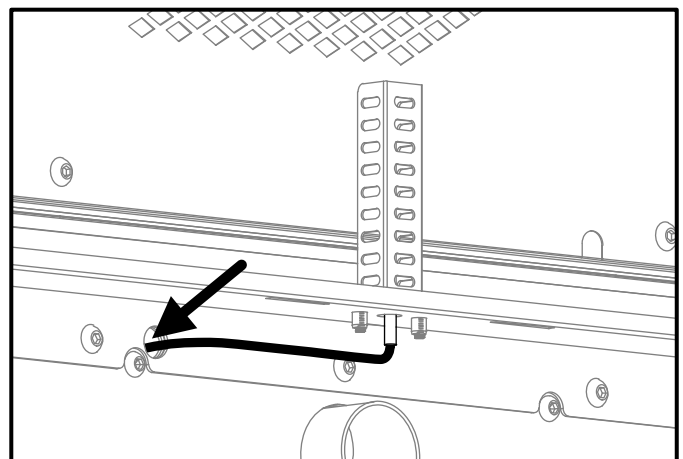
Step 1. Attach Sensor & Cage

- 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).



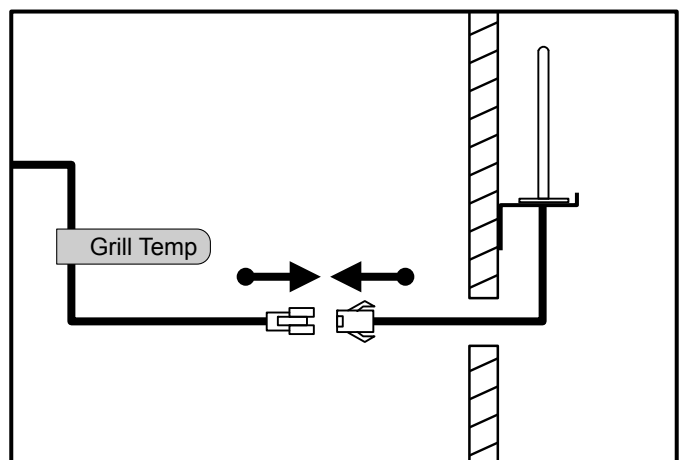
Step 2. Feed Cable Into Hopper

- Carefully feed the plug and cable through the hole into the hopper.
- Do not kink the cable, or pull it too tight.
- Look in from the hopper opening (fan cover removed) to receive and gently pull the cable through.
- During grill operation air will flow through this hole from the hopper through into the grill bottom which is normal.



Step 3. Connect Grill Temperature Sensor

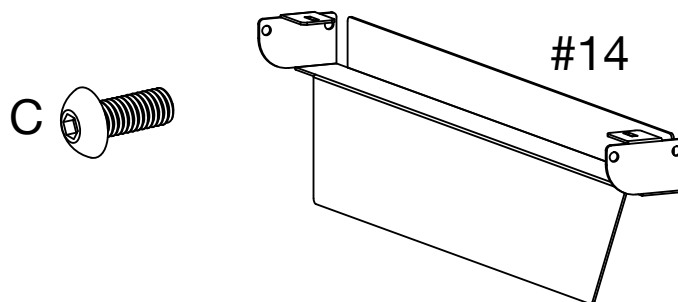
- Find the cable labelled “Grill Temp” and plug into the temperature sensor cable.
- Take note of the plug orientation, as there is a clip that locks into place.
- Tuck the cables in beside the the other wires down the right-rear side of the hopper.
- Use the loose cable tie to secure in place away from the fan.



3.14. Mid Support-Baffle

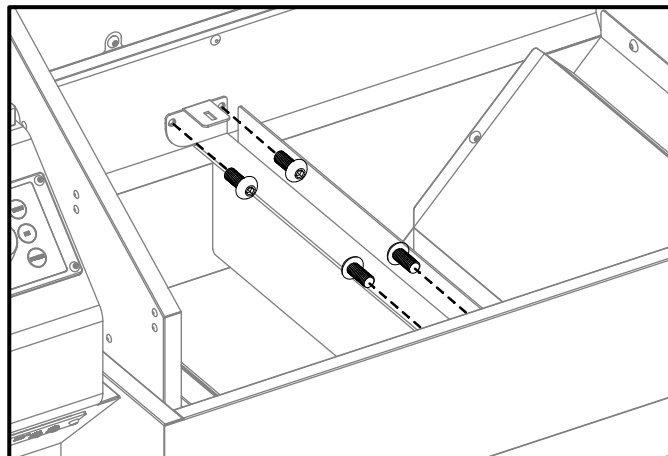
Components Used

- 1 x #14 (Mid Support-Baffle)
- 4 x C (M5x12 HEX Screws)



Attach Mid Support-Baffle

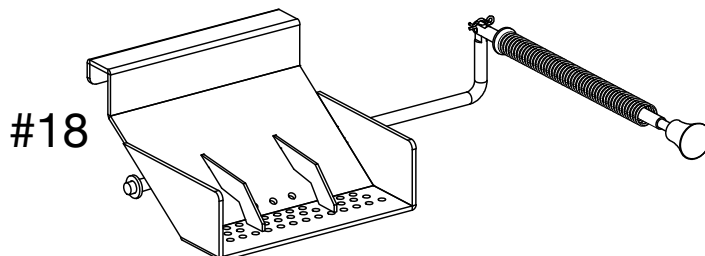
- Use 4 x C screws to secure in place in the centre of the grill bottom.



3.15. Right Fire Grate

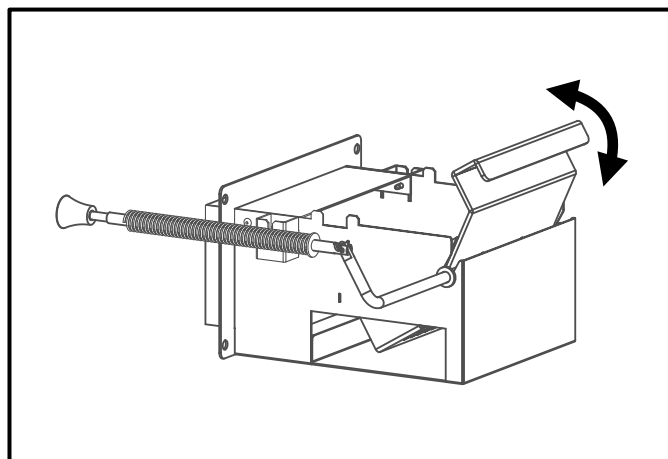
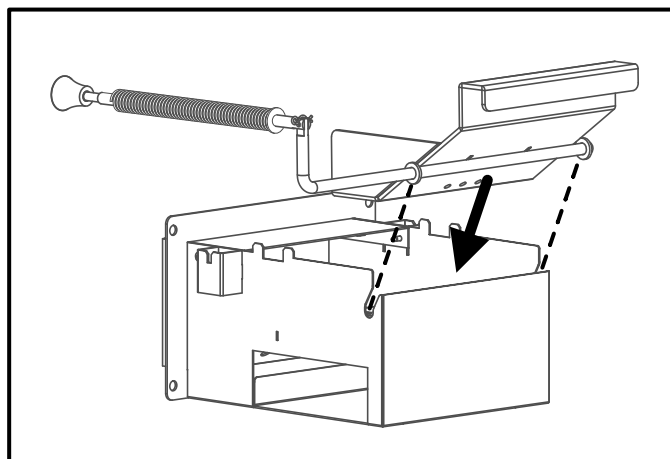
Components Used

- 1 x #18 (Right Fire Grate Assembly)



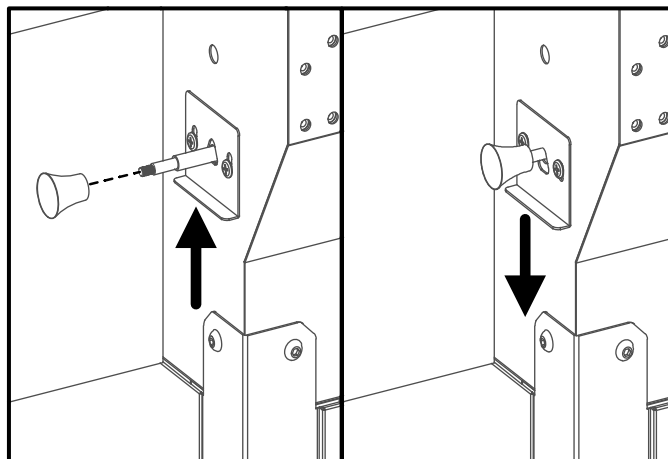
Step 1. Install Right Fire Grate

- Drop the round rod down into the fire-box, ensuring the two metal discs are on the outside of the box.
- Once in place the right fire grate should be able to rotate freely.



Step 2. Install Arm and Handle Knob

- Unscrew the black handle knob.
- Slide up the lock plate and push the end of the arm through the 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.



Step 3. Check Spring Tension

- The spring should have enough tension to hold the right fire grate gently in the fully up (closed) position. If it is loose and sagging at all, take off the spring and pull it to lengthen slightly until the resting length is 170 to 175mm. Reinstall and check the tension.
- This adjustment may need to be done from time to time throughout the life of the grill.



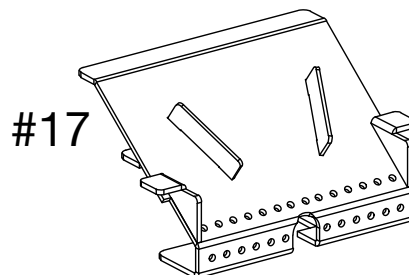
Ash Dump Safety

- 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 activated.
- 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!

3.16. Left Fire Grate

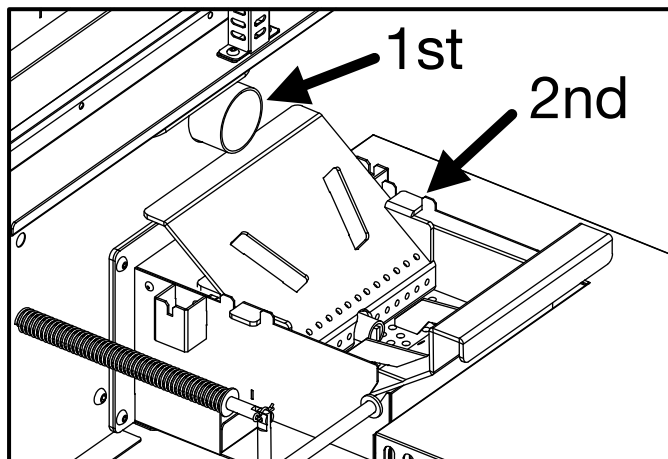
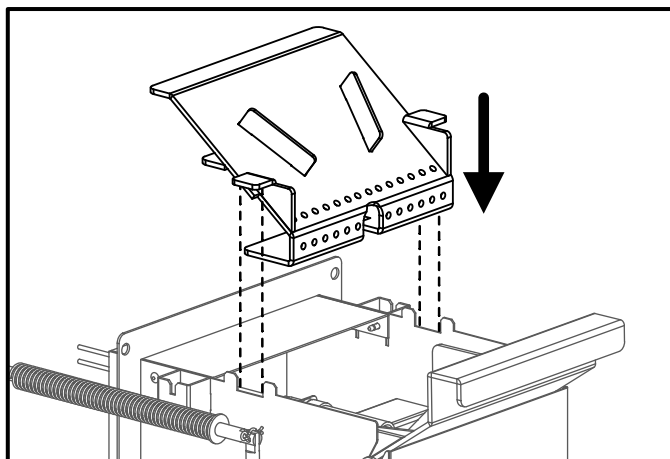
Components Used

1 x #17 (Left Fire Grate)



Install Left Fire Grate

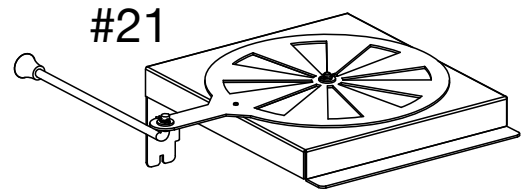
- Lower the left fire grate down into the fire box.
- First tuck the top edge under the round pellet feed tube, then lower down into the fire box.
- The left and right tabs slot into the fire box.



3.17. Heat Baffle

Components Used

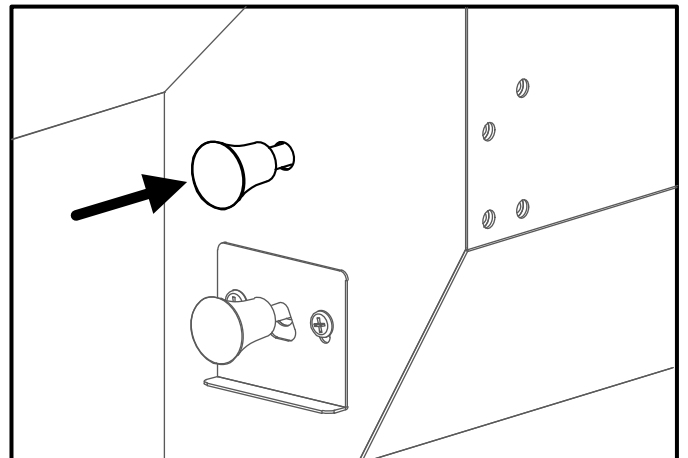
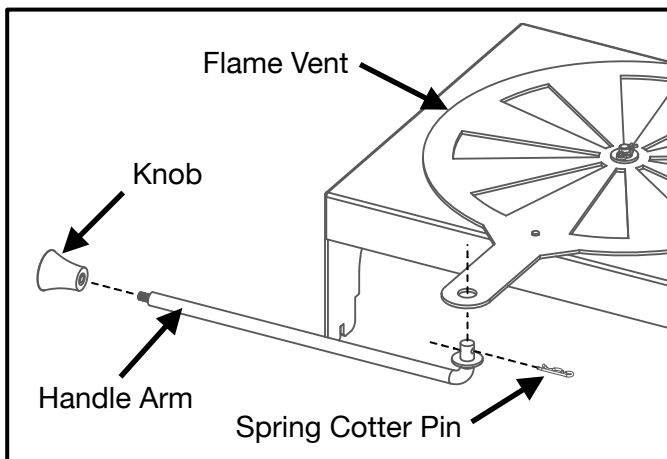
1 x #21 (Heat Baffle)



- Leave heat baffle in for all cooking methods, only removing if doing a deep clean.
- Fully open the flame vent for Pizza Dome 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.

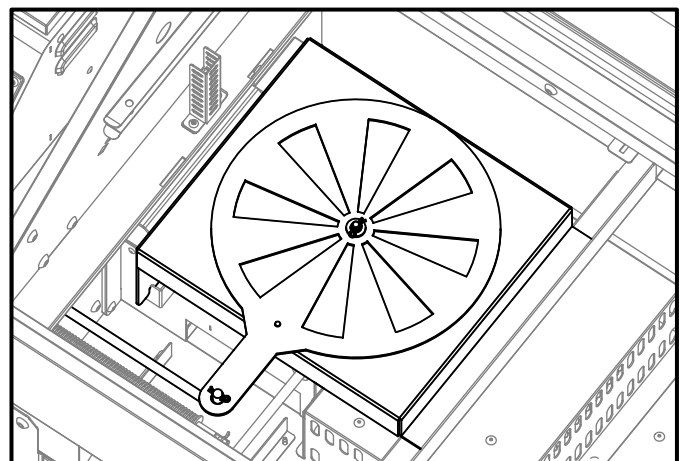
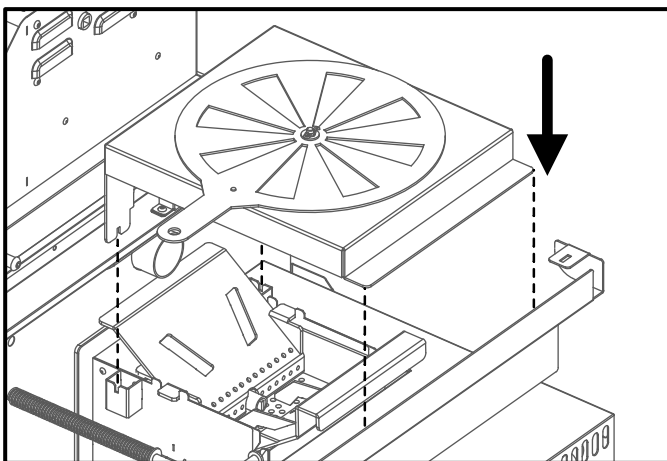
Step 1. Install Flame Vent Arm

- Unscrew the knob off the end of the handle arm.
- Pull out spring cotter pin to release the flame vent arm.
- Push the threaded end of the arm through the grill bottom wall and re-attach the knob.



Step 2. Install Heat Baffle

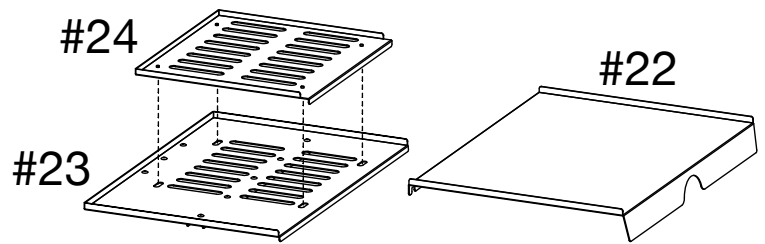
- Lower the heat baffle down into place, with the legs slotted into the fire-box and right side resting on the mid baffle-support.
- Re-attach the arm, securing with the spring cotter pin.
- To access the fire grates for deep cleaning, simply pull out the spring cotter pin to release the handle arm, then lift out the heat baffle.



3.18. Drip Trays

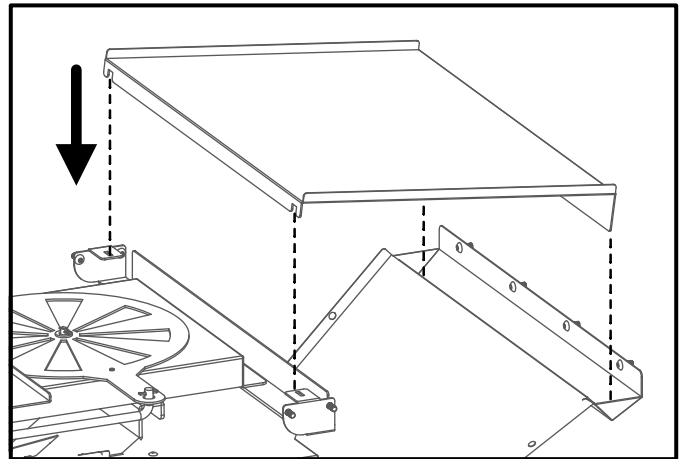
Components Used

- 1 x #22 (Right Drip Tray)
- 1 x #23 (Left Drip Tray)
- 1 x #24 (Vent Cover)



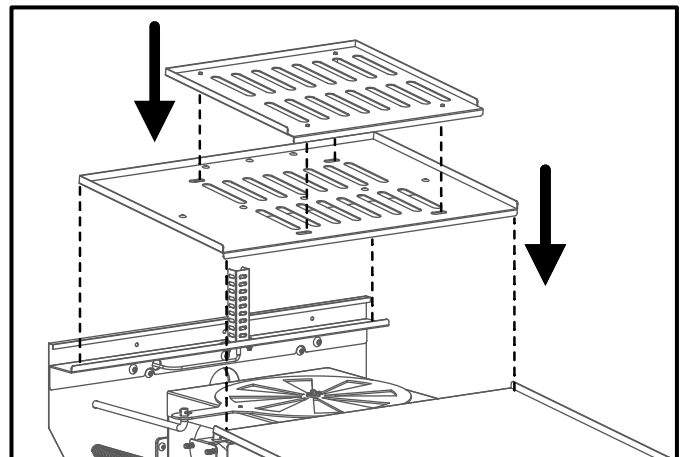
Step 1. Install Right Drip Tray

- Lower the right drip tray into place with the left tabs slotting in the holes, and right side into the V shaped grease drain.



Step 2. Install Left Drip Tray & Vent Cover

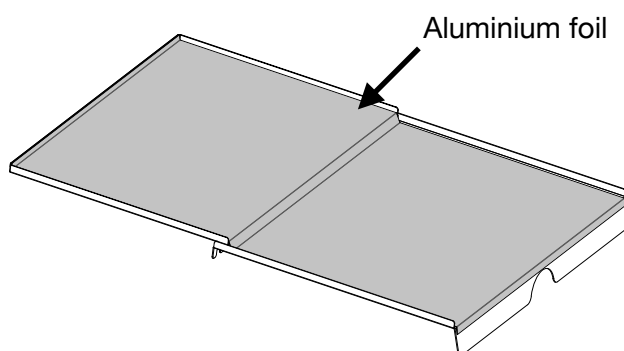
- Lower the left drip tray into place with the left edge hooking in front of the temperature sensor, and the right laying on the right drip tray.
- Lower the vent cover into place with the pegs in the four holes.



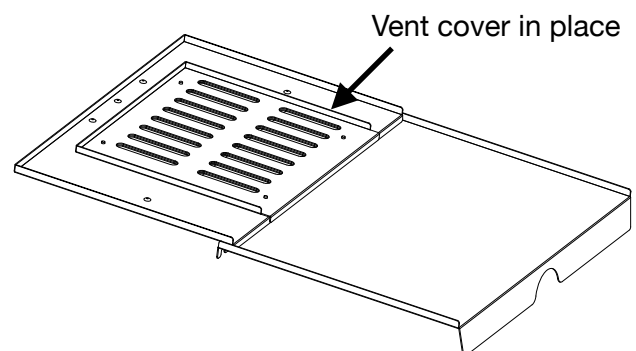
Indirect vs Open Flame Cooking

- For indirect heat cooking (no open flame), the vent cover can be removed and the entire left and right drip trays covered with a layer of heavy duty aluminium foil.
- Foil covering the vent holes provides most even temperatures and allows for easier clean up.
- When open flame searing, remove foil and put the vent cover in place. Slide the vent cover to adjust heat levels. The cover will warp slightly with exposure to high heat.

Indirect Heat Cooking (normal)



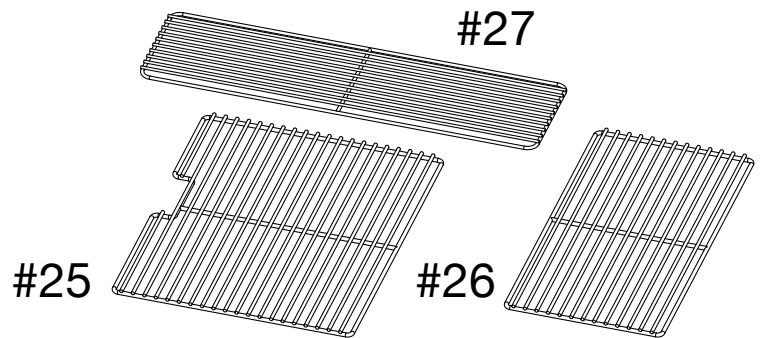
Open Flame Searing



3.19. Grill Racks

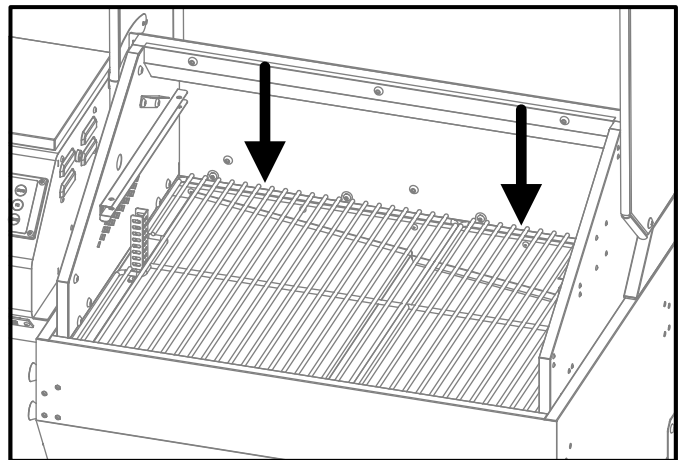
Components Used

- 1 x #25 (Bottom Left Grill Rack)
- 1 x #26 (Bottom Right Grill Rack)
- 2 x #27 (Top Grill Racks)



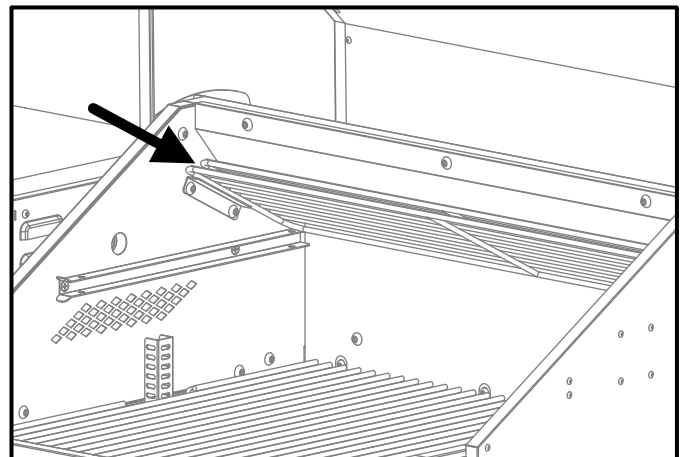
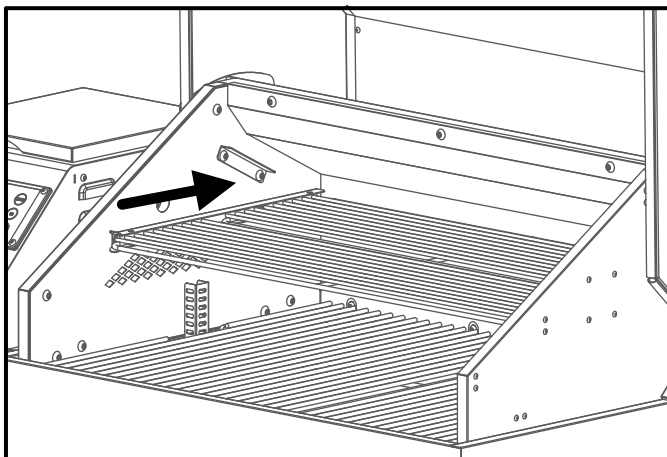
Step 1. Bottom Grill Racks

- Lower in the left grill rack first, taking care not to hit the temperature sensor cage.
- Lower in the right grill rack.



Step 2. Top Grill Racks

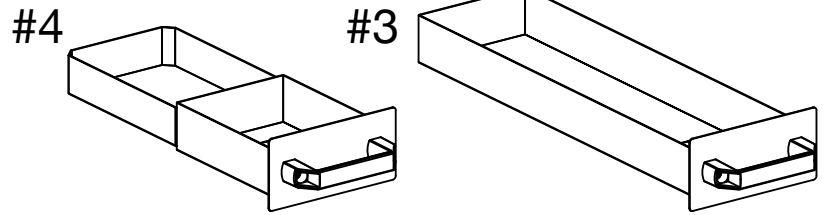
- Slide one or both top grill racks into place for additional grill cooking area.
- The temperature of the grilling area will be slightly higher than the bottom grill racks, so use food temperature probes to monitor.
- When not in use the top grill racks can be neatly stored away in the top of the grill.



3.20. Ash & Grease Bins

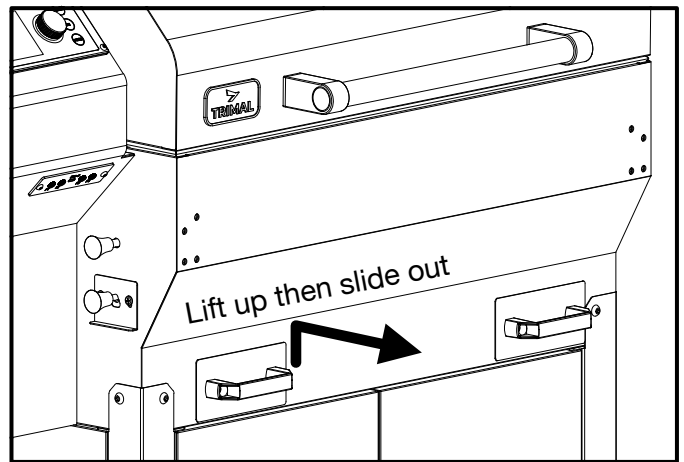
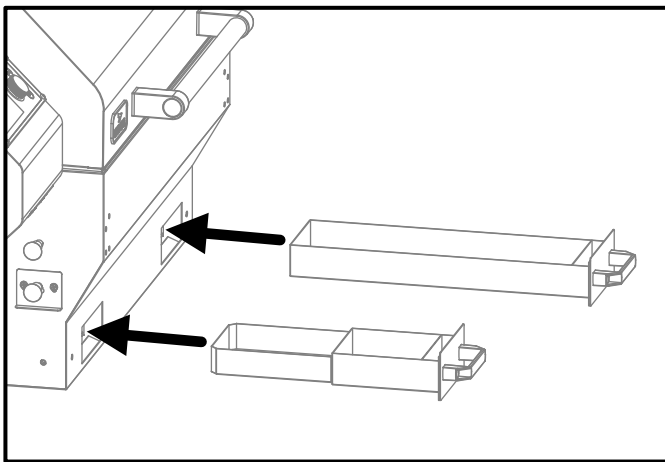
Components Used

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



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.



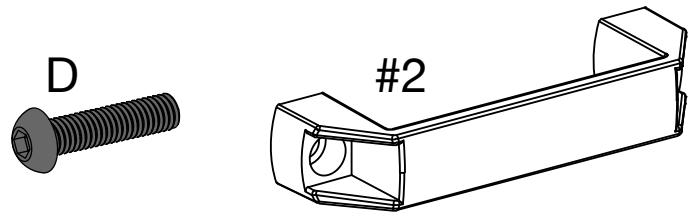
Grease Bin Safety

- 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.

3.21. Side Handle

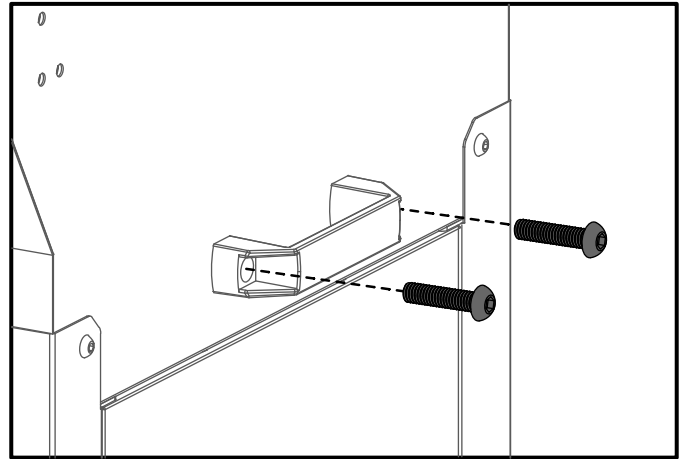
Components Used

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



Attach Handle

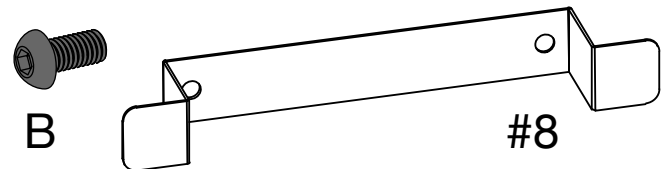
- Use 2 x D screws to attach handle to right side of the grill bottom.



3.22. Power Cable Bracket

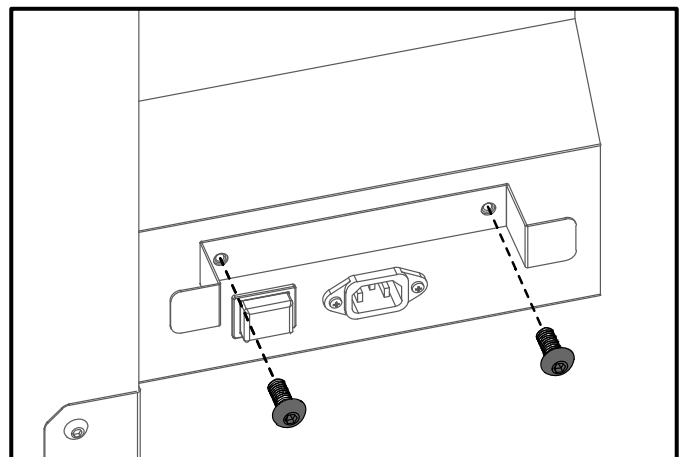
Components Used

- 1 x #8 (Power Cable Bracket)
- 2 x B (Black M5x12 HEX Screws)



Attach Bracket

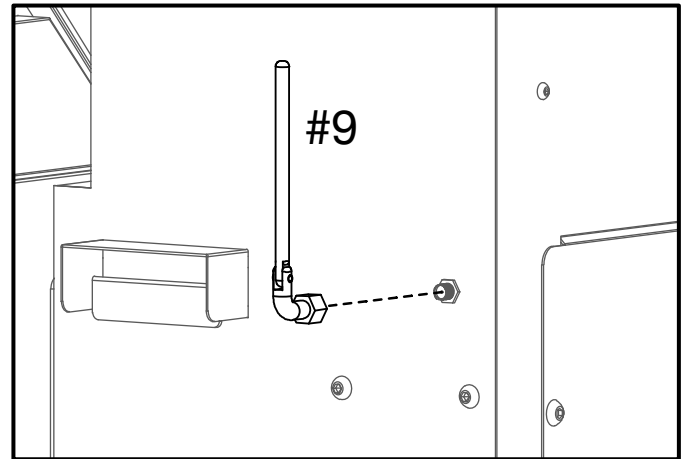
- Use 2 x B screws to attach bracket to rear of hopper.



3.23. WIFI Antenna

Attach Antenna

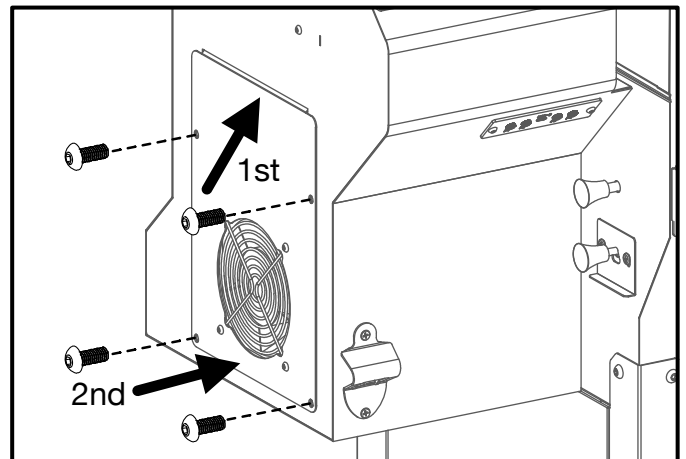
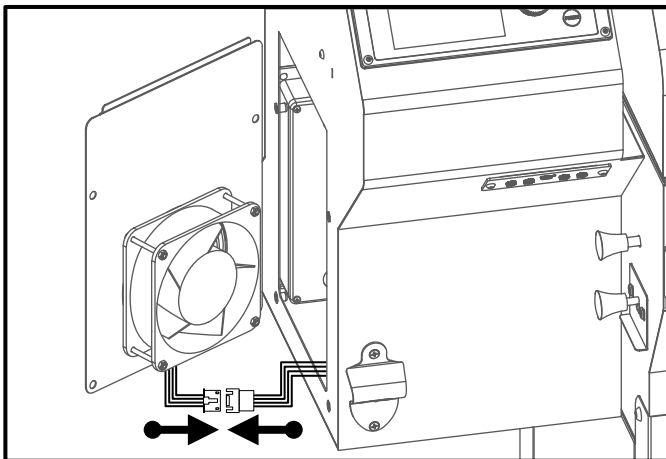
- WI-FI antenna is packed together with the pellet ignitor.
- Carefully attach the WIFI antenna (#9) and position vertically.
- The WIFI signal strength (RSSI) is shown on the Network & Software screen of the Trimal Aus App.
 - Signal of -70dBm or lower is ok.
 - -75dBm or higher is a poor signal, so may require an antenna with long cable for better positioning.



3.24. Replace Hopper Cover

Replace Cover

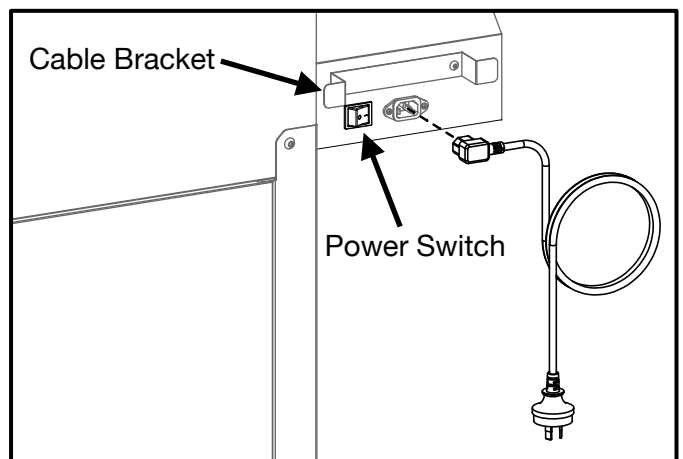
- Connect the Outer Fan and tuck the slack cable down the right side.
- Insert the top lip of the cover into place and push the bottom in.
- Secure the panel with the 4 screws.



3.25. Connect to Power

Plug in Power Cable

- Plug the power cable into the back of the hopper and the other end into a standard household AC 220-240V 50Hz 10 Amp power outlet socket.
- An extension cable may be used (10Amp).
- Turn the power switch on.
- Turn the switch off when the grill is not in use.
- The power cable can be neatly stored, wound around the cable bracket.

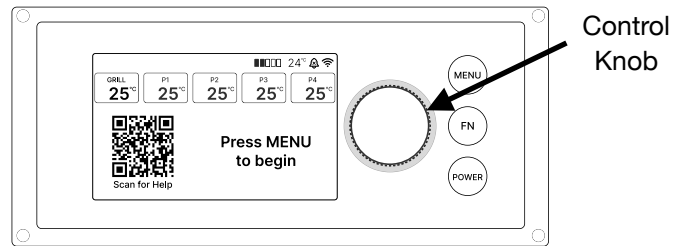


Assembly job is done. Good work!

4. Controller

4.1. 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 to all the operating functions and settings.

FN button

- At the time of printing this manual no actions are assigned to this button.
- Functionality may be added in the future through software updates.

POWER button

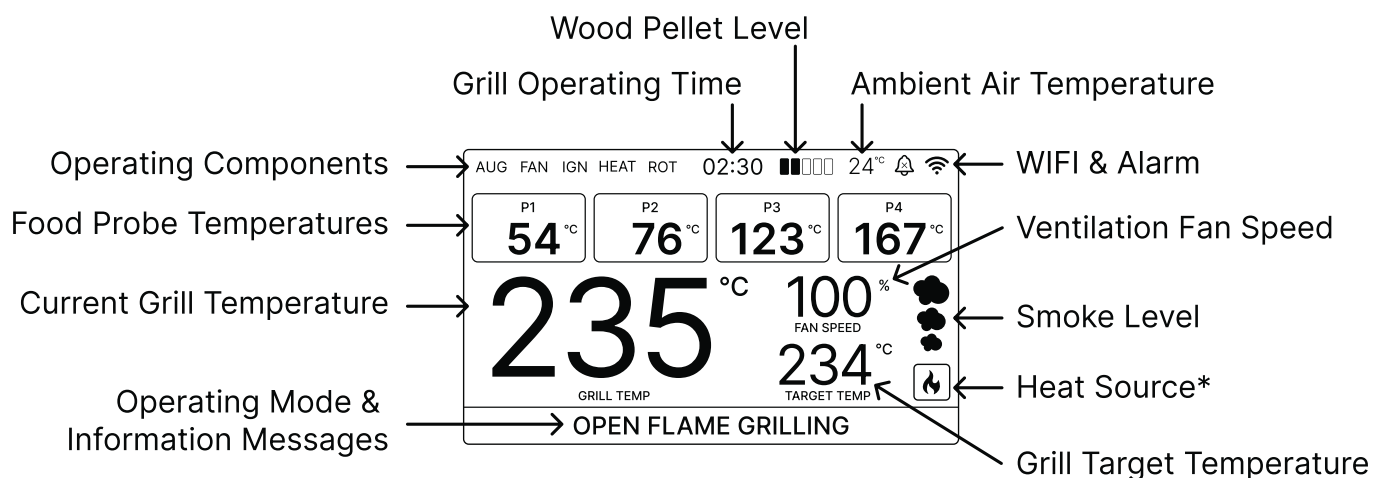
- Press and hold for 2 seconds to turn the controller on.
- Pressing the power button **does not** shut down or turn off the grill while cooking.
- Use the physical on/off switch on the back of the hopper to permanently turn power off.
- Press once to wake the screen after it has gone to sleep (while grill is operating in hot weather).

Control Knob

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

4.2. Colour Screen

- To prevent overheating of the screen, in hot weather it will go to sleep after several minutes of no user input. Press the control knob to wake the screen up.
- The screen provides all key information related to the grill operation and temperatures. Below is a summary of the key displayed elements.

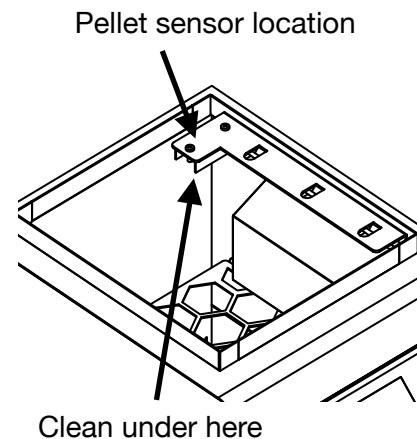


* Heat Sources



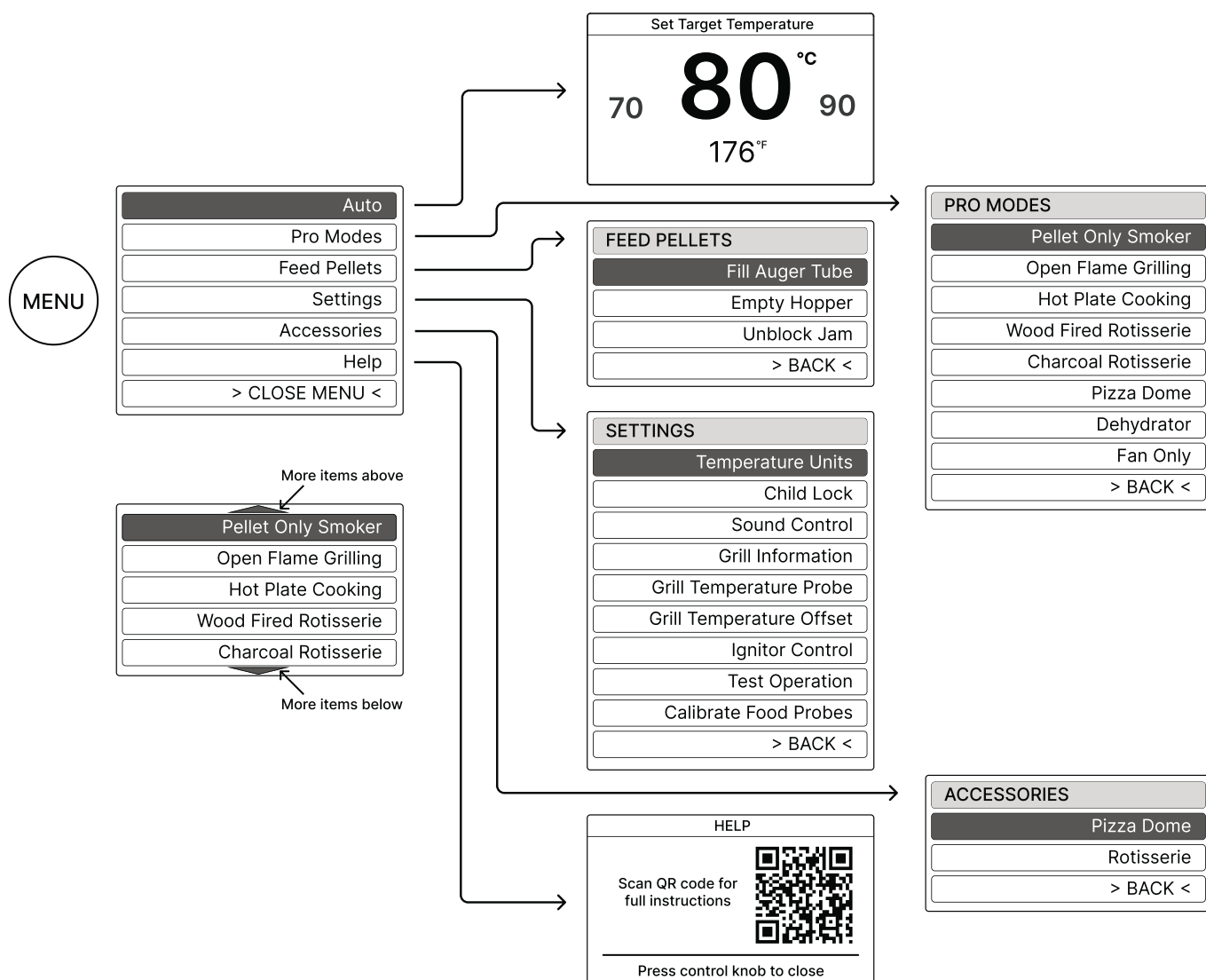
4.3. Wood Pellet Level

- 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 glass cover.
- Use a mirror (or phone selfie camera) underneath the pellet sensor to clearly see the pellet sensor.
- Gently wipe the glass cover clean with a soft dry cloth.



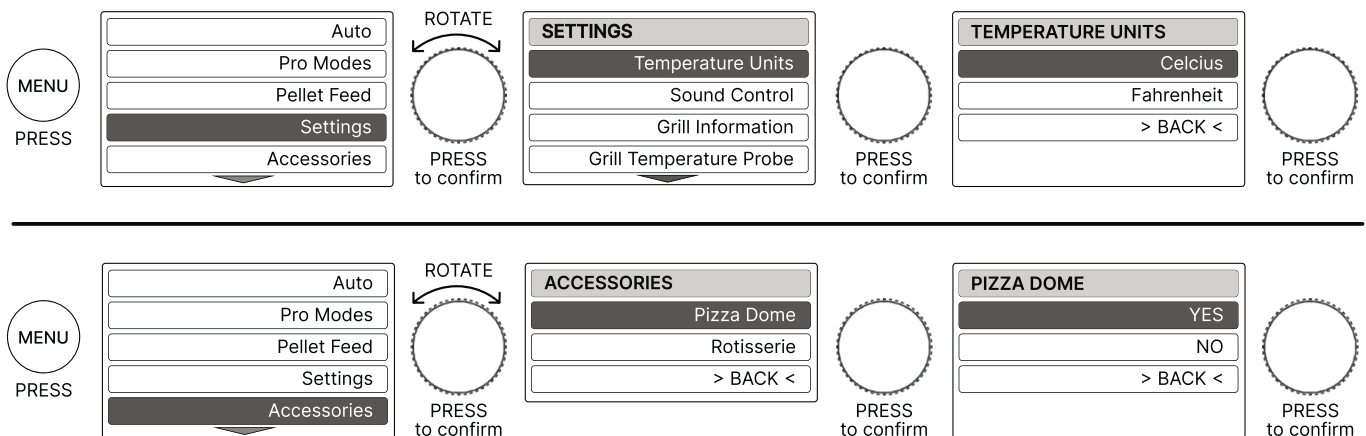
4.4. Menu

- 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 the example for selecting temperature units and Pizza Dome option.



4.5. Pro Modes

- Access the PRO MODES menu to use these additional cooking modes.
- Refer to section 6.3 for more information on each mode.

4.6. Feed Pellets

Fill Auger Tube

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

Empty Hopper

- Runs the auger motor for several 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.

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.

4.7. 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 control from any input.
- 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.
 - Grill approaching target temperature (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.
- Consult with the Trimal customer service team before adjusting this value.

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:
 - Place half a 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 10 second test of each electrical power consumer (fan, auger motor etc).
 - "PASS" is displayed if the component passes the test
 - "FAIL" message will be displayed if the component is not using power.
 - Rotisserie will not show a PASS or FAIL, so look to see if the shaft is slowly rotating.
- Manually run any of the electrical devices (auger motor, fans, rotisserie motor, pellet ignitor or heating element) for 60 seconds. This allows the devices to be observed for normal operation.

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.

4.8. Accessories

- Use this menu to turn ON/OFF which accessories are available for use.
- Rotisserie motor is normally 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.

5. Trimal Aus App

5.1. Download the Trimal Aus App

- Scan the codes below to open up the Apple App Store (iOS version) or Google Play Store (Android version) to download the free Trimal Aus App.
- The App is required to connect the grill to the internet via your WIFI, allowing any 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

5.2. Connect 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 grill → Enter 4 digit code that appears on controller screen
 - Enter the WIFI password to allow the grill to connect
 - Start using the App to monitor and controller the grill



connect-grill

5.3. 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 should 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 operating.
- Scan the QR code for more detail instructions on the update process.



update



Update Before First Use!

- Connect the grill to WIFI and update the grill software before using the grill!
- WIFI and Screen updates do NOT need to be completed before first use.

6. How to Use

6.1. First Use

Update Grill Software

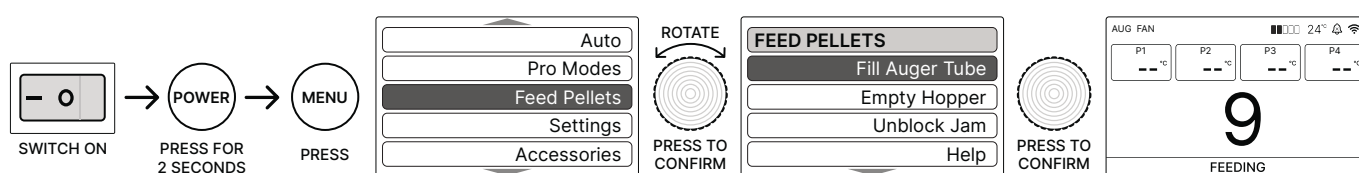
- Grill software is regularly updated with improvements so please update before first use.

Prepare The Grill

- Remove the stainless steel grill racks and wash with warm soapy water before first cook.
- Install the right drip tray, left drip tray and vent cover. For now do not cover with aluminium foil.

Prime Wood Pellets

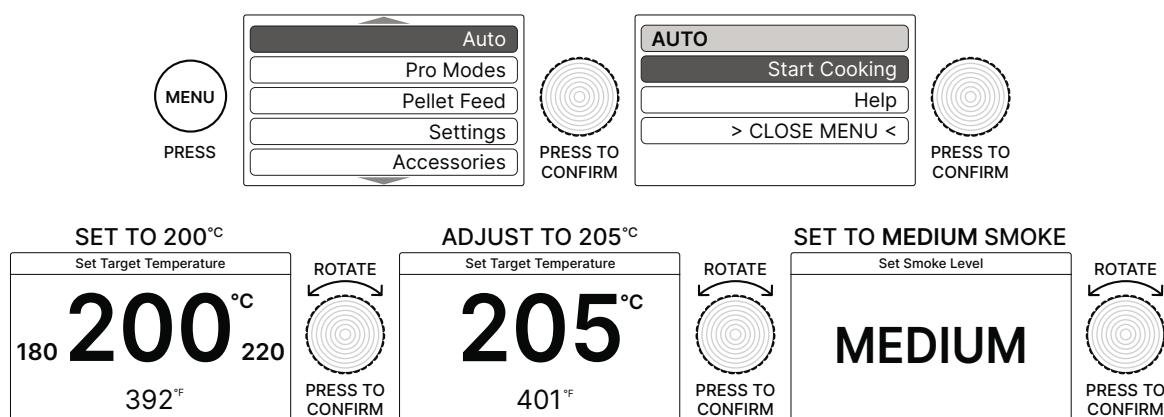
- Pour 2~3 kilograms of wood pellets into the hopper.
- Follow the step by step process outlined below to prime the auger tube with wood pellets.
- This process is only required if the hopper is totally empty, not before each cook.
- The auger will run for 10 seconds at fast speed to fill the auger tube.



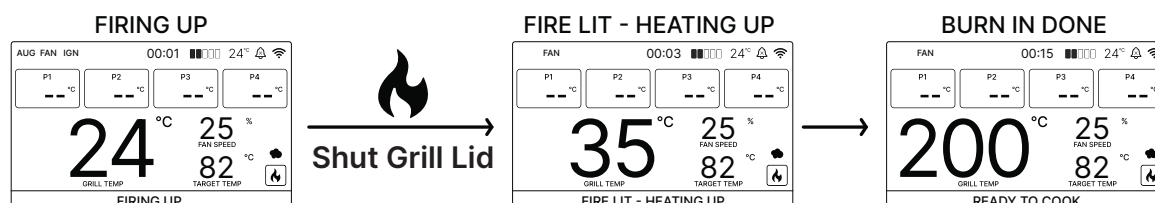
Fire Up & Burn In

- Before the first cook, the grill must be fired up and “burnt in” by heating to 200°C on medium smoke level for 15 minutes. Using medium smoke ensures 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.
- Follow the step by step process outlined below to fire up the grill and burn it in.

Set temperature & Smoke level (AUTO mode)

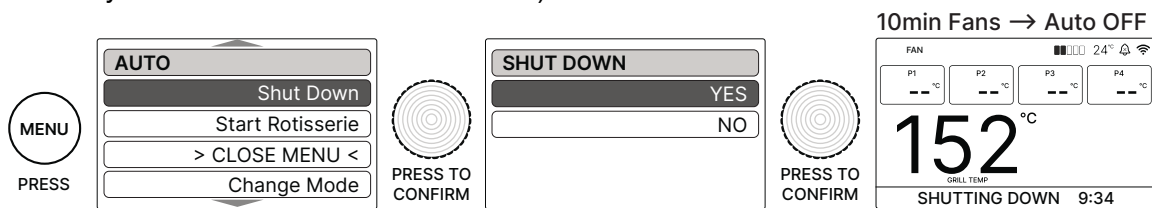


Fire up & Heat up



Finish Burn In

- Once the grill been heated to 200°C for 15 minutes it can be shut down.
- Follow the step by step process below to safely shut down the grill (do not use the App to remotely shut down for this initial burn in).



- 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

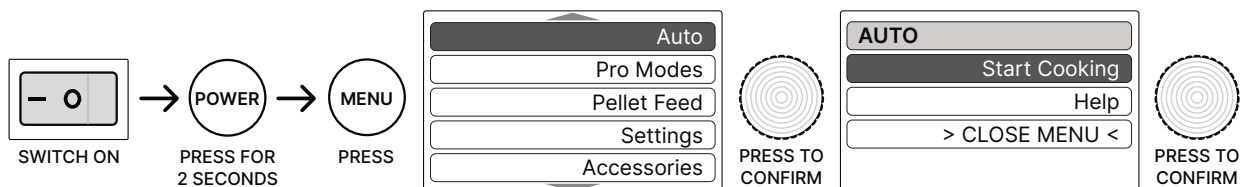
Foil Drip Trays

- For cooks that do not require direct flame exposure, remove the vent cover (Part #24) and line the left drip tray, ideally both trays, with heavy-duty aluminium foil.
- Using foil prevents the build up of grease that can flare up during high temperature cooks.
- It also provides more even temperatures across the grill rack area by covering the vents.

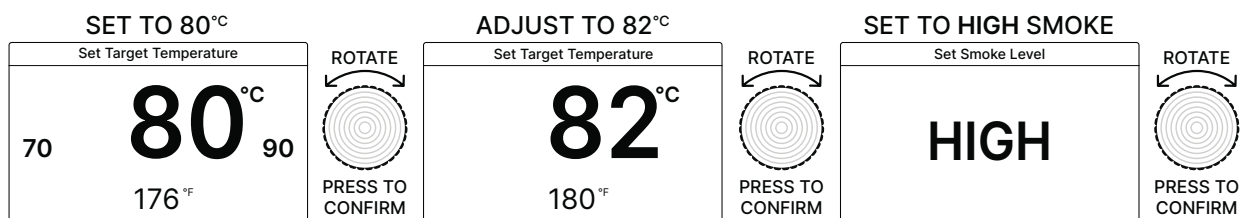
Firing Up

- 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.
- Here's a quick overview of how to start a low-temperature smoking cook using AUTO mode.
- Refer to section 6.4 to understand all the cooking modes.

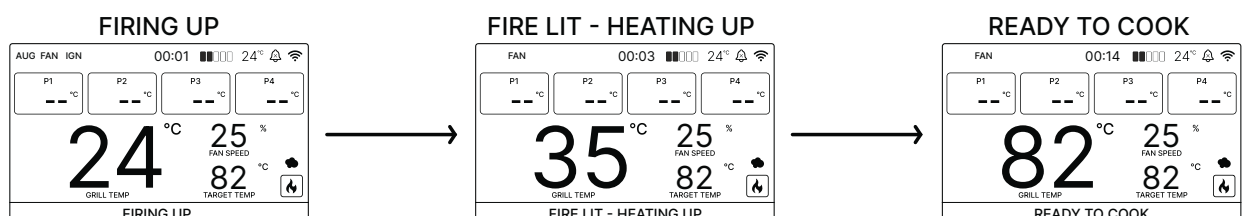
Empty ash and grease bins & top up wood pellets before each cook!



Set Temperature & Smoke Level

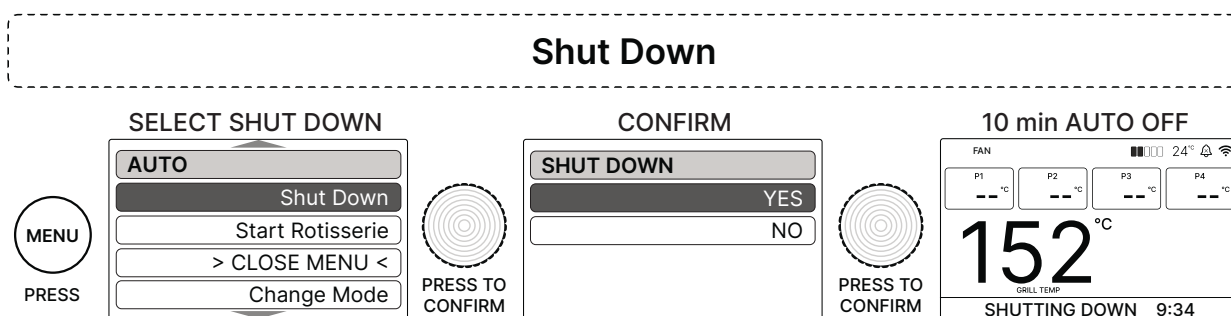


Fire Up & Heat Up



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.

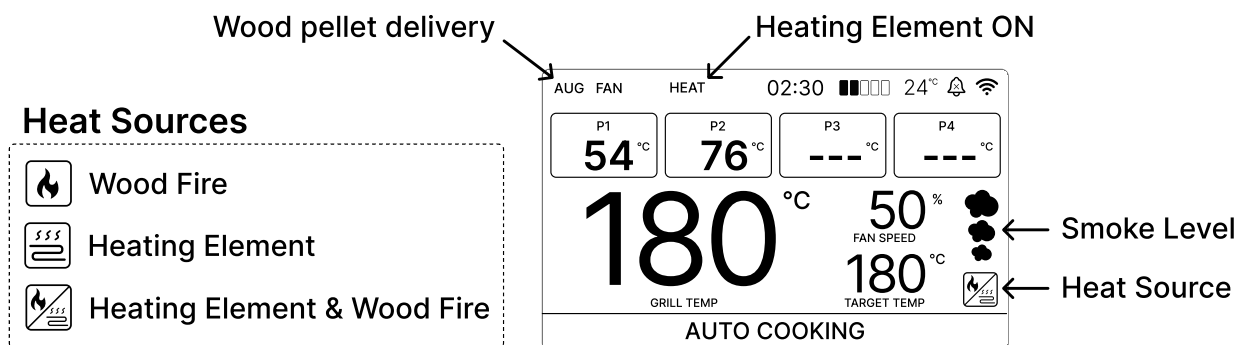


Cleaning

- 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 up to 200°C / 392°F
 - Lower wood pellet usage = lower operating cost
 - Electric heating only modes such as Dehydrator and Keep Warm

Heating Element Usage

- Target temperatures < 100°C / 212°F = Only wood pellets are used.
- Target temperatures > 100°C / 212°F = Heating element used for MEDIUM and HIGH smoke levels.
- PIZZA DOME mode, the heating element will operate at 100% (if installed) 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 are delivered into the fire grate and smoulder before finally starting to burn with flames, at which point the smoke amount reduces.
- Smoke is produced in batches every 30 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, clean burning fire.
- At temperatures below 110°C / 230°F, LOW, MEDIUM and HIGH smoke settings are achieved by modulating how frequently pellets are delivered. HIGH smoke setting delivers more pellets each cycle with a longer time interval, for larger smoke release.
- At temperatures above 110°C / 230°F the heating element is used for MEDIUM and HIGH smoke settings to supplement the heating, 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 required certain accessories, such as the Hotplate, Pizza Dome 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 to some Pro Modes when the grill is already operating in AUTO mode.

Pellet Only Smoker

- Full temperature range operation using only wood pellets for heat, not using the heating element.
- This mode may be useful if running off a battery (less power draw).

Open Flame Grilling

- Cook food using direct open flame heat from the wood pellet fire.
- The heating element is not used, thus ensuring the largest fire size for a given target temperature.
- No smoke levels are available.
- Fully open the flame vent; slide open the left drip tray vent to allow heat and flames to rise up.

Hot Plate Cooking

- Cook on the stainless steel hotplate (optional accessory)
- Remove left drip tray; leave right drip tray in place so hotplate grease can drain onto it.
- Place in the hotplate and slide all the way to the left.
- Left half is the hottest, while 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 Settings > Accessories.
- Wood pellet fire provides indirect heat.
- Rotisserie rotation can be started/stopped through the controller menu.

Charcoal Rotisserie

- Only available if the Rotisserie Kit is installed and set to YES in Settings > 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 closed for higher temperatures.

Pizza Dome

- Only available if Pizza Dome set to YES in Settings > Accessories.
- Plug food temperature probe into P4 and the probe shaft into the rear of the Pizza Dome to read the internal temperature.
- Open flame vent; remove left drip tray; left right drip tray in place.
- Lift Pizza Dome into the centre of the grill; hang on the left and right heat baffles; slide the dome 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 +80°C.
- Fan speed can be adjusted. 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 and press to confirm.

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 Fire Rotisserie
 - Pizza Dome
- 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 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 (<110°C) Pellet Fire & Heating Element (>110°C)	Closed	Left & Right (foil covered)	Left & Right In
Pro Cooking Modes				
Pellet Only Smoker	Wood Pellet Fire	Closed	Left & Right (foil covered)	Left & Right In
Open Flame Grilling	Wood Pellet Fire	Open	Left & Right (foil covered)	Left & Right In
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 (foil covered)	—
Charcoal Rotisserie	Charcoal (manually placed in tray once white and no flames)	Closed	—	—
Pizza Dome	Wood Pellet Fire & Heating Element	Open	Right	—
Dehydrator	Heating Element	Closed	Left & Right (foil covered)	Left & Right In
Fan Only	—	Closed	Left & Right (foil covered)	Left & Right In

1. Heating Element must be installed to be available for use. It will be automatically detected by the controller if installed.
2. 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.
3. Drip trays are divided into left and right. The left grease tray has vents which can be opened by sliding open the vent cover, allowing heat through for open flame grilling. When not open flame grilling, remove the vent slider and cover both drip trays with foil for better heat distribution and easier cleanup.
4. Grill racks (left and right) should be removed to place in the HOTPLATE, PIZZA DOME 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	Every 250kg of pellets burnt
Empty wood pellet hopper	If not using for more than a week.

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 after the shut down cycle has been completed.
- Follow these steps:
 - Lift up the lock plate and pull the knob back and forth 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 scrap 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 available, use a blower to blow the air out from beneath the heating element.
- 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

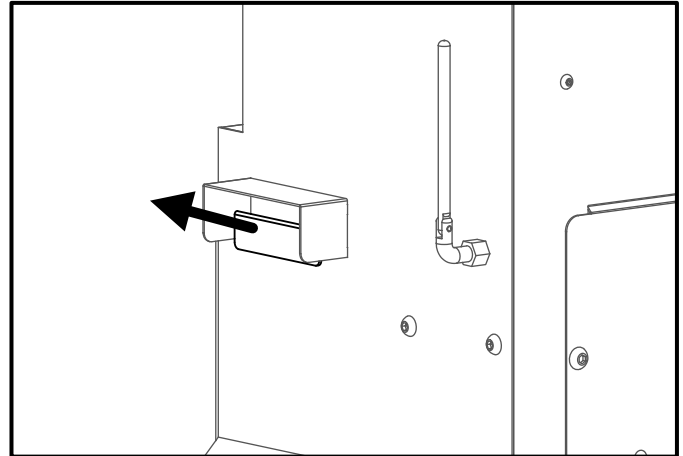
- Although high quality 304 grade stainless steel used for the grill lids, it can still develop “tea staining” brown corrosion spots if near the coast or swimming pool.
- To clean, polish along the brushed grain with kitchen grade stainless steel cream or powder to remove any rust or other blemishes.
- Ultra-fine wire wool can be used to remove stubborn stains.

Exhaust Vents

- Exhaust vents in the side walls can accumulate soot and creosote, eventually restricting air flow and potentially even catching fire.
- 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 stainless steel panels with bbq cleaner and a soft cloth and then return into place.
- Clean the air vent holes in the rear wall panels with a small brush.

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 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
which will feed the remaining pellets into the fire grate.
- Dump the pellets out of the fire grate into the ash bin and dispose.



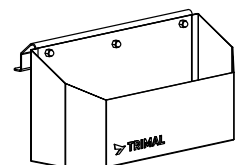
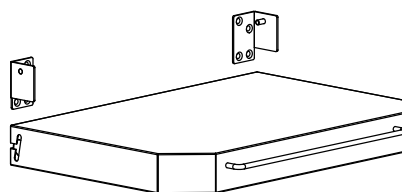
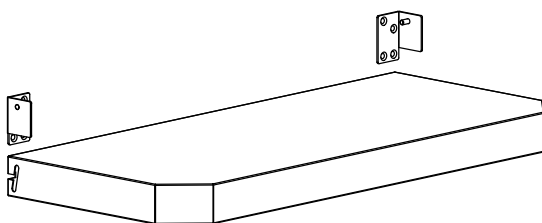
8. Accessories

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.

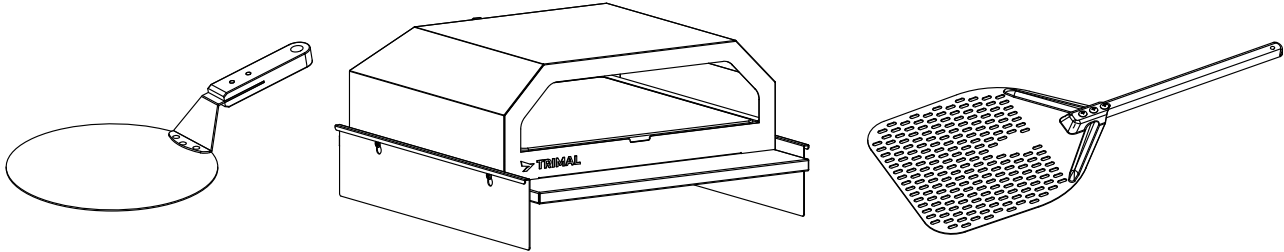


benches



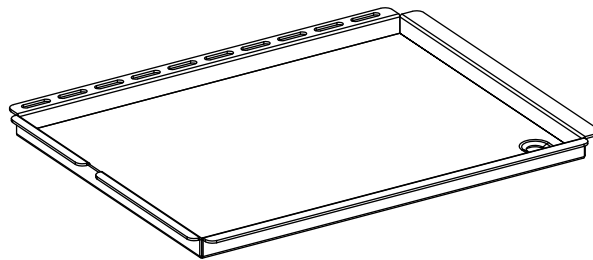
8.2. Pizza Dome

- The dome 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 dome temperature on the controller screen or through the Trimal Aus App.



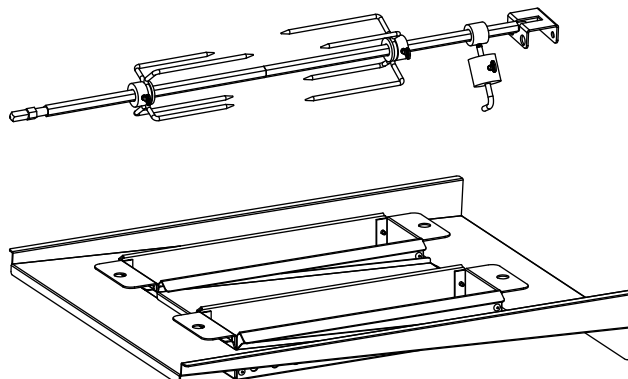
8.3. Hotplate

- Drop in the full size stainless steel hotplate for even more cooking versatility.
- Leave the hotplate 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.
- Rotisserie cook using wood pellet fire 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 (scan QR code).	GR-EL-002-01
ERROR 22 Ambient temperature sensor	• Problem: No signal from ambient temperature sensor. • Action: Continue normal operation, but assuming 30°C 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 screen and App. • Solution: Replace temperature 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. If dead, replace auger 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: Replace inner 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: Replace outer 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 and manually light fire until replaced (scan QR code).	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: Replace heating element.	GR-EL-008-01
ERROR 51 Grill High Temperature	• Problem: Temperature exceeded 340°C for >1minute • Action: Fans on 10 minutes, then grill power off. • Solution: Check grill operation (scan QR code).	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 (scan QR code).	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 (scan QR code).	N/A

9.2 Troubleshooting Guide

The table below provides guides for most common issues.
Scan the QR code for more detailed troubleshooting guidance.



Problem	Reason	Investigation/Solution
Grill not turning on. Screen not lighting up.	No Power	- Check power supply to the grill ensuring the power plug is pushed firmly in and the power switch is on. 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).
	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 $>300^{\circ}\text{C}$, 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 $>300^{\circ}\text{C}$. - Keep the lid shut, or set to lower temperature setting if cooking with the lid open.
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 wood pellets in the fire grate
	Auger jammed	- Use test grill function to manually run the auger - if not turning use Unblock Jam function. - If still not turning, clean out all pellet 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 and test operation again.
Grill not reaching temperature	Moist pellets	Dump out pellets and use fresh, clean pellets.

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”, by 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 2.5, 3.4 and 9.1 for spare part names. Scan the QR code above for a full troubleshooting guide with lists of any spare components required. Please contact the Trimal support team for availability and pricing of spare parts.

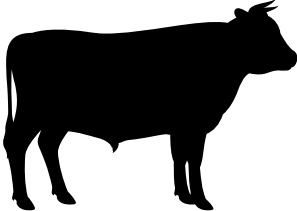
9.5. Get Support (contact us)

Start by visiting the Trimal Knowledge Centre by scanning the QR code. Fill out the support form there any product operational or warranty issues, ensuring our team has your correct contact and product information for fastest support. 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 

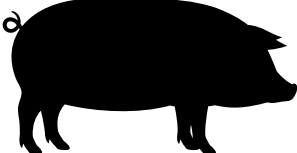
Medium: 63°C / 145°F 

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 

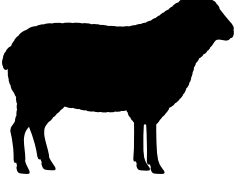
Medium: 66°C / 150°F 

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 Policy

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 assembly and 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