ASSEMBLY GUIDE · HAND-CRANKED FLIP WINDOW

The Christmas Shop

Two canal houses on a frozen canal street. Turn the street organ's crank and twenty Christmas pictures flip in the shop window, one click at a time, while the organ's drummer and bell-ringer bob up and down in turn.



You need

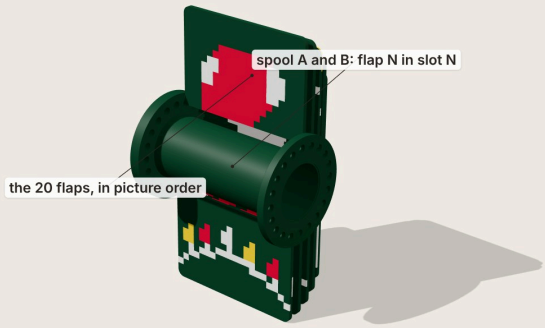
All the printed parts (already in the kit)
Three M2 pan-head screws (included):
one M2 × 16 and two M2 × 14

Good to know

Everything else presses, slides or sits in a pocket, so it all comes apart again.
The street is 200 × 136 mm; the set stands about 145 mm tall.
The crank is keyed and goes into the axle one way only.

BUILD

Assemble

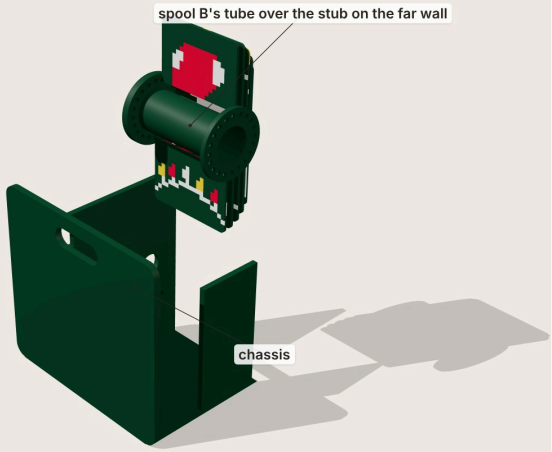


1

Load the spool

Set spool A disc-down on the loading stand's pin (plate 4). Drop flap N into the slot just right of number N, the top half of picture N facing the number.

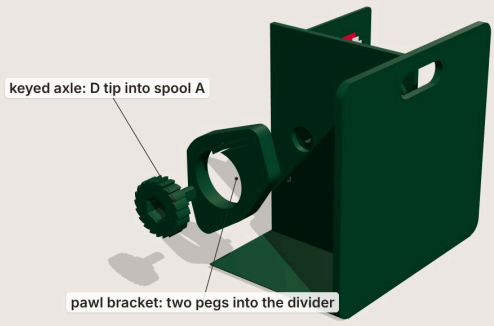
Press spool B down the tube, lip up, until it stops on the tube's end. Its funnelled holes catch all 20 tabs. Lift the loaded spool off the stand.



2

Spool into the chassis

Tilt the loaded spool into the chassis: spool B's tube over the stub on the far wall, spool A at the divider's round hole.



3

Axle and ratchet

Push the keyed axle into the pawl bracket, turning it until the teeth slip past the pawl. Feed its D-shaped tip through the divider into spool A and press the bracket's two pegs into the divider's two small holes.

Turn the axle by hand: it clicks once per picture going forward and refuses to turn back.



4

Into the shop

Slide the chassis into the shop from the back until it clicks over the ridge on the floor.



5

The snowy roofs

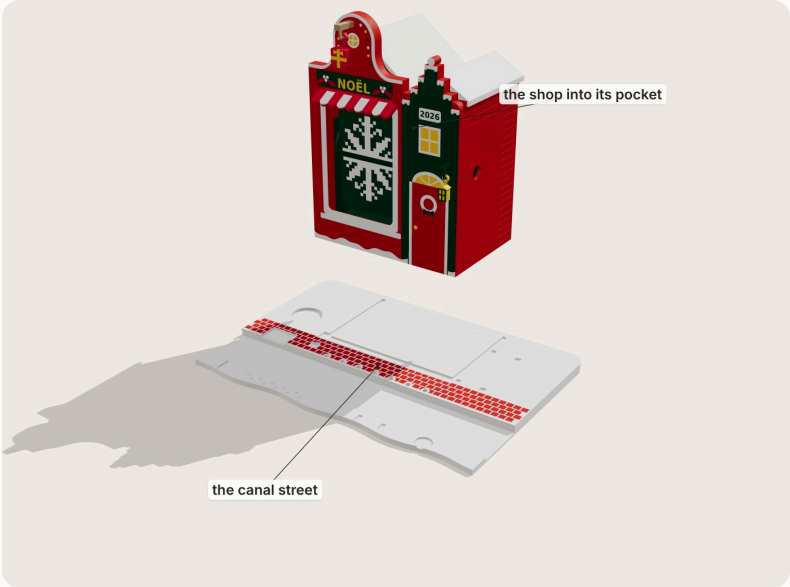
Set each roof on the box behind its gable, its skirt down the box's side and its front against the back of the face. Nothing pegs in: they lift off again.



6

Awning, hoist and lantern

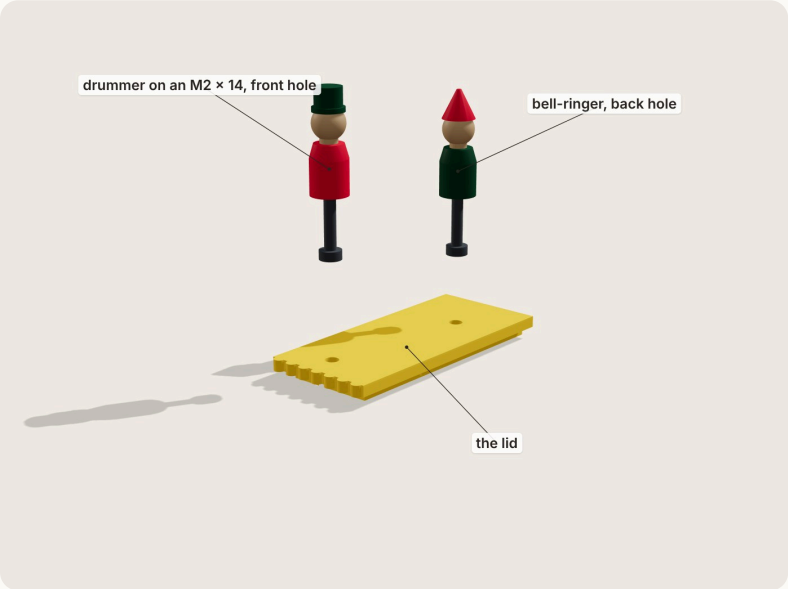
Slide the awning's tongue into the slot over the window. Push the hoist beam into the hole at the top of the bell gable and the lantern bracket into the one by the door; hang the present and the lantern on their hooks.



7

Onto the street

Lower the shop into its pocket on the canal street, its face along the red-brick cobbles. Leave the four small pockets on the crank side clear: they're for the organ's legs.

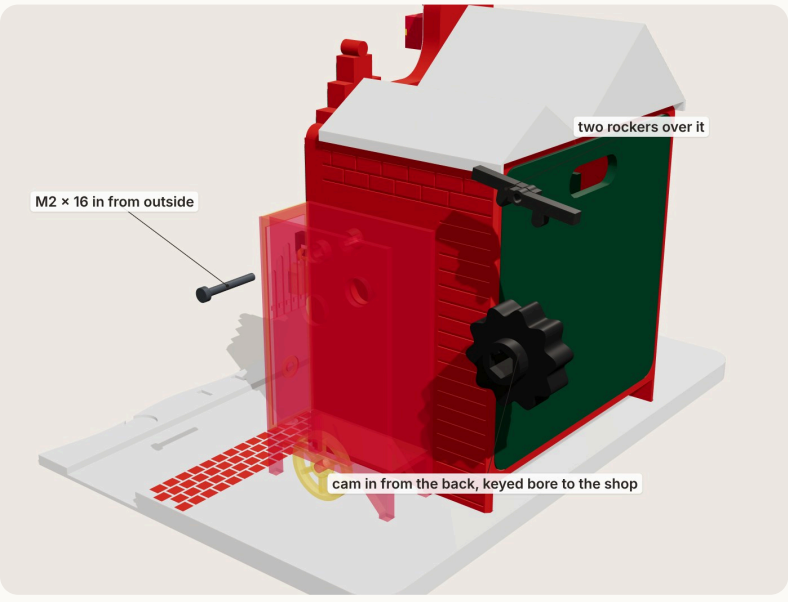


8

Figures on the organ's lid

Hold the lid upside down. Push an M2 × 14 up through each hole and screw the drummer onto the front one, the bell-ringer onto the back one, until each head sits snug under the lid; back each off a quarter turn so it slides.

No screws? Push a 15.5 mm piece of 1.75 mm filament 5 mm into each figure's base instead.

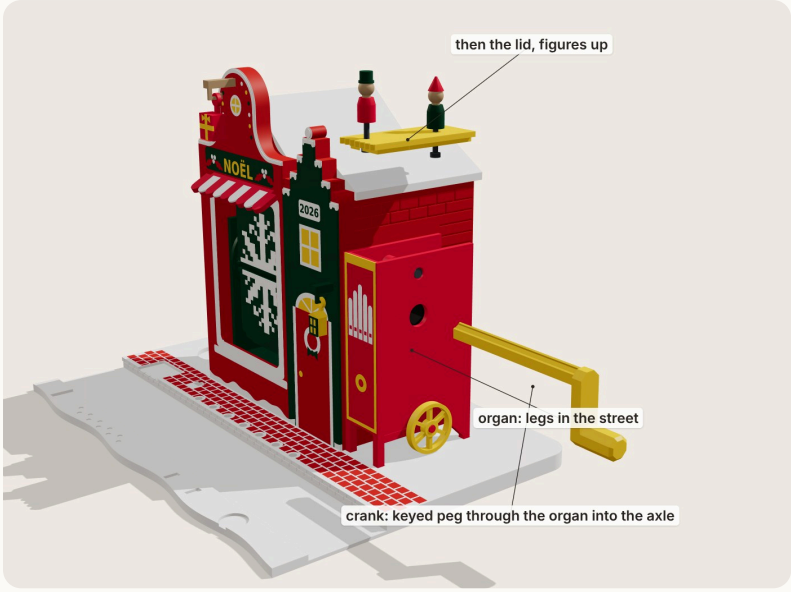


9

The organ's cam and rockers

Drop the cam into the case from its open back, its keyed bore toward the shop. Put the two rockers in over it, rocker a (its nose to the front) toward the shop.

Drive the M2 × 16 in from the organ's outer side, through both rockers and into the inner boss (or push in a 19.5 mm piece of filament until it's flush).



10

Organ, crank and lid

Stand the organ against the shop's crank side, its four legs in their pockets. Push the crank's peg through the organ and the cam into the axle: it only goes in one way, the groove on the rib, so turn it until it drops in.

Put the lid on, figures up: the screw heads land on the rockers. Turn the crank: a picture flips at every click and the figures bob in turn.



11

The canal and the street

Lay the ice in the canal and set the bridge across it, its feet in their pockets; the skaters stand in the pockets on the ice.

Stand the tree's pot in its round pocket on the left. The postbox goes by the bell gable's corner, the snowman and the bench on the far bank, the seven bollards in their holes along the quay.

PLAY

The twenty pictures

Turn the crank anticlockwise, top forward. Each click flips one picture, in this order:



1. a snowflake
2. Santa
3. Rudolph
4. a snowy tree
5. a present
6. a stocking
7. a bauble
8. two bells
9. a candy cane
10. a mug of cocoa
11. a star over snowy hills
12. a polar bear in a Santa hat
13. a nutcracker
14. Santa's sleigh
15. Santa's boots in the chimney
16. fairy lights
17. an Advent wreath
18. mittens on a string
19. HO HO HO
20. MERRY XMAS

If something is off

The two halves of a picture don't match	The flaps went in the other way round. Reload them in reverse order.
A picture rests half-flipped	Spool B isn't fully down: press it until it stops on the tube's end, so every tab sits in its hole.
The crank won't go into the axle	It's keyed: turn it until the groove along its peg meets the rib in the socket. Don't force it.
The crank turns but nothing flips	The crank's peg isn't in the axle's socket. Push it fully home.
The figures don't move	Their screw heads must rest on the rockers' tips: lift the lid and check each rocker's nose sits on the cam.
A press fit is tight	Sand it a little. Write to me if a small piece is off and I'll sort a replacement.