KIT ASSEMBLY GUIDE · HAND-CRANKED FLIP WINDOW

Santa's Kitchen

A little Christmas kitchen to look into. Turn the crank and twenty baking pictures flip through the oven window, while the hand mixer turns beside it under a snowy night window.



In the box

- 85 scene pieces and the alignment tool (86 printed pieces total)
- Reusable flap-alignment tool included in every kit
- No screws, glue, wires or batteries

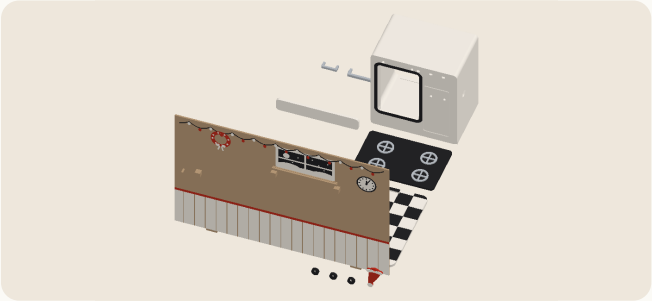
Good to know

- The pieces press, slide or sit in place. Keep thin pins supported as you fit them.
- The floor is 238 × 109 mm and the back wall lifts off. The drawer pull is decorative.
- The crank is keyed and fits one way only.

BEFORE YOU BUILD

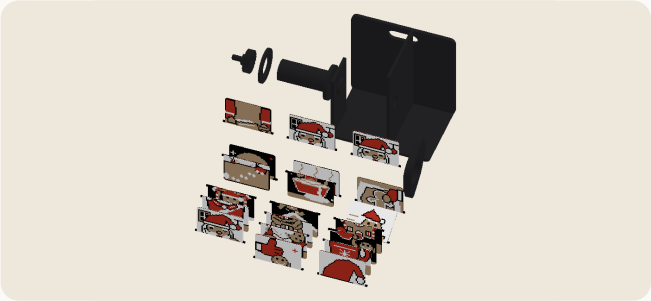
What is in the box

Check all 86 printed pieces before you start. The kit includes 85 scene pieces and one flap-alignment tool.



Oven and floor · 11 pieces

Oven body, Oven handle and cupboard pull, 3 oven dials, Hob, Rear upstand, Checker kitchen floor, Lift-off back wall and Santa's hat.



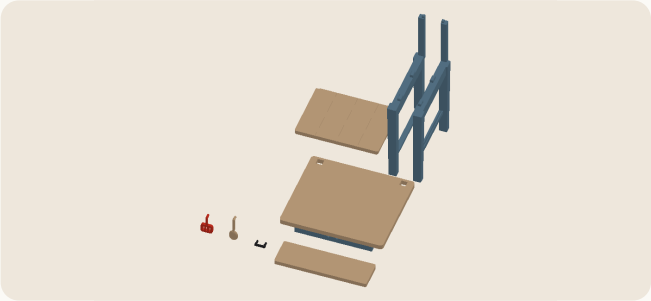
Picture mechanism · 25 pieces

Chassis, Spool A and spool B, Axle and pawl bracket, 20 two-sided picture flaps.



Hand mixer · 10 pieces

2 casing halves and red cap, Stand and bowl, Input gear sleeve and driven gear, Whisk shaft, beater and crank.



Baking table · 8 pieces

2 side frames, Lower shelf, Worktop with apron, Upper shelf with rail, Drawer pull and 2 hanging tools.



House and pantry · 14 pieces

House core on board, iced front and roof, 5 jar bodies, 5 jar badges and the flour sack label.



Baking decorations · 17 pieces

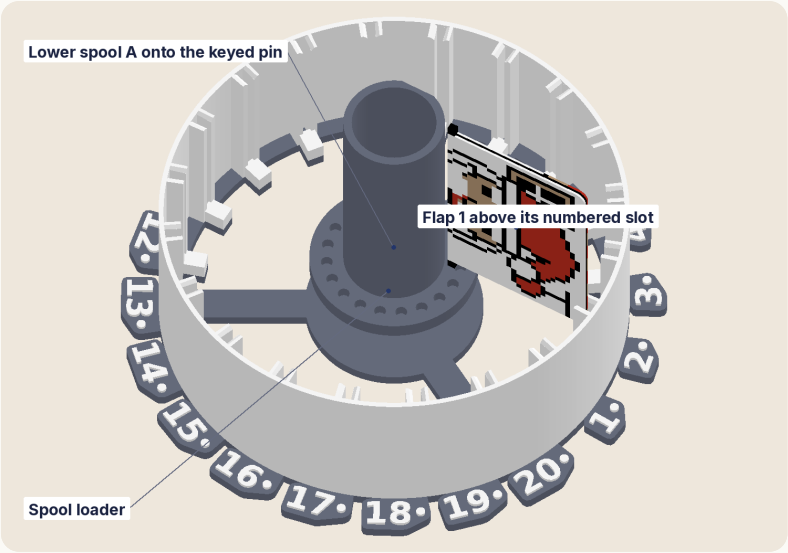
Red bowl, dough with pin and piping bag, Saucepan with its handle, lid and baking pan, 3 gingerbread men, Stool, biscuit tin and gift tin, Mouse with its cookie, flour sack and flour spill.



Included spool loader (1 tool): the numbered stand aligns the flaps while you build the spool in steps 1 and 2. Every kit includes it. Keep it for future flap sets.

BUILD

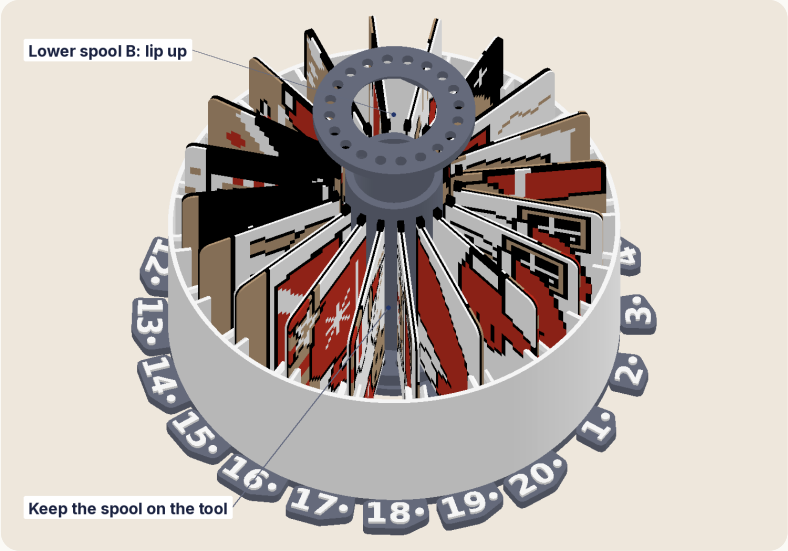
Assemble



1 Start with the spool loader

Set the spool loader flat. Lower spool A onto its keyed pin, disc down and tube up. Match the two flats.

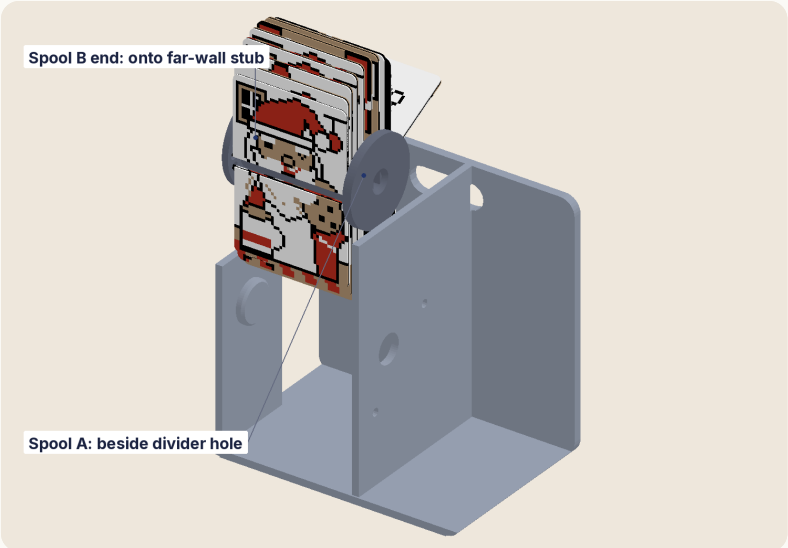
Load flaps 1-20 in order, in the slot just right of each number. The top-half picture faces its numeral. Keep the drum on the tool.



2 Close the flap drum

Match the single flat in spool B to the flat on the tube. Keep the lip up and the funnelled holes facing the free flap tabs.

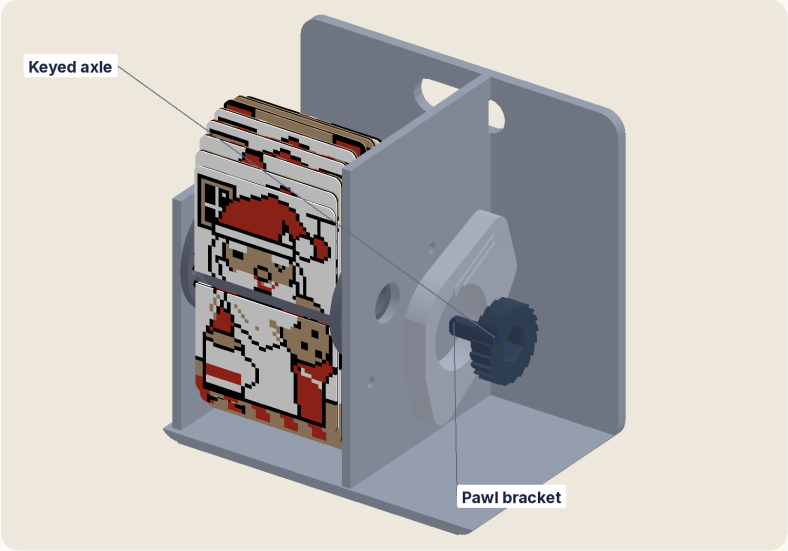
Press spool B evenly to the tube end, catching all twenty tabs. Lift the drum off the tool. Every flap must pivot freely.



3 Seat the drum in the chassis

Tilt the loaded drum into the chassis. Slip the open tube end at spool B over the far-wall stub.

Swing spool A down beside the divider hole. Support this end until the axle is fitted. Keep the flaps clear of the divider.

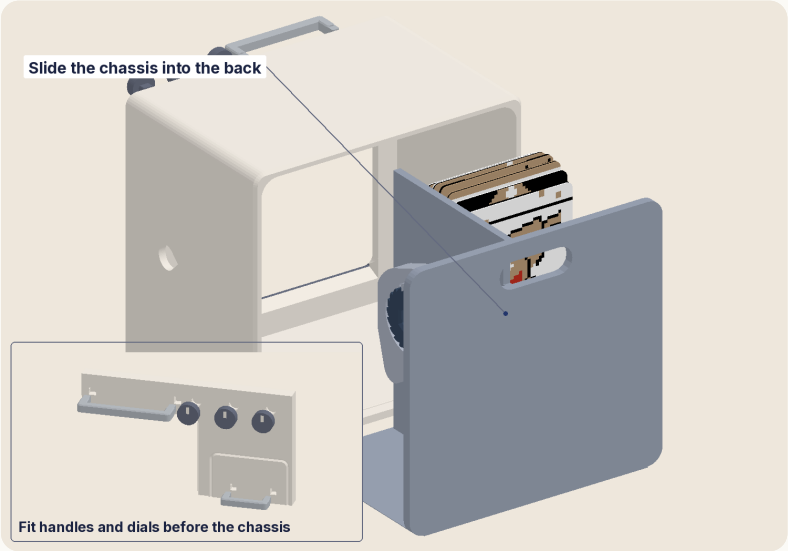


4

Fit and check the ratchet

Push the axle into the loose pawl bracket, turning gently until its teeth slip past the pawl.

Feed its tip through the divider into spool A, aligning both flats. Seat both bracket pegs flat against the divider. Test gently anticlockwise from the axle side: it must click and resist reverse.



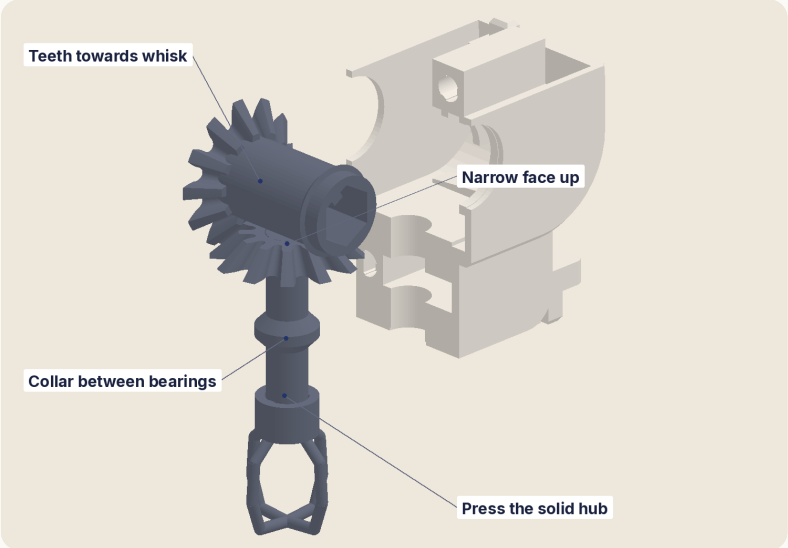
5

Assemble the oven

Support the oven back. Fit both handles, flat sides down: long above the window, short on the cupboard. Press each evenly at both ends.

Fit the three dials, cream ticks up.

Slide the chassis past the ridge. Check flaps clear and axle lines up. Leave crank off.

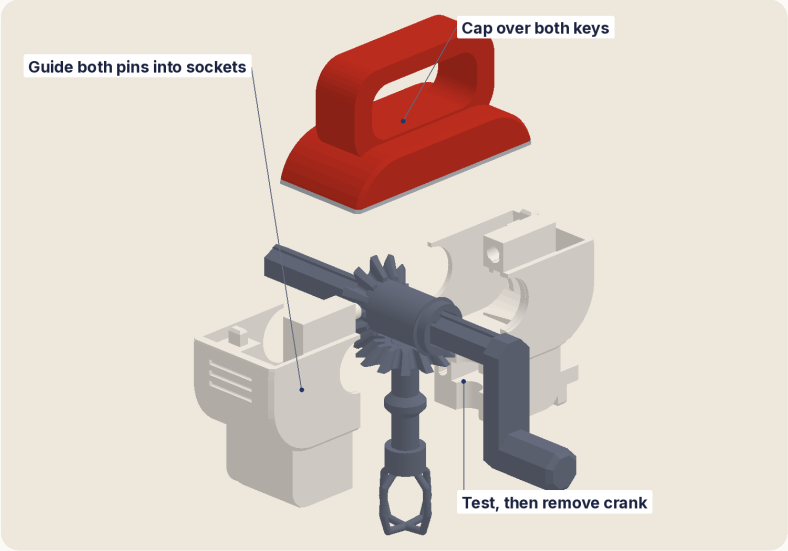


6

Build the mixer drive

Hold the loose shaft by its collar. Fit the gear on the short upper D-end, narrow face up, top nearly flush. Press the beater hub onto the long lower D-end; avoid its cage.

Lay the rear casing seam up. Seat the sleeve, long hub towards crank, and shaft, collar between bearings. Roll the sleeve to check free movement.

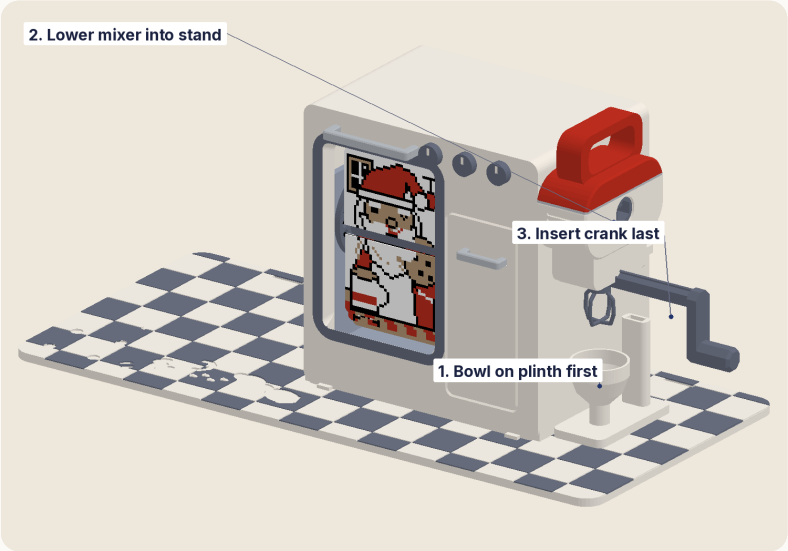


7

Close and test the mixer

Guide the front casing's two pins into the rear sockets. Keep both shafts seated. Press the red cap onto both top keys.

Hold the casing. Match the crank groove to the sleeve rib and insert it temporarily. Turn gently: the beater must rotate freely. Remove the crank before the next step.

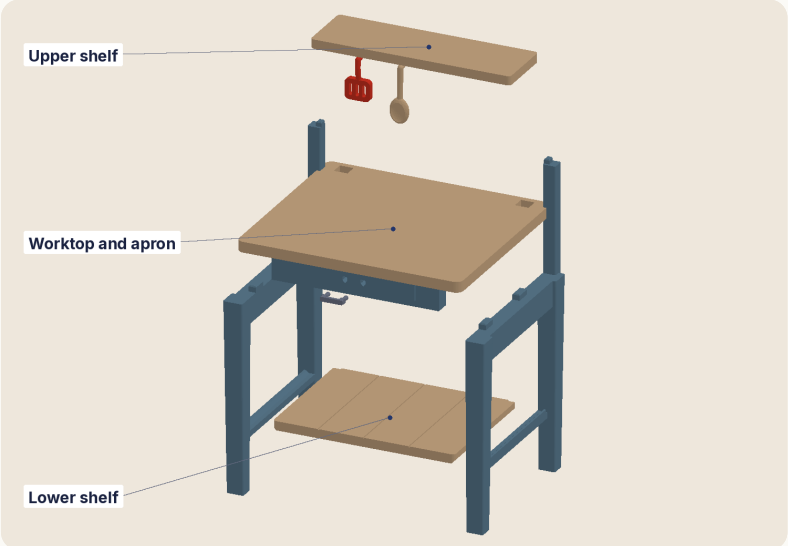


8

Place the bowl first

Lay the floor flat, locators up. Seat the oven around its stops and stand over its pegs. Center the empty bowl on the stand plinth first.

With crank removed, lower the mixer: beater into bowl, tongue into stand. Match crank groove to sleeve rib; slide through, turn anticlockwise to match axle rib, and push fully home.

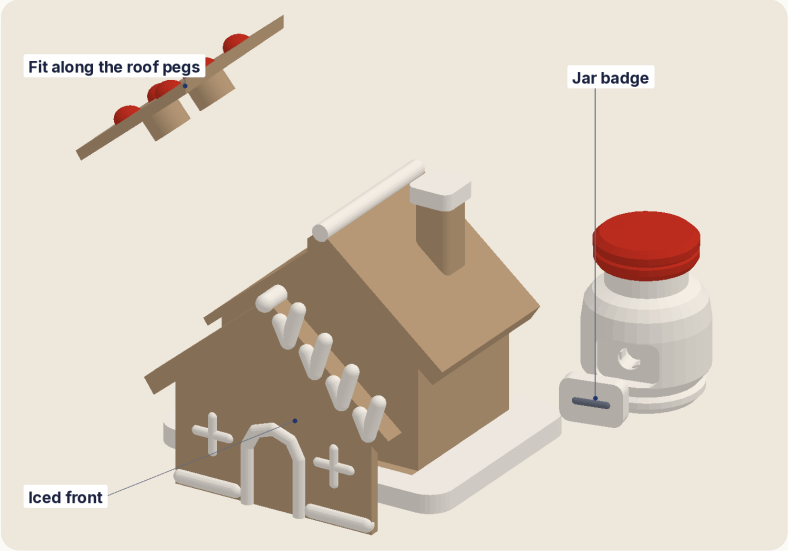


9

Build the open baking table

Capture the lower shelf between the frames' inward ledges. Lower the worktop over the rear posts onto its four keys.

Fit the upper shelf, drawer pull and two hanging tools. Press close to each key. Seat the table on its floor locators; its angle beside the oven is intentional.



10

Finish the house and jars

Support the house core on its board. Fit the iced front into both sockets. Fit the roof along its sloping pegs.

Press the five badges into their matching jar sockets, supporting each body rather than its lid. Never force a pin that stops early.



11

Arrange the kitchen

Fit the hob and upstand. Put the house, red bowl, dough-and-pin and piping bag on the table; three jars above, two and gift tin below.

Put saucepan and pan on the rear burners, lid on pot, three stars in pan. Put biscuit tin on stool; mouse and sack by the flour trail. Keep moving parts clear.



12

Make one slow full turn

Look straight at the crank and turn anticlockwise. The top of the drum moves towards the oven front. Never force it backwards.

Count twenty clicks in one full turn. Check every picture and that the beater turns clear of its empty bowl. Stop at any resistance; use the checks on the next page.

Dark mechanical parts are lightened in the diagrams to show their edges. Product colours are unchanged.

PLAY

The twenty pictures

One full anticlockwise turn, viewed straight at the crank, advances all twenty pictures. Stop if a flap catches or the mixer binds.



1. The Christmas recipe
2. Making the batter
3. Rolling out the dough
4. Cutting the cookies
5. The first warm batch
6. One cookie winks
7. Escape over the rolling pin
8. Up the candy cane
9. Straight into the flour
10. Santa follows the footprints
11. Icing the gingerbread house
12. A stolen gumdrop
13. A very sweet hiding place
14. Santa offers a helping hand
15. Friends again
16. A tin full of Christmas
17. Cocoa for the kitchen
18. Santa sneaks a cookie
19. Who borrowed the hat?
20. Crumbs and a wave

Match each flap's top half to the numbered pictures above. Its reverse carries the next picture's lower half; flap 20 wraps to picture 1.

If something is off

A picture catches	Reseat both pivot tabs and both spool discs. Remove a loose burr; do not enlarge a bearing.
The halves do not match	Check the numbered order and both faces; the reverse belongs to the next picture.
Crank or mixer binds	Remove the crank before lifting the mixer or opening it. Reseat shafts and gears. Put the bowl back before lowering the mixer.
A joint stops early	Separate it and inspect the pin and socket. Never force a thin pin or shorten a locating key.
A piece is damaged	Contact Filamenting through your order with a photo and the part name.

Keep loose decorations away from the crank, beater and flap opening.