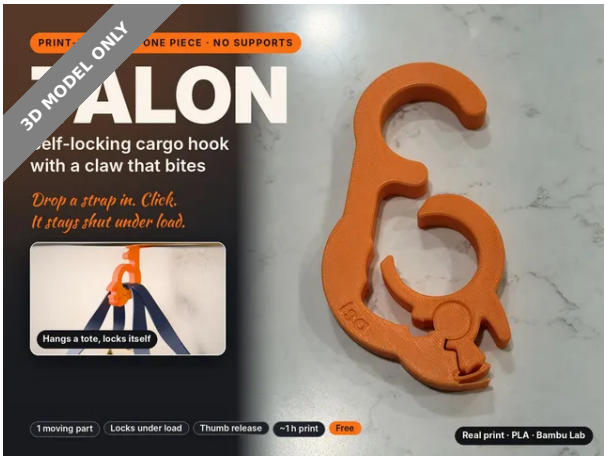



# TALON - Self-Locking Cargo Hook (Print-in-Place)

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VIEW IN BROWSER

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## Summary

Drop a strap in and the claw curls shut with a click. Locked under load, one-thumb release. One piece, no supports.

Household > Other House Equipment

Tags: hook bag car gift mechanism cargo printinplace grocery carabiner

TALON is a cargo hook with a claw that closes by itself.

Hang it on a bar, drop a bag strap in, and the weight of the bag presses a trigger at the bottom of the hook. The claw curls shut around the strap with a click and stays locked. While the bag is hanging it cannot open: the load holds the claw shut, and pulling or shaking the strap only pushes it against the closed claw. To release, lift the bag a little and press the rear spur with your thumb. The claw snaps open and stays open, ready for the next bag.

## How It Works

- One moving part: the orange claw turns on a single pivot. The pivot is an hourglass-shaped pin, so the claw is captured in every direction and cannot fall out.
- The bottom of the hook is the trigger. Any load resting on it turns the claw shut.
- A small flexible lip in the heel clicks over two teeth: one holds the claw open, the other holds it closed. That makes it bistable: it stays open until something lands on the trigger, and it stays closed until you press the spur.
- The claw is printed half-open, so all gaps are 0.5 mm (PLA) / 0.6 mm (PETG) on the print bed. When closed or open it sits firmly against its stops with no rattle.

## Print In Place - No Assembly, No Supports

- Prints flat in one piece, 62 x 120 x 12 mm.
- Files: Bambu Studio 3MF for PLA and for PETG (all Bambu Lab printers), plus plain STLs for any slicer.
- PLA: about 1 h, 31 g. PETG: about 1 h, 31 g, recommended for cars and outdoors (heat).
- Settings: 0.20 mm layers, 5 walls, 25% gyroid, no supports, no brim.
- Set elephant-foot and XY compensation to 0: the clearances are drawn in the model.
- Please do not scale the model. The pivot and the click lip are tuned for this size.

## First Use

After printing, push the claw closed until it clicks, then press the spur until it clicks open. Do this a few times. If a thin hair of plastic links the lip to the claw, just break it free.

## Where To Use It

- The top hook fits round bars up to 25-27 mm: closet rods, shopping carts, strollers, garage rails, kitchen rails, tool carts.
- It holds bag straps, tote handles, plastic bag handles, watering cans, wire handles and lanyards (anything that fits the 30 mm throat).
- Designed for everyday loads up to about 5 kg (11 lb).

## Notes

- The real photos show my test print with a name engraved on it. The files are plain.

- Use the PLA or PETG file that matches your filament: the PETG file has slightly larger gaps.

## Model files



**talon_m_petg_all_printers.3mf**



**talon_m_pla_all_printers.3mf**



**talon_m_pla_print_in_place.stl**



**talon_m_petg_print_in_place.stl**

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