Tool chest – links (scale 1:1)

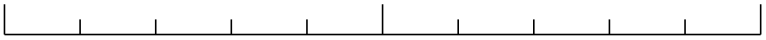
Four-bar “up-and-over” hinge · 4 links total (one A and one B per side, both sides identical)
Holes Ø8.1 for shoulder screws ISO 7379 (shoulder Ø8, M6) – laser cut or drilled + reamed. Ends fully rounded R11.

Link A (inner) – 2 pcs · plate pivot A0 ↔ lid pivot A
Flat bar 22×5 mm · hole spacing 109.6 mm · hole Ø8.1 · overall length 131.6 mm · 2 pcs



Link B (outer) – 2 pcs · plate pivot B0 ↔ lid pivot B
Flat bar 22×5 mm · hole spacing 121.5 mm · hole Ø8.1 · overall length 143.5 mm · 2 pcs



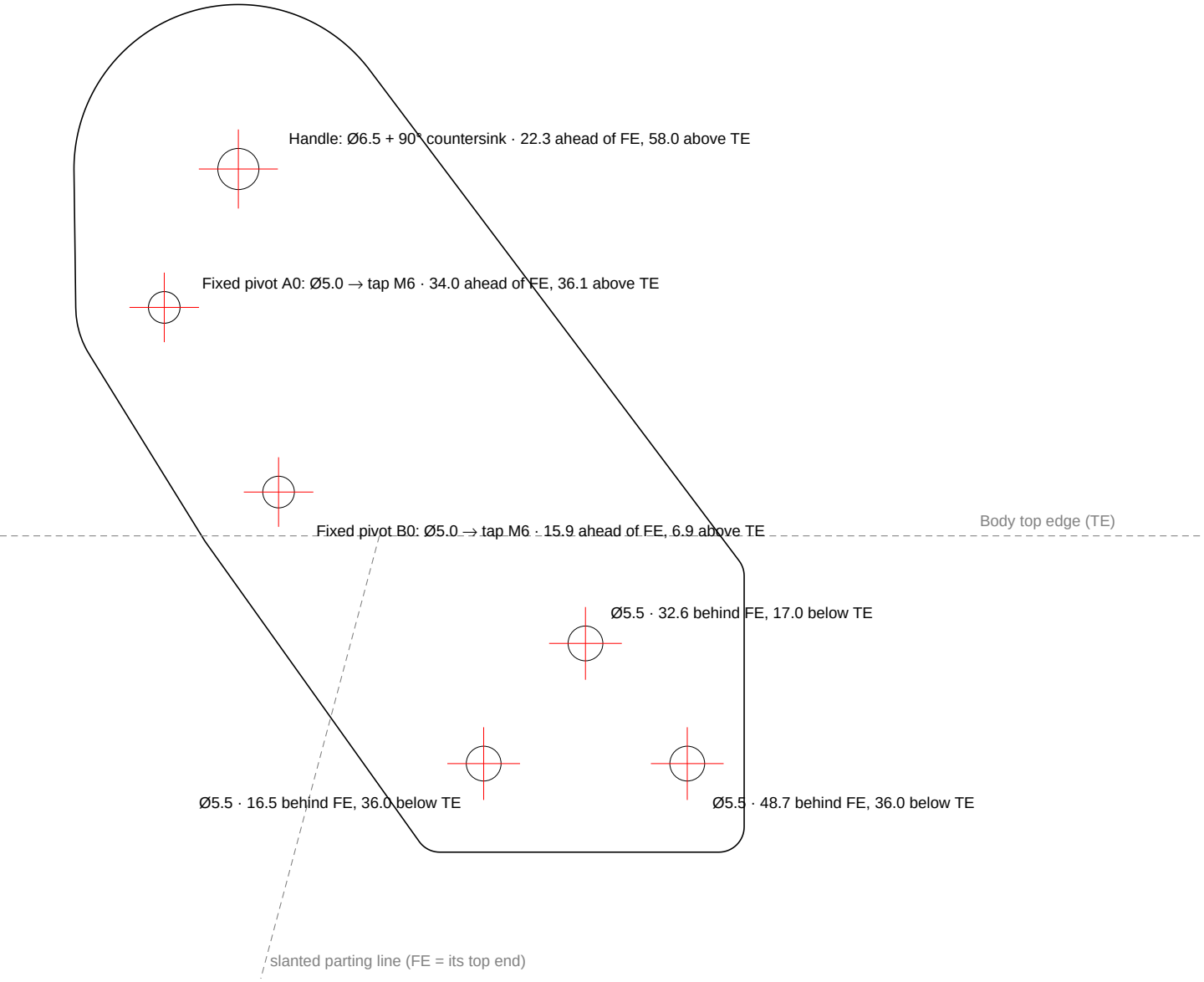


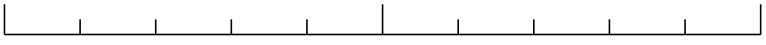
Check bar 100 mm – print at “Actual size / 100 %” and measure!

Note: the hole spacing is what matters (±0.3 mm). Clamp all four links in pairs and drill them together so left and right side are identical. The outline is not critical.

Handle plate (scale 1:1) – 2 pcs, 5 mm steel

Bolted to the outside of the body side panel; carries the handle and both fixed pivots (like the black ECE disc).
Reference: body top edge (TE) and body front edge (FE = parting line). Dimensions in mm. Right side: same plate.

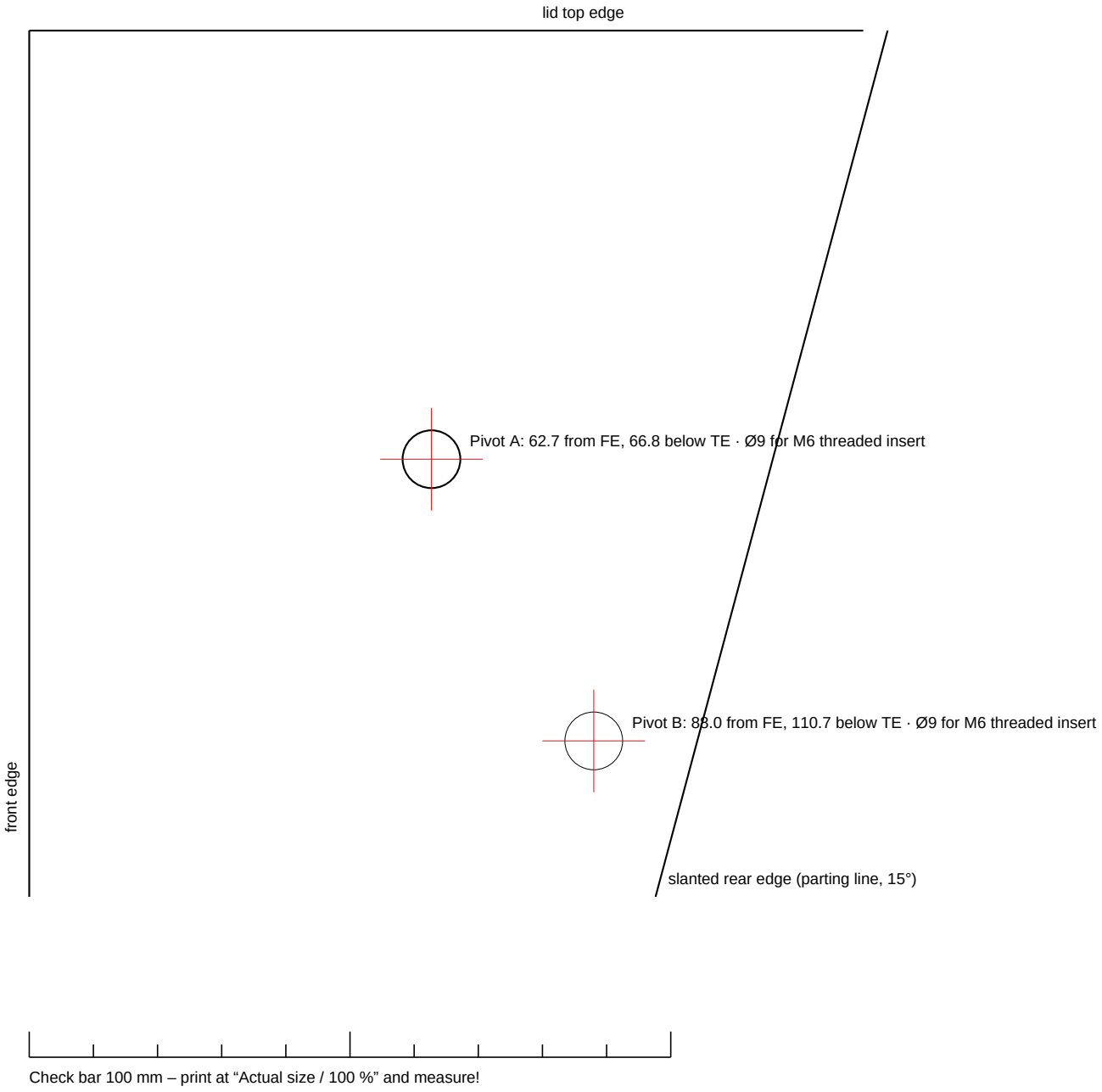




Check bar 100 mm – print at “Actual size / 100 %” and measure!

Drilling template lid side panel (1:1) – upper front corner

Place on the outside of the lid side panels, register against front edge and top edge, centre-punch the marks.
For the right side use the same dimensions from front/top edge (flip the template).



Glue a 20 mm reinforcement inside behind both pivots (from 215 mm height up to the top, following the slant); insert goes through both layers.

Cut list & hardware

12 mm birch plywood, all dimensions in mm (L × W). Butt joints glued + screwed/doweled; rebates optional.

Lid (front wedge, 485 wide) – edges at the parting line bevelled 15°		
Side panel (trapezoid: bottom 40.0, top 133.8 deep)	2	350 high
Front	1	461 × 350
Top (rear edge 15°)	1	461 × 118.6 / 121.8
Bottom (rear edge 15°)	1	461 × 28.0 / 31.2
Pivot reinforcement (20 mm, trapezoid)	2	height 215…338
Body (rear trapezoid, 486 wide)		
Side panel (trapezoid: bottom 227.5, top 133.7 deep)	2	350 high
Back	1	462 × 350
Bottom (front edge 15°)	1	462 × 215.5 / 212.3
Top (front edge 15°)	1	462 × 124.9 / 121.7
Handle plate reinforcement (20 mm)	2	height 290…338
Other		
Handle, beech dowel Ø30	1	486 long, M6 insert in each end

Steel		
Handle plate 5 mm (laser/waterjet)	2	see p. 2
Link A flat bar 22×5	2	131.6 (hole spacing 109.6)
Link B flat bar 22×5	2	143.5 (hole spacing 121.5)

Pivot stack per side (from the panel outwards)

All 8 pivots use shoulder screws ISO 7379, shoulder Ø8 h8/f9, thread M6, head Ø13 × 5.5. The link turns on the shoulder, the screw clamps on its shoulder – nothing binds.

Spacers: aluminium tube 14 × 2 (ID 10) cut to length and deburred. Link needs 0.3–0.8 mm play: if it binds, shorten the spacer 0.2 mm; too loose, add a thin M8 washer.

Layers (from plate outer face): link A (inner) 4.7…9.7 · inner screw heads up to 16 · link B (outer) 19.2…24.2 – link B passes over the head of A0.

A0 (plate): ISO 7379-8-M6-10 · spacer 4.7 · link A · threaded into the 5 mm plate, Loctite 243 · grind protruding thread flush inside (lid side panel slides past behind!)

B0 (plate): ISO 7379-8-M6-25 · spacer 19.2 · link B · threaded into the plate, Loctite 243 · grind flush inside

Lid A: ISO 7379-8-M6-16 · spacer 10.2 · link A · M6 threaded insert in side panel + reinforcement

Lid B: ISO 7379-8-M6-30 · spacer 24.7 · link B · M6 threaded insert in side panel + reinforcement

Handle: countersunk M6×25 flush in the plate → M6 insert in the dowel (both links pass over it). Plate to body: 3× M5 (2× T-nut, upper hole nut + washer).

Width: body 486, over the outer links approx. 544, over the screw heads approx. 557. For exactly 530 over the links make the body 472 wide.

Also: 2 draw latches at the lower sides (lid ↔ body).

Geometry (side view, origin = lower front corner, Y backwards, Z up):

Lid pivots A (62.7 | 283.2) B (88.0 | 239.3) · fixed pivots A0 (100.3 | 386.1) B0 (118.4 | 356.9)

Handle axis (112.0 | 408.0) · parting line 15°: bottom at 40.0, top at 133.8 · open, the lid lies flat on the body (open height 701 mm)

While opening, the lid swings approx. 22 cm forward and max. 10 mm behind the back.