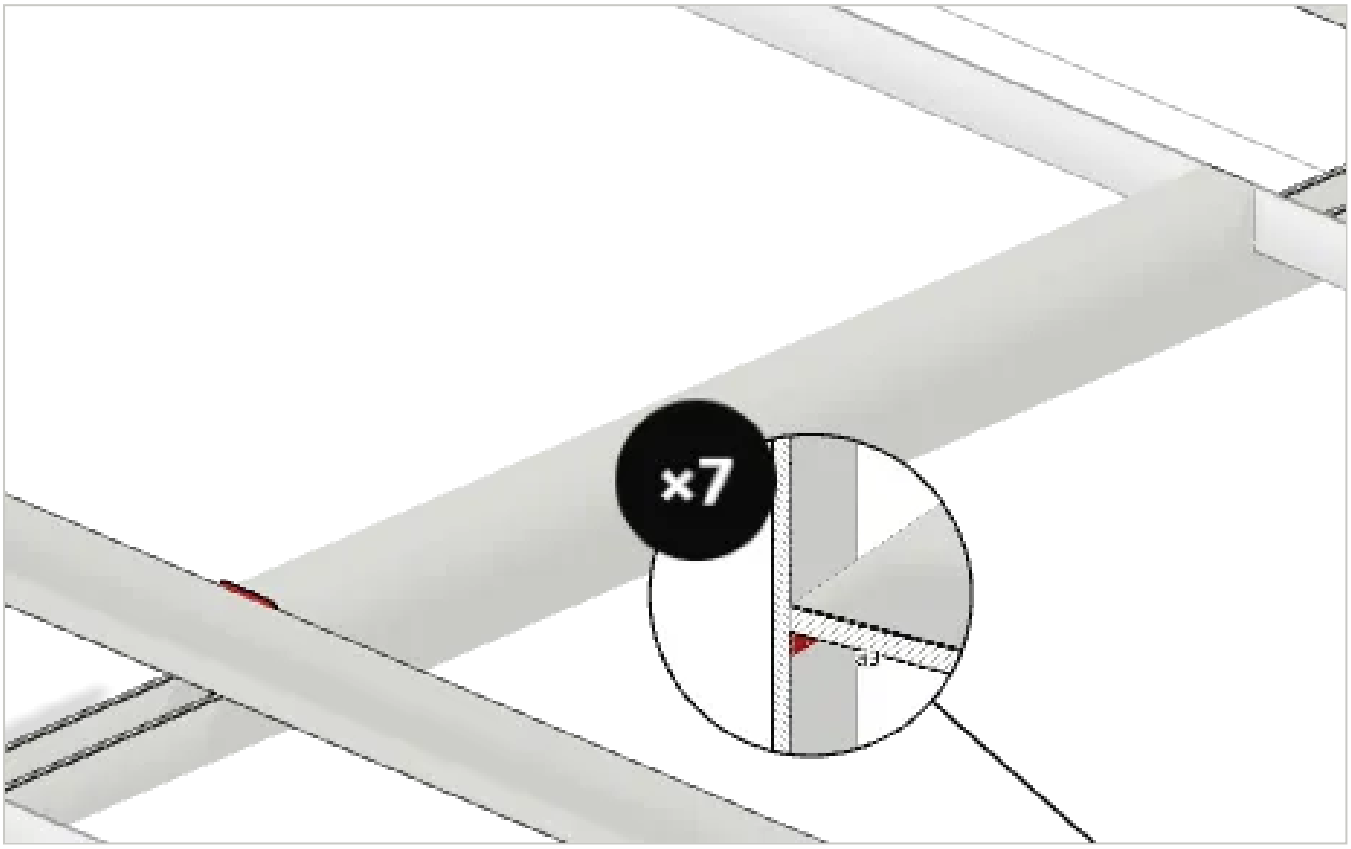
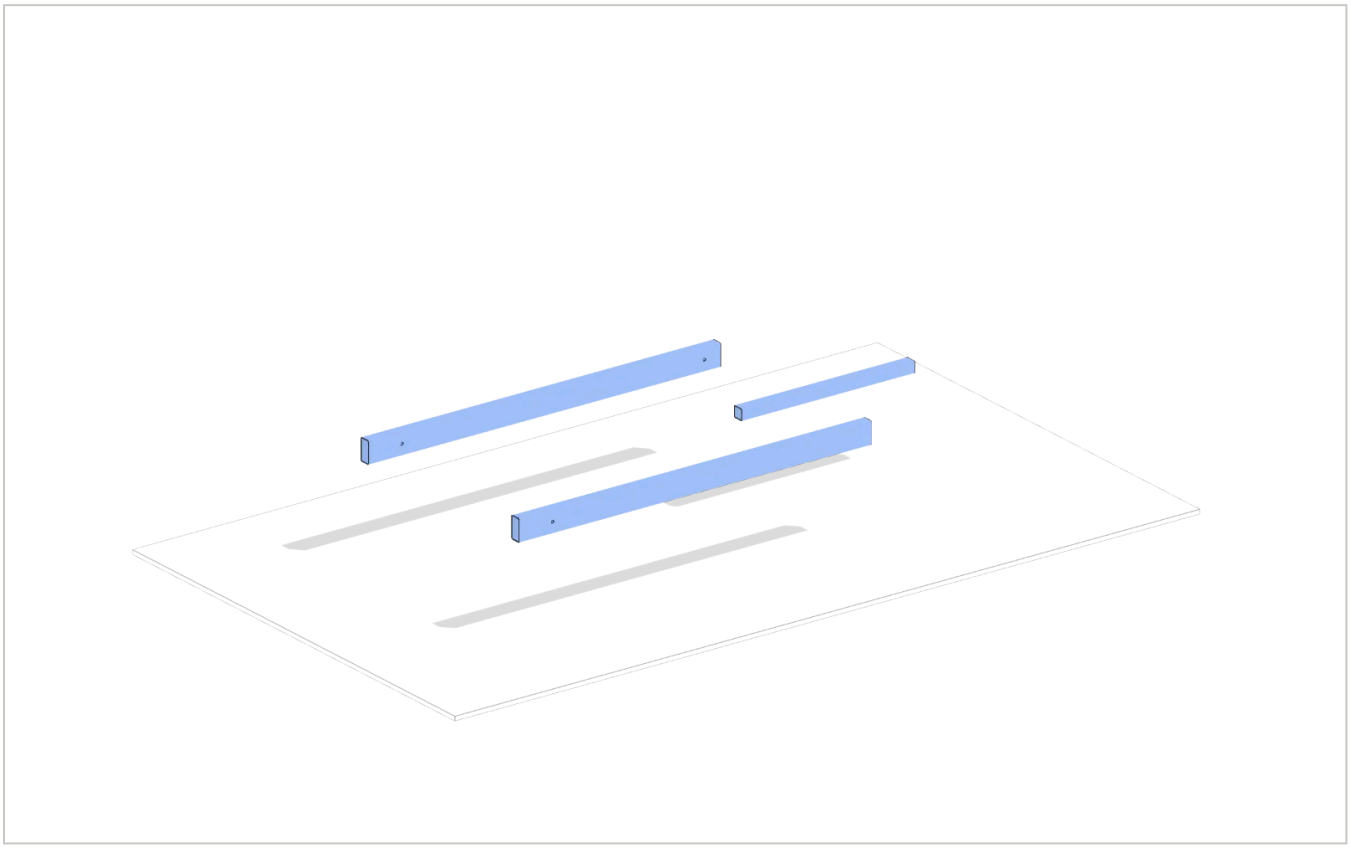
Work instruction

Trailer Assembly instructions



128 steps · w-95b71a38-208

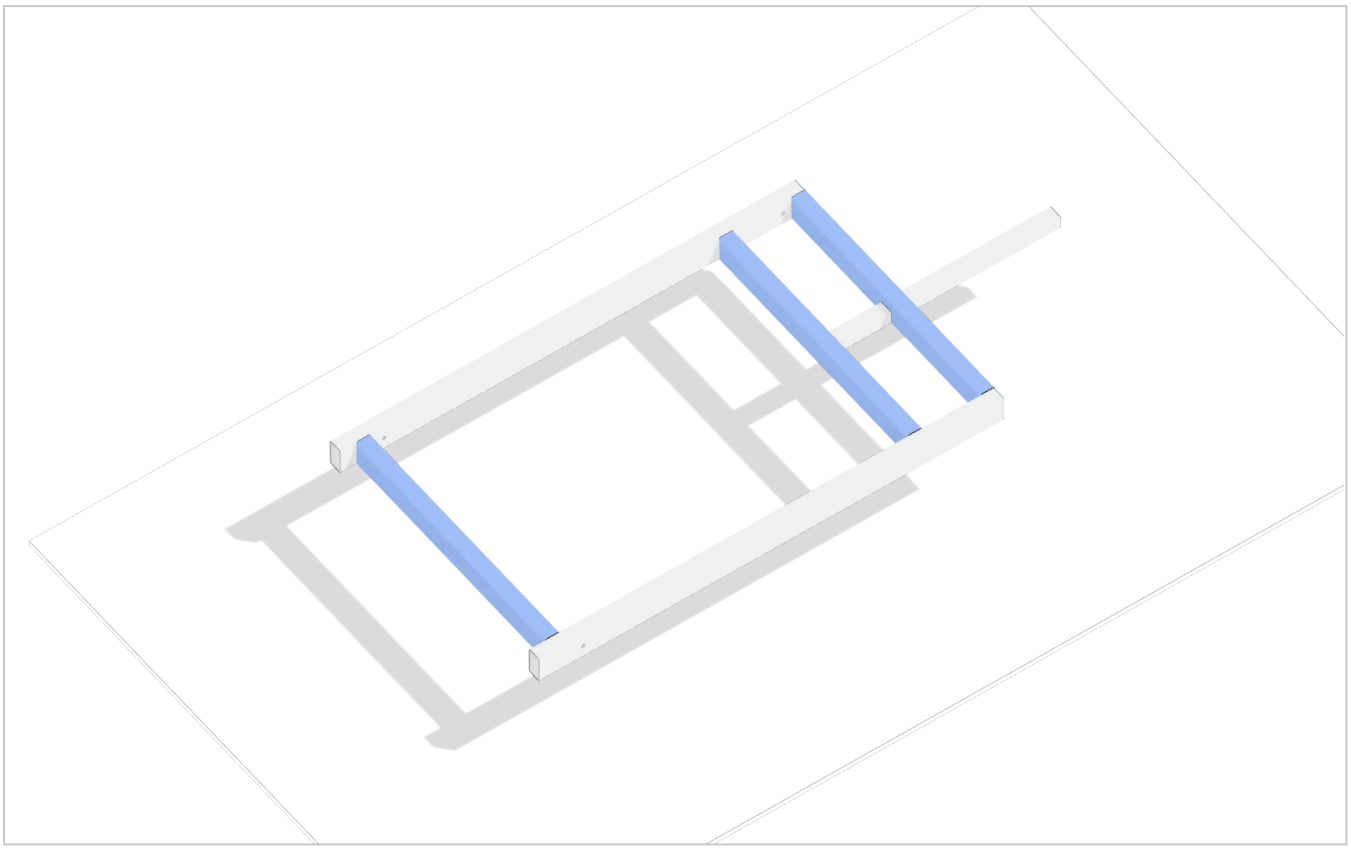
01 Lay the main rails and the tongue beam



Set the two main rails on the frame jig, 1,570 mm apart, and the tongue beam on the centre line running out to the front. Check the rails are parallel and level before anything is tacked.

Item	Part number	Description	Qty
184	PART_2	Main rail, RH	1
213	PART_3	Main rail, LH	1
170	PART_16	Tongue beam	1

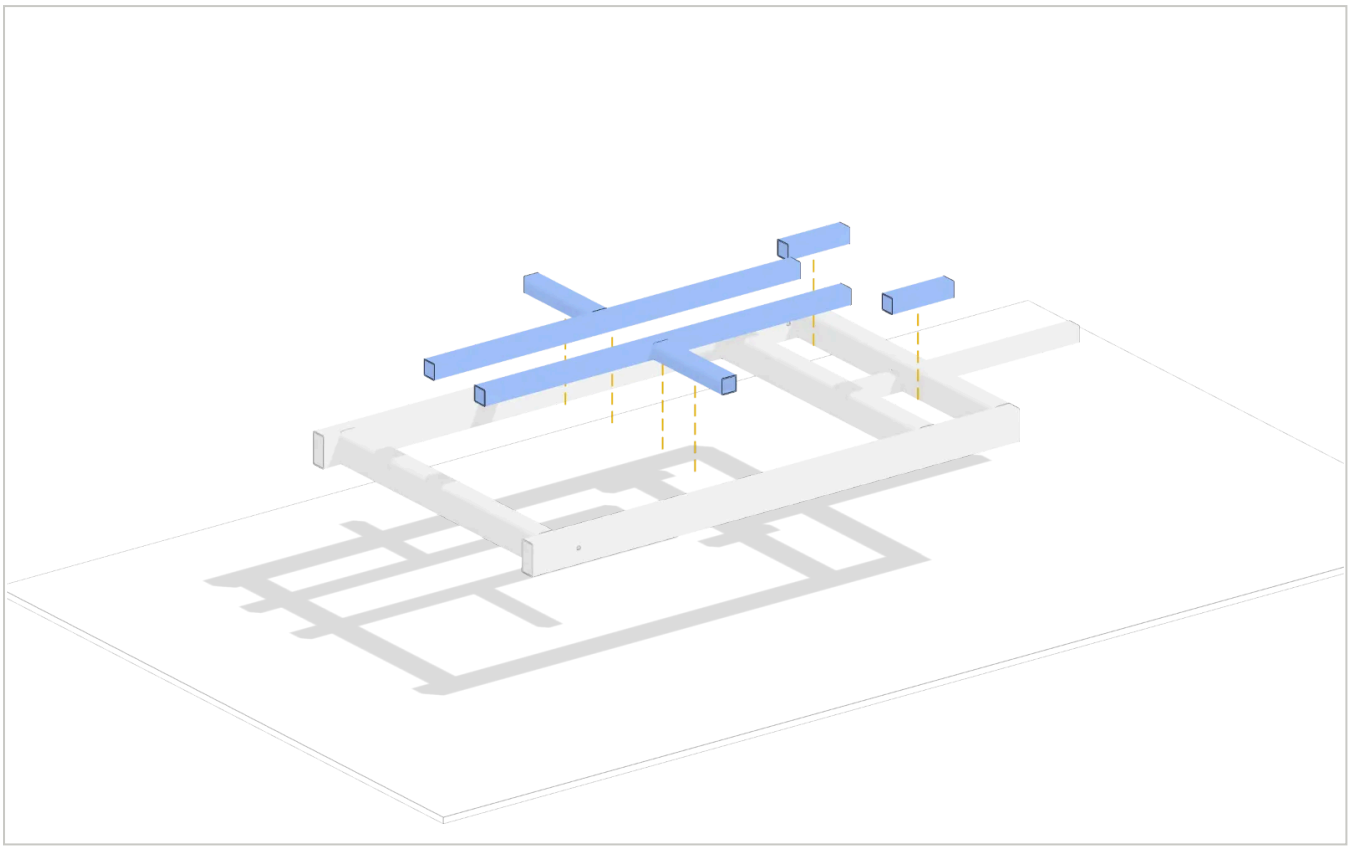
02 Fit and tack the cross members



Fit the front, middle and rear cross members between the rails, the front and middle ones sitting over the tongue beam. Square the frame across the diagonals, then tack all six joints; do not weld out yet.

Item	Part number	Description	Qty
143	PART_1	Front cross member	1
294	PART_8	Middle cross member	1
297	PART_9	Rear cross member	1

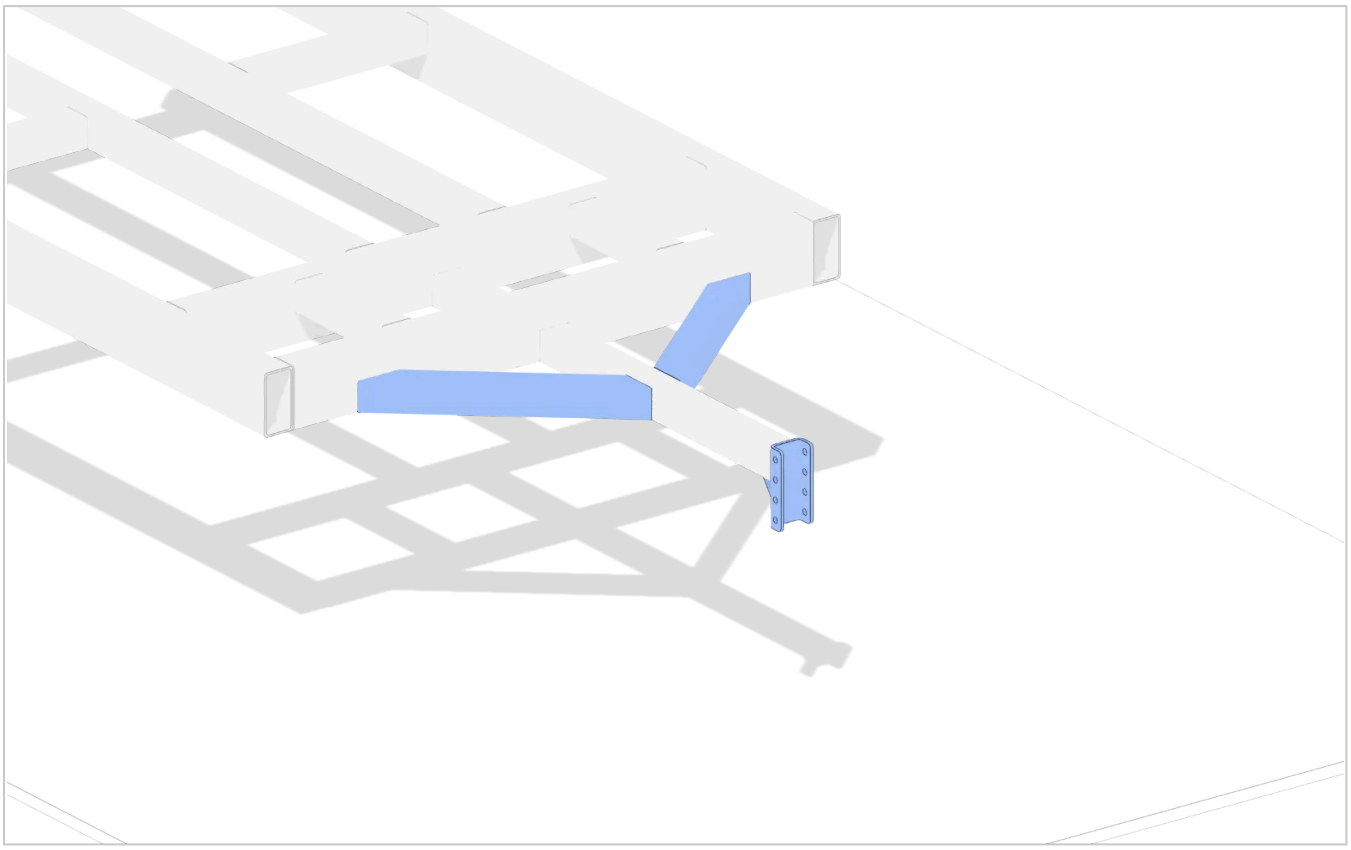
03 Fit and tack the inner stringers and braces



Fit the two inner stringers and the cross braces between them, and the two short tongue braces at the front. Tack each joint; do not weld out yet.

Item	Part number	Description	Qty
144	PART_10	Inner stringer, LH	1
147	PART_11	Inner stringer, RH	1
150	PART_12	Cross brace, LH	1
157	PART_13	Cross brace, RH	1
164	PART_14	Tongue brace, LH	1
167	PART_15	Tongue brace, RH	1

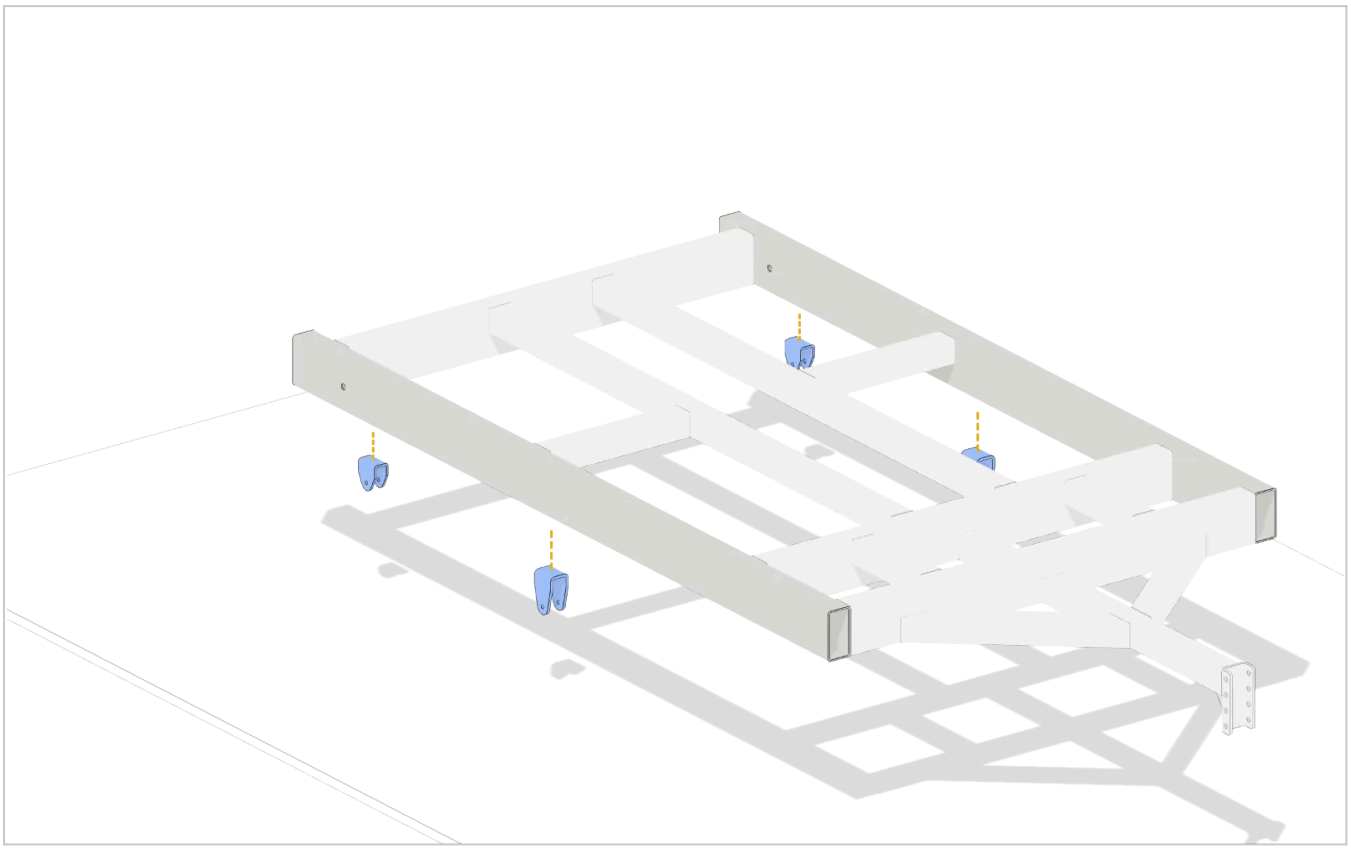
04 Fit and tack the tongue plates



Offer up the two tongue gusset plates from below, between the tongue beam and the rails under the front cross member. Fit the coupler plate and its tab to the front face of the tongue beam. Tack each plate; do not weld out yet.

Item	Part number	Description	Qty
173	PART_17	Tongue gusset, LH	1
176	PART_18	Tongue gusset, RH	1
179	PART_19	Coupler plate	1
185	PART_20	Coupler tab	1

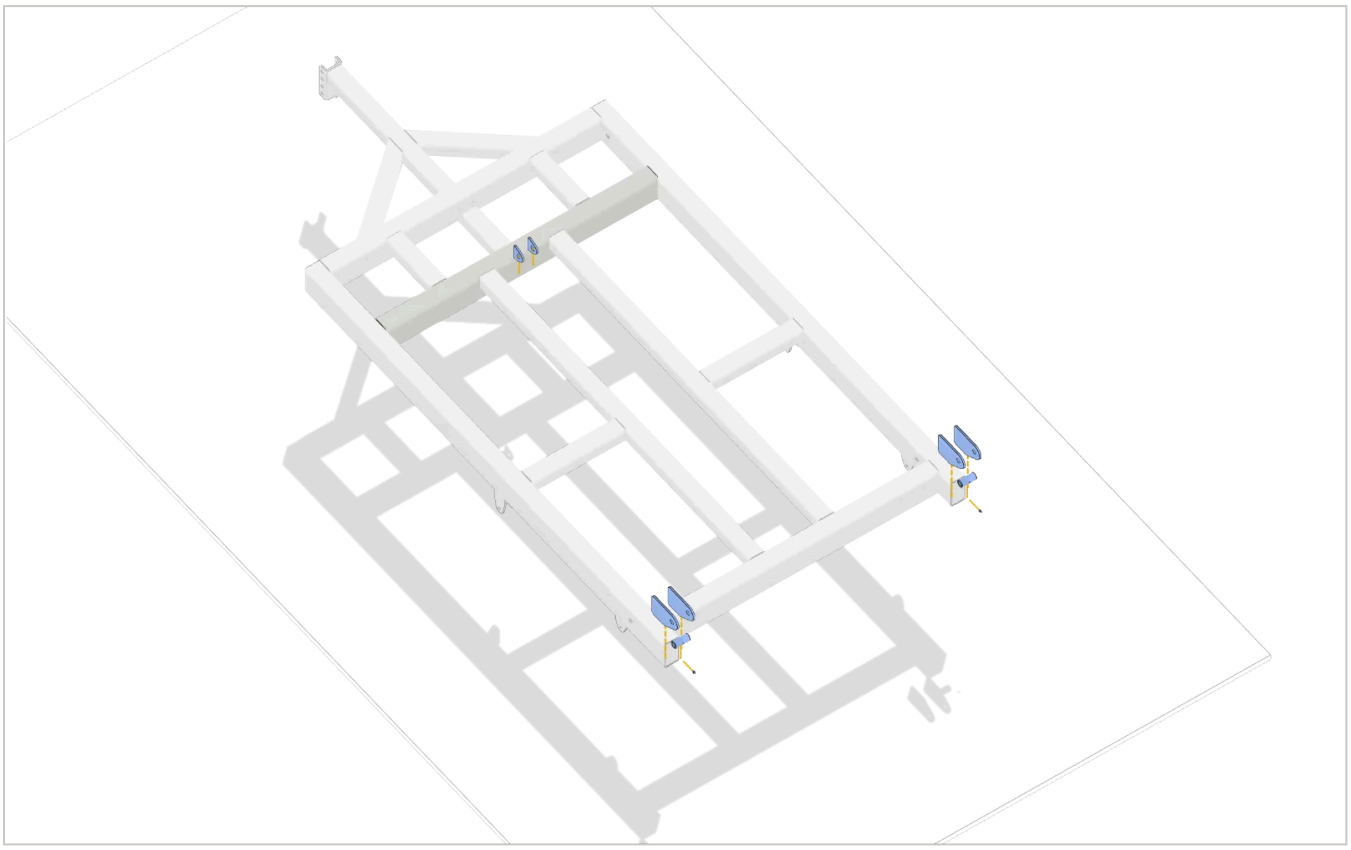
05 Fit and tack the spring hangers



Offer the two front hangers and the two rear hangers up to the underside of the rails, 1,570 mm apart on the centres, and tack them.

Item	Part number	Description	Qty
340	SPRING_HANGER_FRONT	Spring Hanger, Front_1	2
123	LEAF_SPRING_HANGER_REAR	Leaf Spring Hanger, Rear_1	2

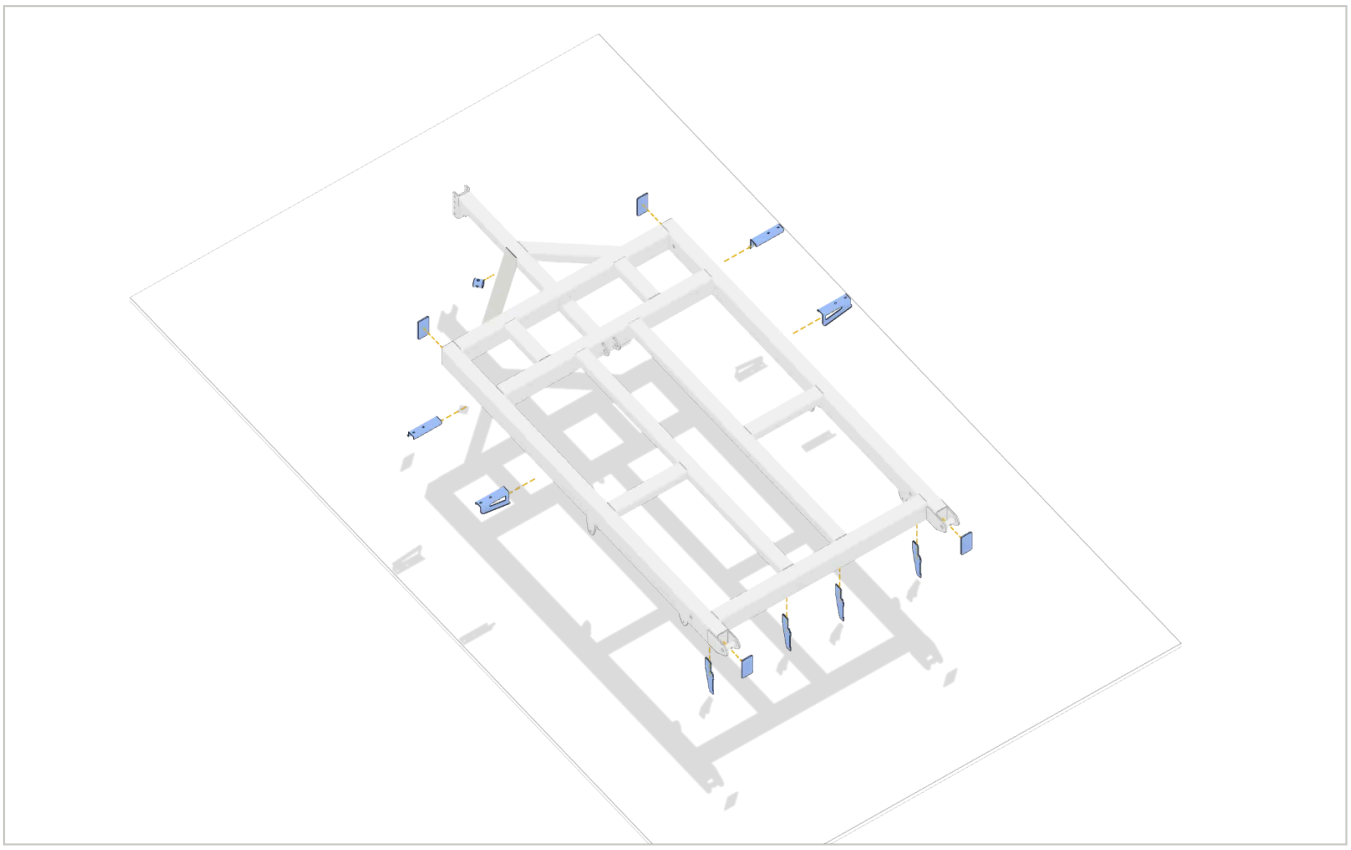
06 Fit and tack the bed pivot brackets and the cylinder ears



Set the four bed pivot brackets and the two pivot bosses on top of the rails at the rear, and the two cylinder mount ears on the middle cross member, and tack them. Screw a grease fitting into the back of each pivot boss.

Item	Part number	Description	Qty
222	PART_34	Bed pivot bracket, LH inner	1
225	PART_35	Bed pivot bracket, LH outer	1
229	PART_37	Bed pivot bracket, RH inner	1
231	PART_38	Bed pivot bracket, RH outer	1
227	PART_36	Bed pivot boss, LH	1
233	PART_39	Bed pivot boss, RH	1
238	PART_40	Cylinder mount ear, RH	1
240	PART_41	Cylinder mount ear, LH	1
70	GREASE_FITTING_2	Grease Fitting_3	2

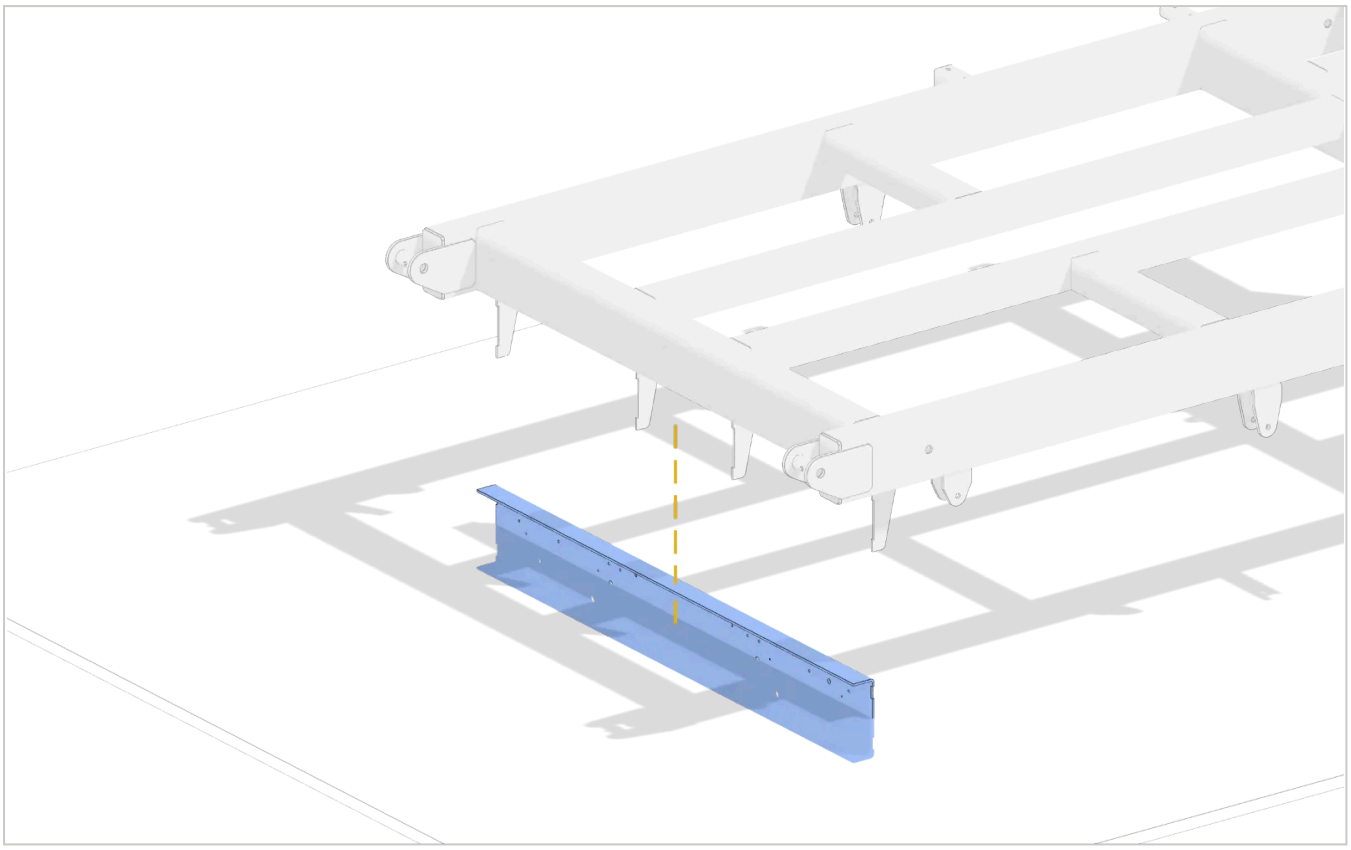
07 Fit and tack the gussets, end caps and step arms



Fit the four gusset plates under the frame corners, the four end caps into the rail ends, the four side step arms to the outside of the rails and the jack mounting shaft to the tongue, and tack them.

Item	Part number	Description	Qty
191	PART	Gusset plate	4
237	PART	Rail end cap	4
327	SIDE_STEP_ARM_LH	Side Step Arm, LH	1
328	SIDE_STEP_ARM_LH_2	Side Step Arm, LH_1	1
329	SIDE_STEP_ARM_RH	Side Step Arm, RH	1
330	SIDE_STEP_ARM_RH_2	Side Step Arm, RH_1	1
106	JACK_MOUNTING_SHAFT	Jack Mounting Shaft	1

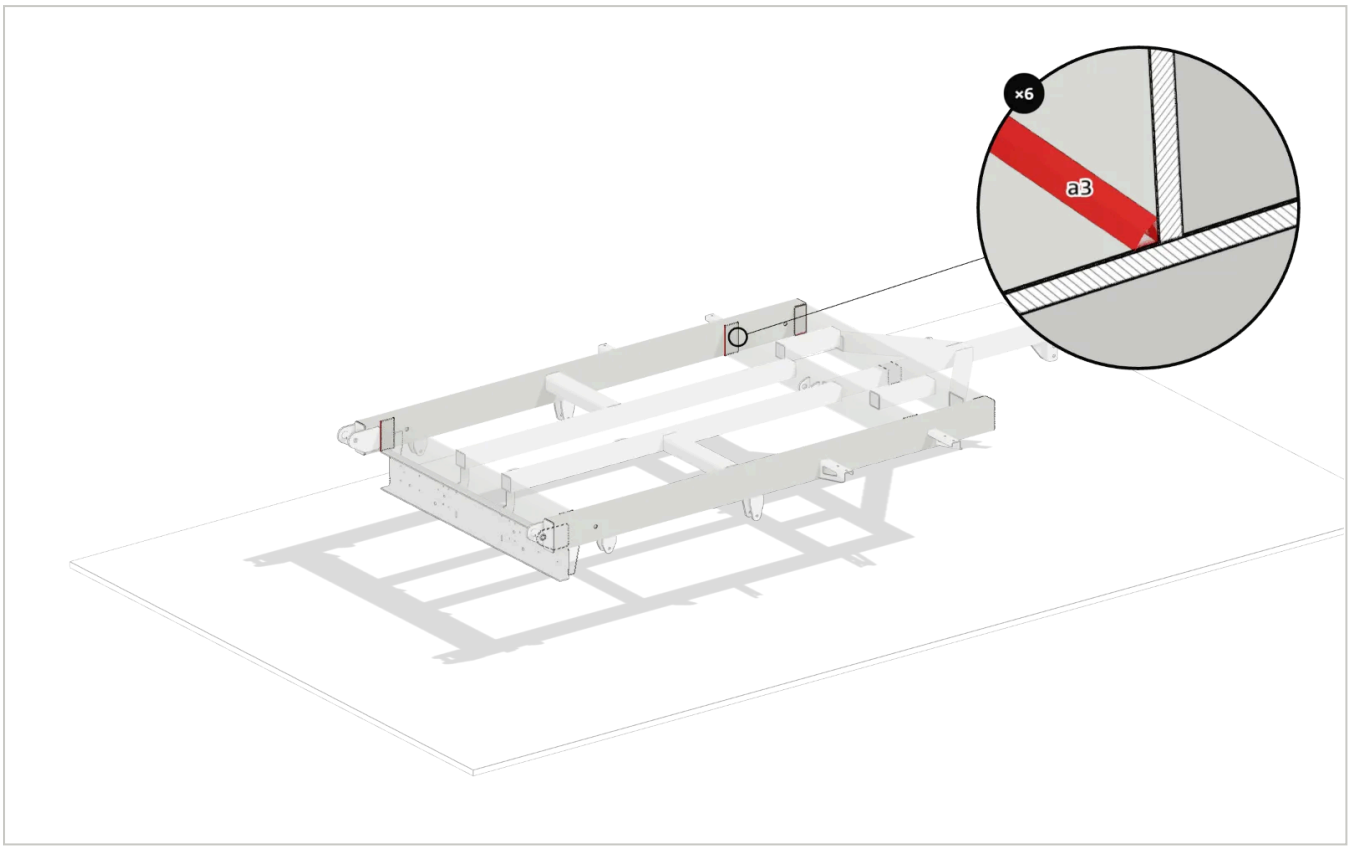
08 Fit the rear bumper bar



Offer the rear bumper bar up under the rear cross member, flush with the rail ends, and weld it along the top edge, with stitches underneath, to the drawing.

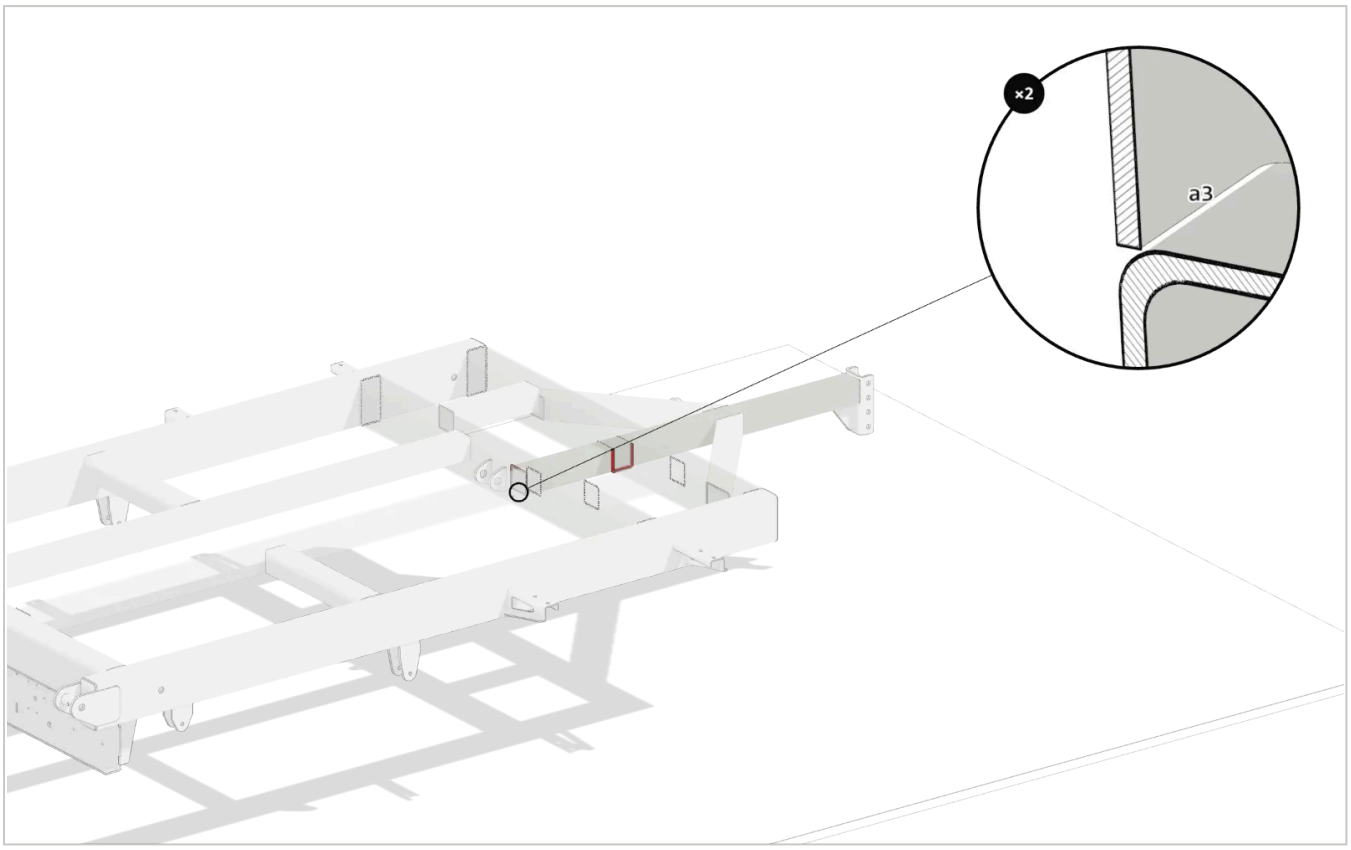
Item	Part number	Description	Qty
188	PART_21	Rear bumper bar	1

09 Weld out the cross members, joint 1 of 2 (×6)



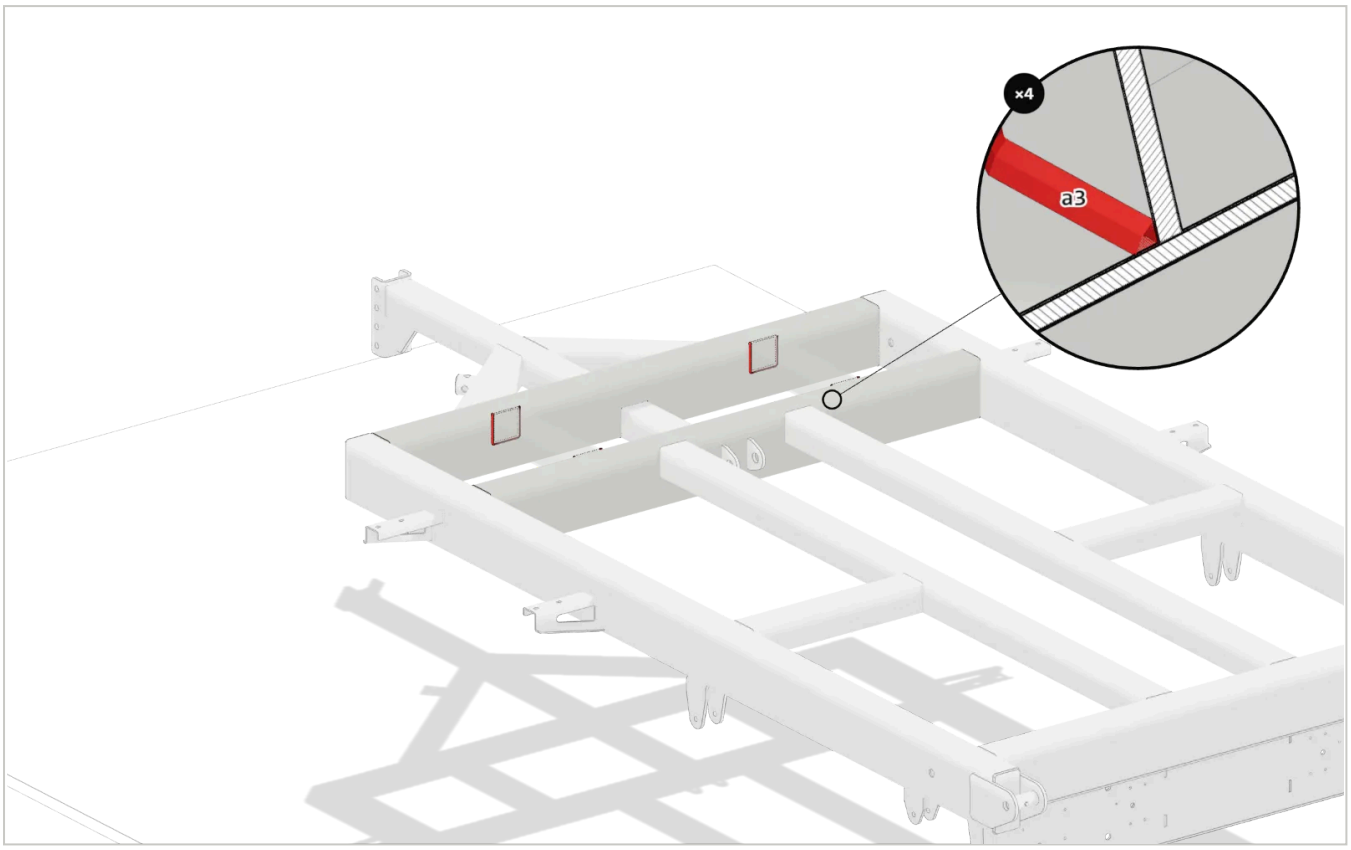
Check the weldment square across the diagonals before the first run, then weld out balanced, opposite sides in turn; backstep long seams. MAG (135), fillet a3, continuous, 1 run. Size proposed at the EN 1993-1-8 minimum; confirm with engineering. a3 is close to the 4 mm wall: keep the heat down and watch for burn-through. Weld all 6 joints of this type the same way.

10 Weld out the cross members, joint 2 of 2 (×2)



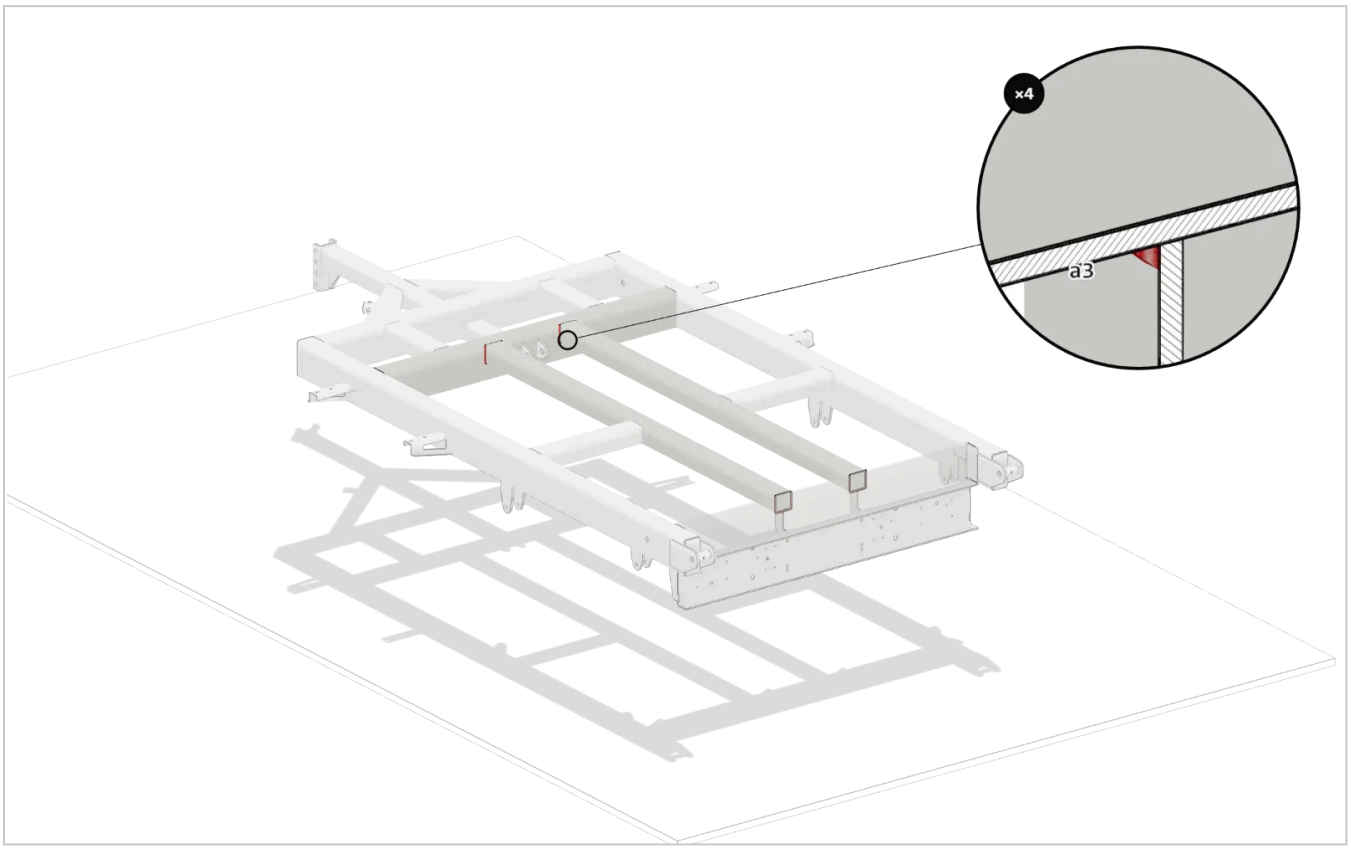
MAG (135), fillet a3, continuous, 1 run. Size proposed at the EN 1993-1-8 minimum; confirm with engineering. a3 is close to the 4 mm wall: keep the heat down and watch for burn-through. Weld all 2 joints of this type the same way.

11 Weld out the inner stringers and braces, joint 1 of 3 (×4)



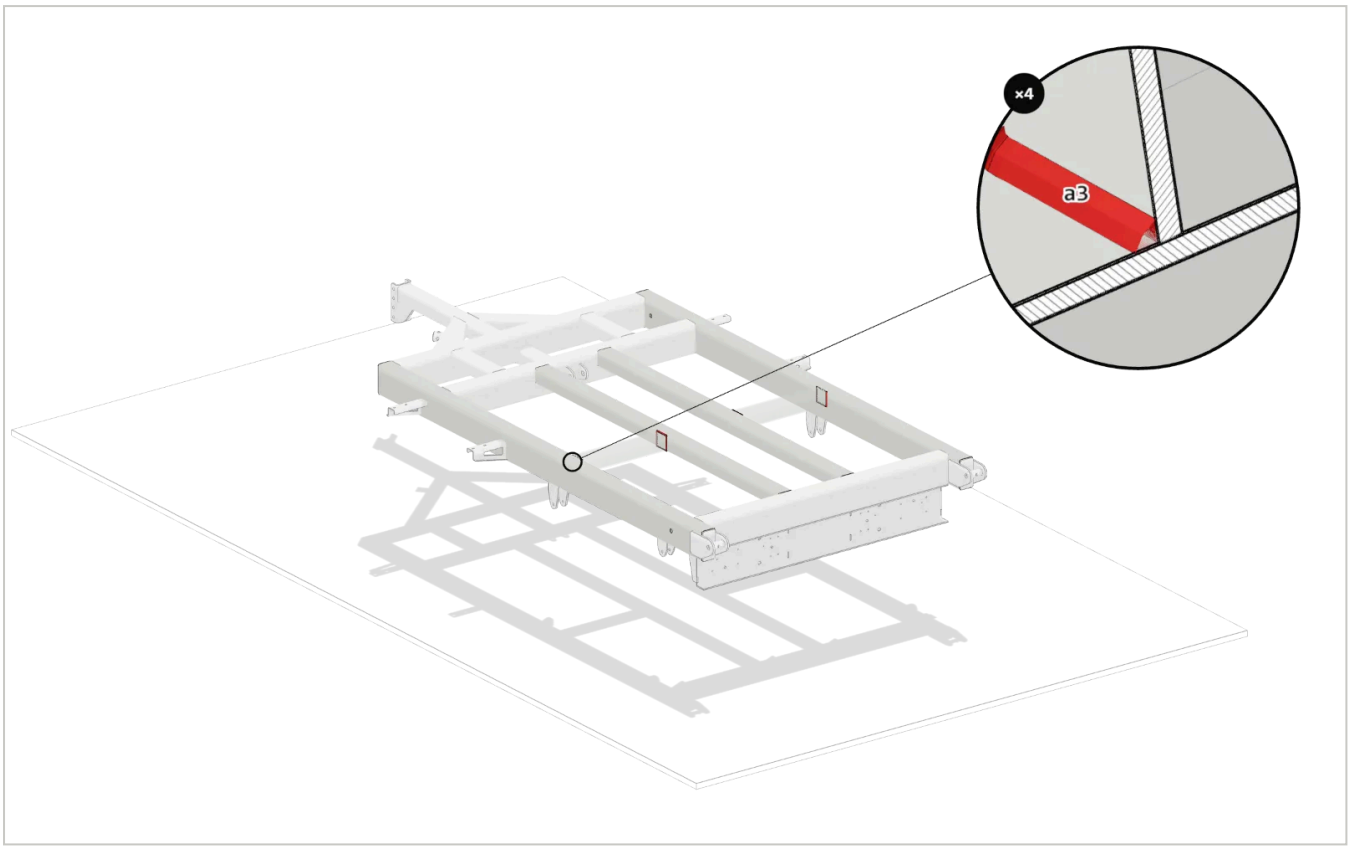
MAG (135), fillet a3, continuous, 1 run. Size proposed at the EN 1993-1-8 minimum; confirm with engineering. a3 is close to the 4 mm wall: keep the heat down and watch for burn-through. Weld all 4 joints of this type the same way.

12 Weld out the inner stringers and braces, joint 2 of 3 (×4)



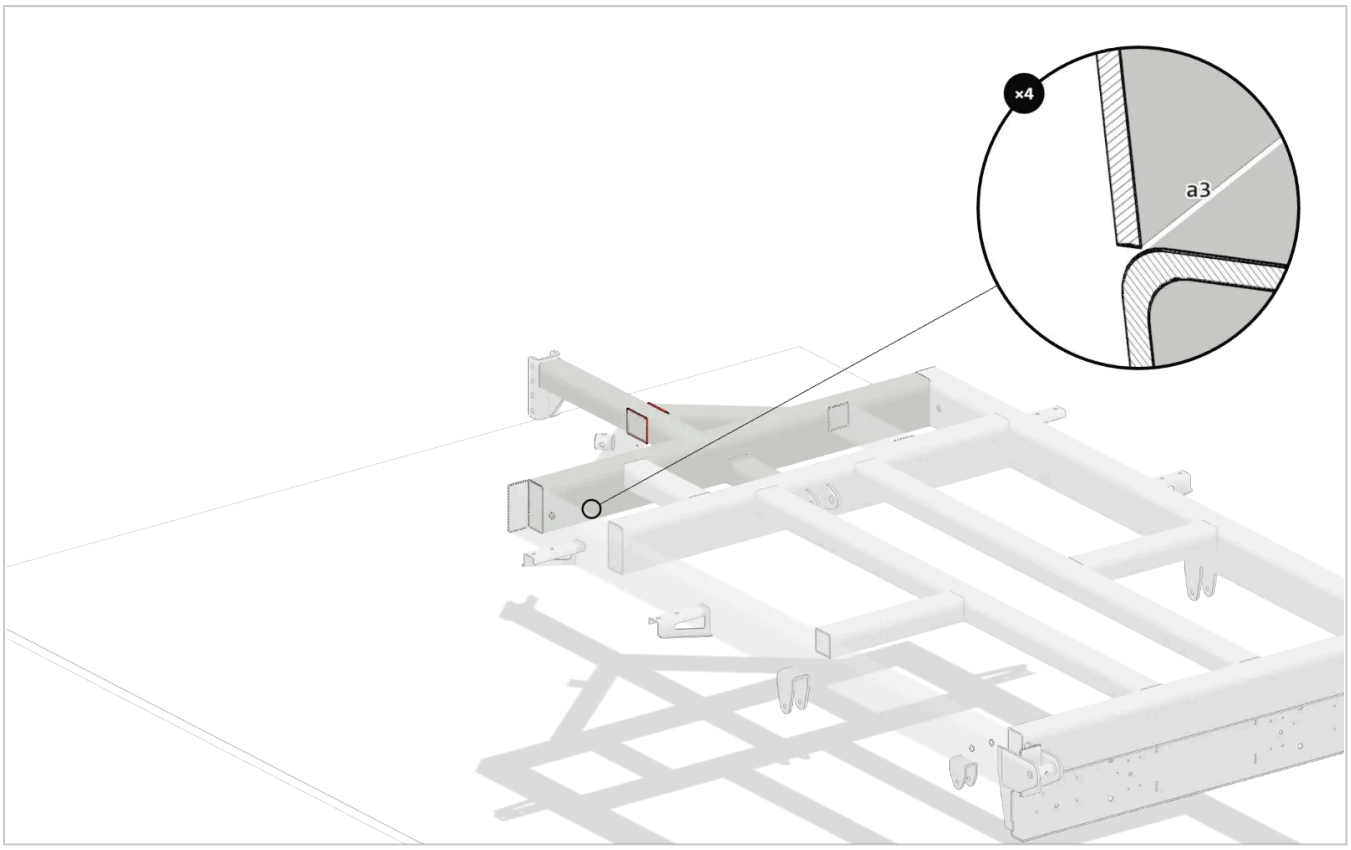
MAG (135), fillet a3, continuous, 1 run. Size proposed at the EN 1993-1-8 minimum; confirm with engineering. a3 is close to the 4 mm wall: keep the heat down and watch for burn-through. Weld all 4 joints of this type the same way.

13 Weld out the inner stringers and braces, joint 3 of 3 (×4)



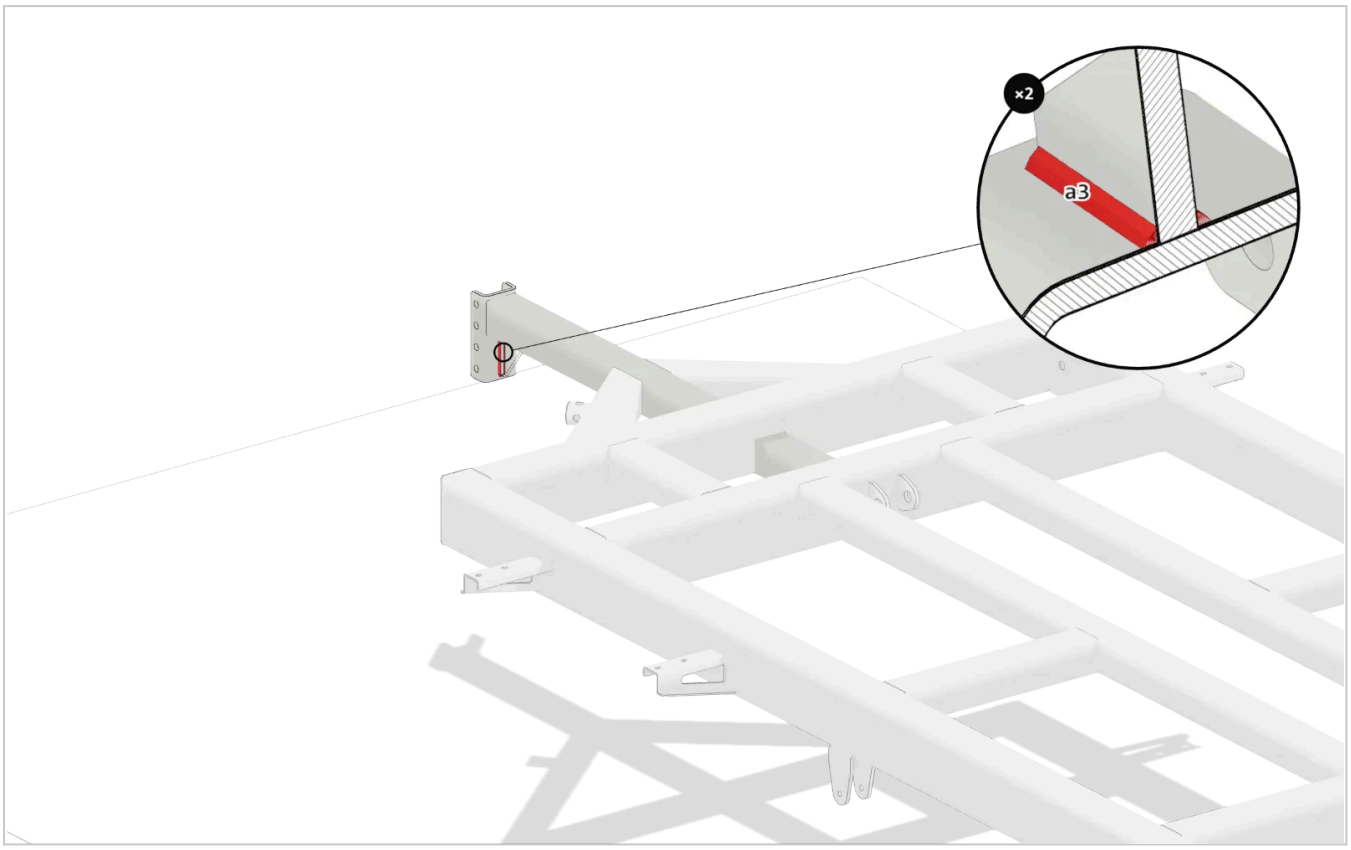
MAG (135), fillet a3, continuous, 1 run. Size proposed at the EN 1993-1-8 minimum; confirm with engineering. a3 is close to the 4 mm wall: keep the heat down and watch for burn-through. Weld all 4 joints of this type the same way.

14 Weld out the tongue plates, joint 1 of 2 (×4)



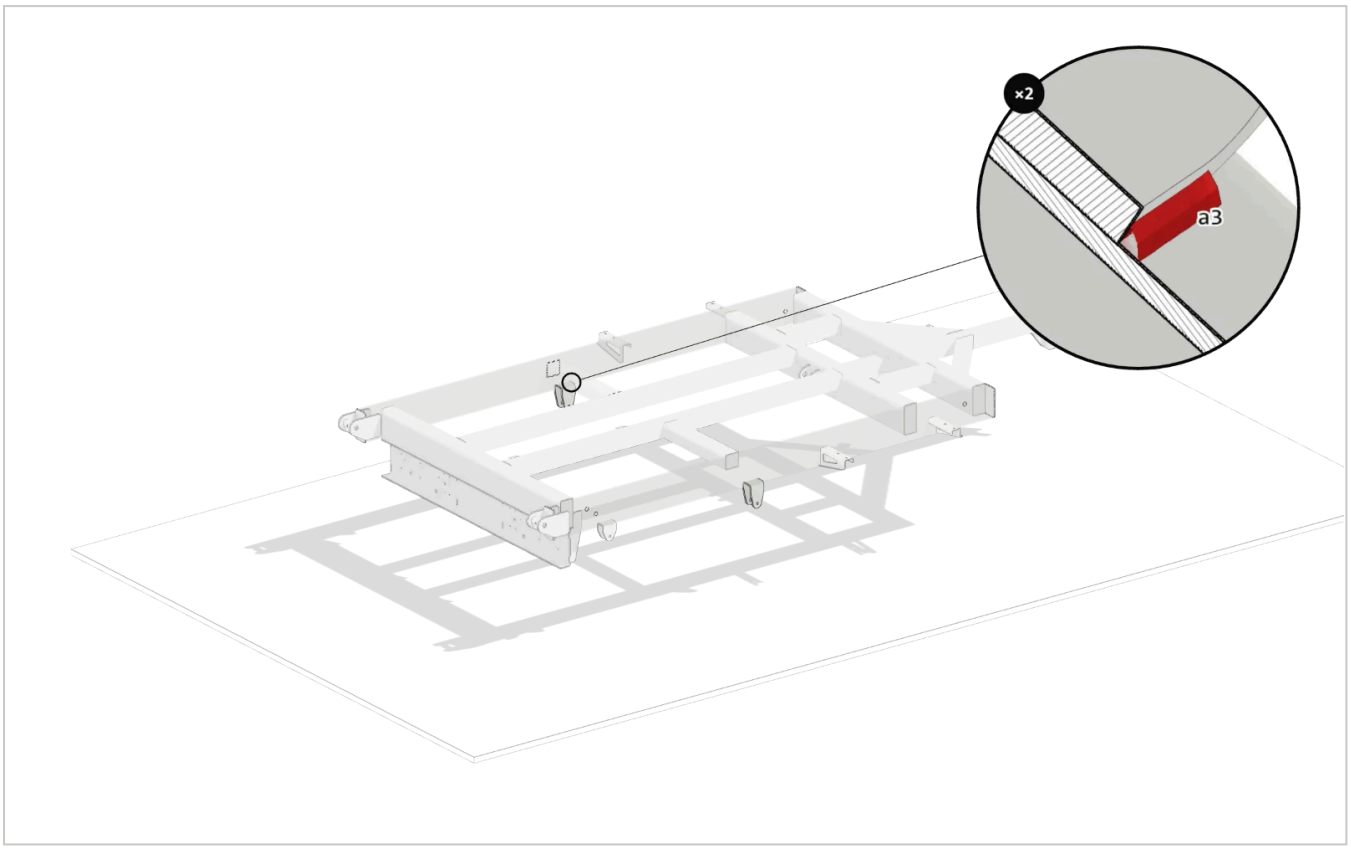
MAG (135), fillet a3, continuous, 1 run. Size proposed at the EN 1993-1-8 minimum; confirm with engineering. a3 is close to the 4 mm wall: keep the heat down and watch for burn-through. Weld all 4 joints of this type the same way.

15 Weld out the tongue plates, joint 2 of 2 (×2)



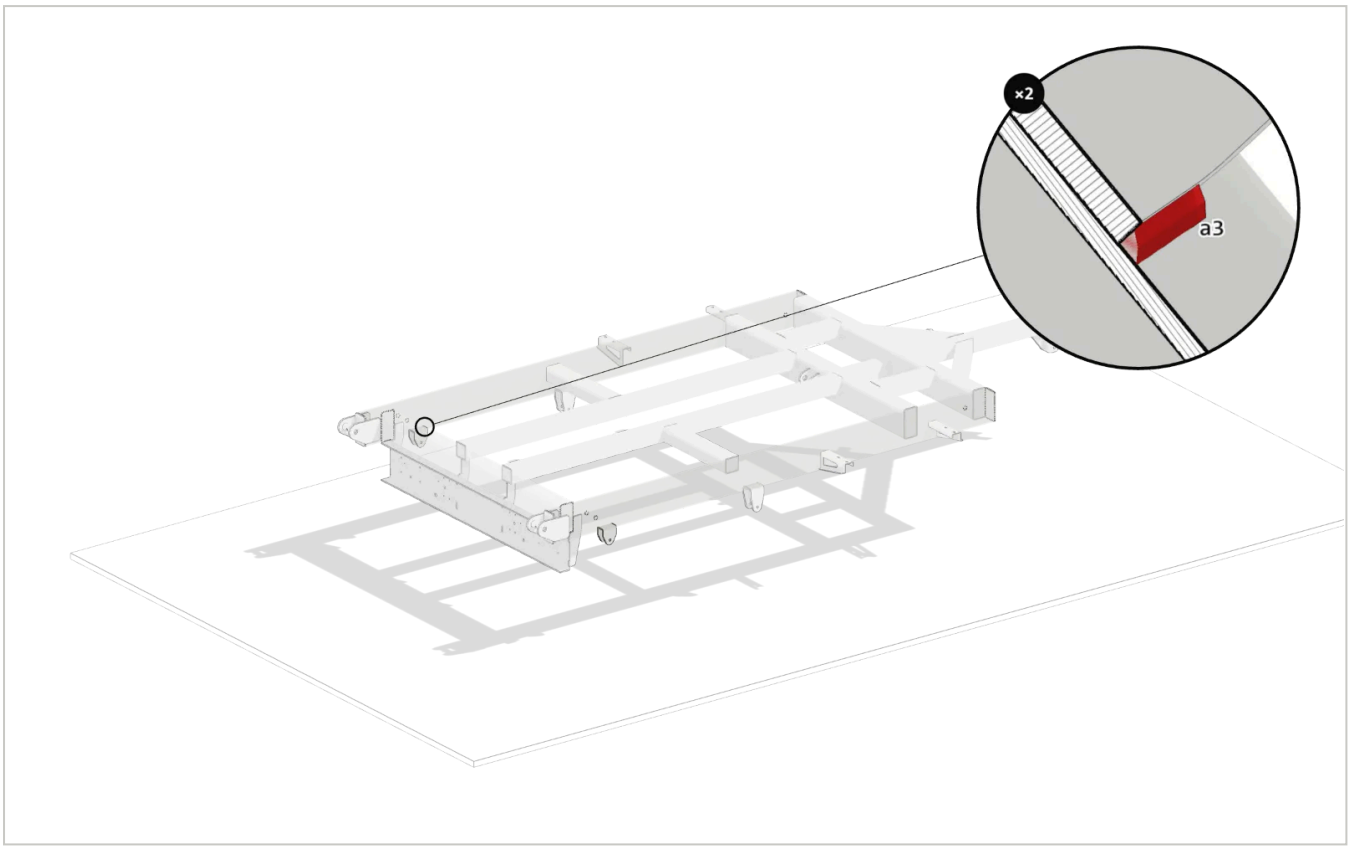
MAG (135), fillet a3, continuous, 1 run. Size proposed at the EN 1993-1-8 minimum; confirm with engineering. a3 is close to the 4 mm wall: keep the heat down and watch for burn-through. Weld all 2 joints of this type the same way.

16 Weld out the spring hangers, joint 1 of 2 (×2)



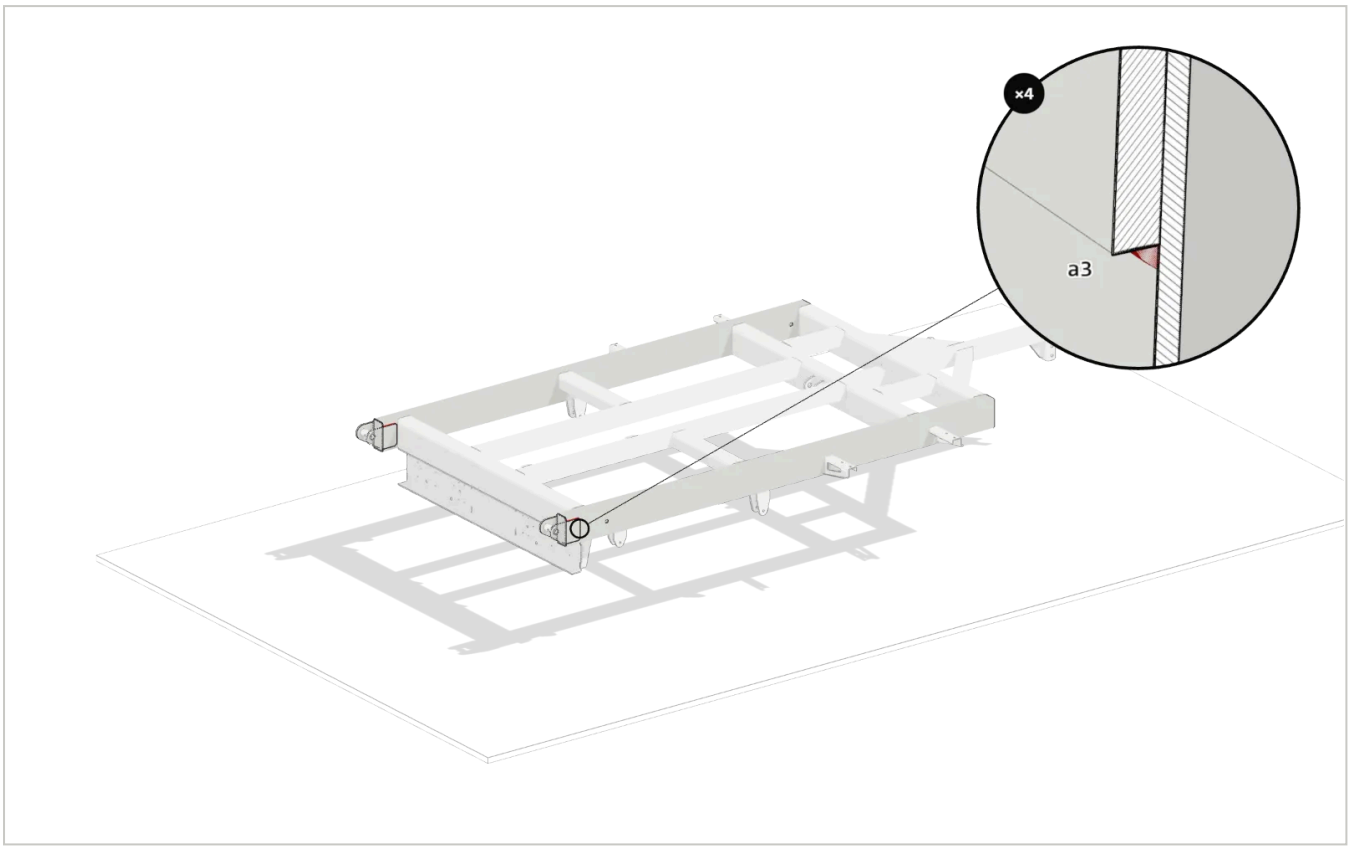
MAG (135), fillet a3, continuous, 1 run. Size proposed at the EN 1993-1-8 minimum; confirm with engineering. a3 is close to the 4 mm wall: keep the heat down and watch for burn-through. Weld all 2 joints of this type the same way.

17 Weld out the spring hangers, joint 2 of 2 (×2)



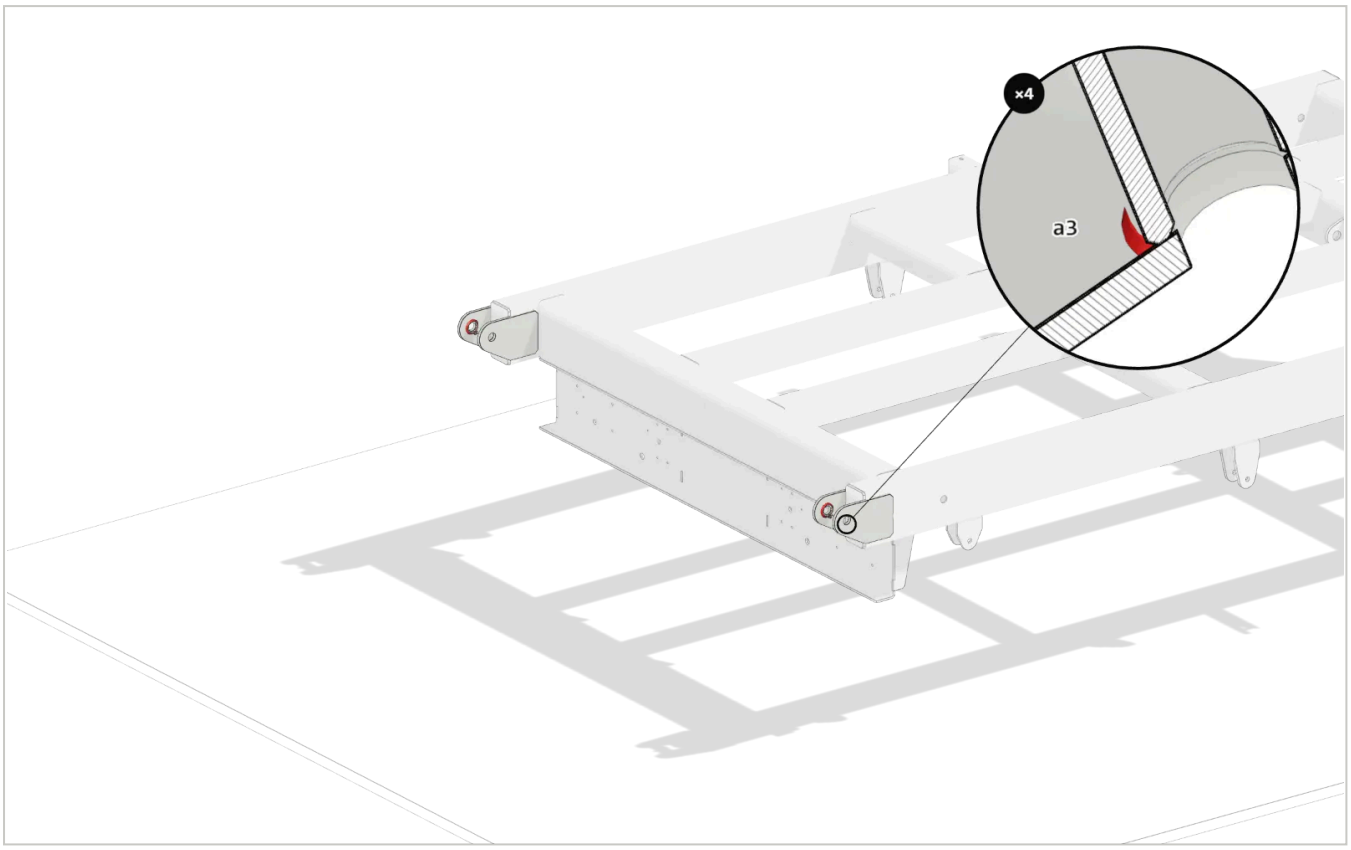
MAG (135), fillet a3, continuous, 1 run. Size proposed at the EN 1993-1-8 minimum; confirm with engineering. a3 is close to the 4 mm wall: keep the heat down and watch for burn-through. Weld all 2 joints of this type the same way.

18 Weld out the bed pivot brackets and the cylinder ears, joint 1 of 4 (×4)



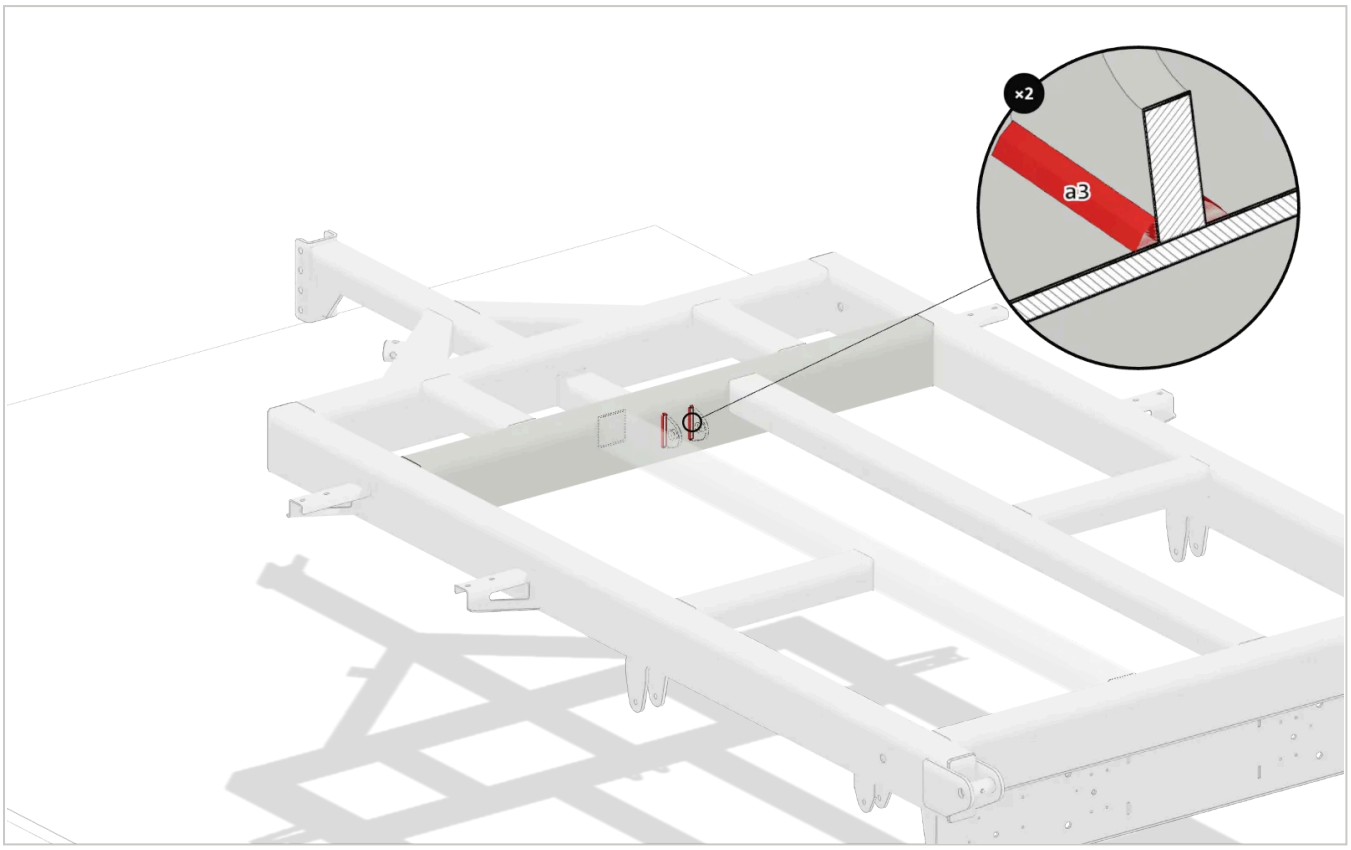
MAG (135), fillet a3, continuous, 1 run. Size proposed at the EN 1993-1-8 minimum; confirm with engineering. a3 is close to the 4 mm wall: keep the heat down and watch for burn-through. Weld all 4 joints of this type the same way.

19 Weld out the bed pivot brackets and the cylinder ears, joint 2 of 4 (×4)



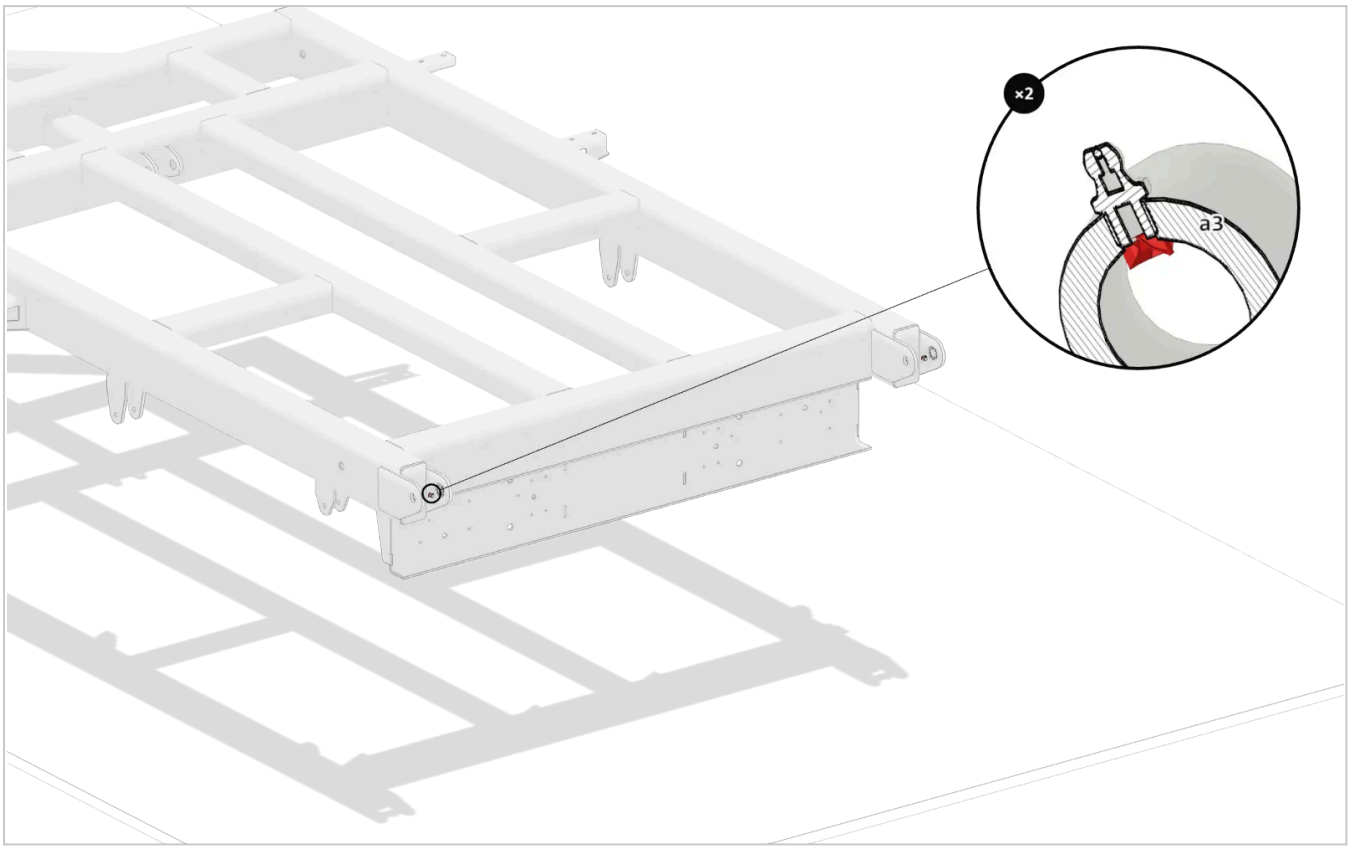
MAG (135), fillet a3, continuous, 1 run. Size proposed at the EN 1993-1-8 minimum; confirm with engineering. Weld all 4 joints of this type the same way.

20 Weld out the bed pivot brackets and the cylinder ears, joint 3 of 4 (×2)



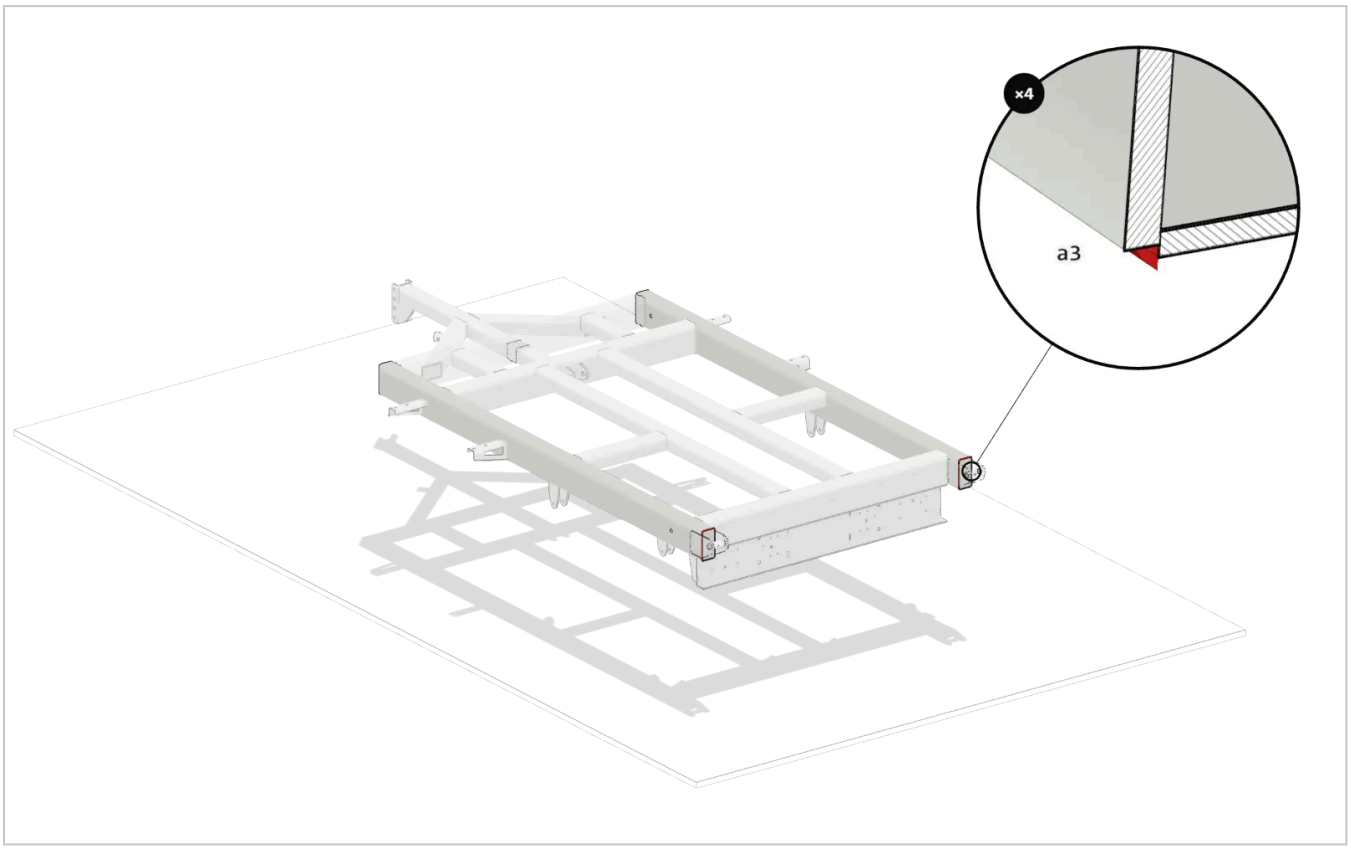
MAG (135), fillet a3, continuous, 1 run. Size proposed at the EN 1993-1-8 minimum; confirm with engineering. a3 is close to the 4 mm wall: keep the heat down and watch for burn-through. Weld all 2 joints of this type the same way.

21 Weld out the bed pivot brackets and the cylinder ears, joint 4 of 4 (×2)



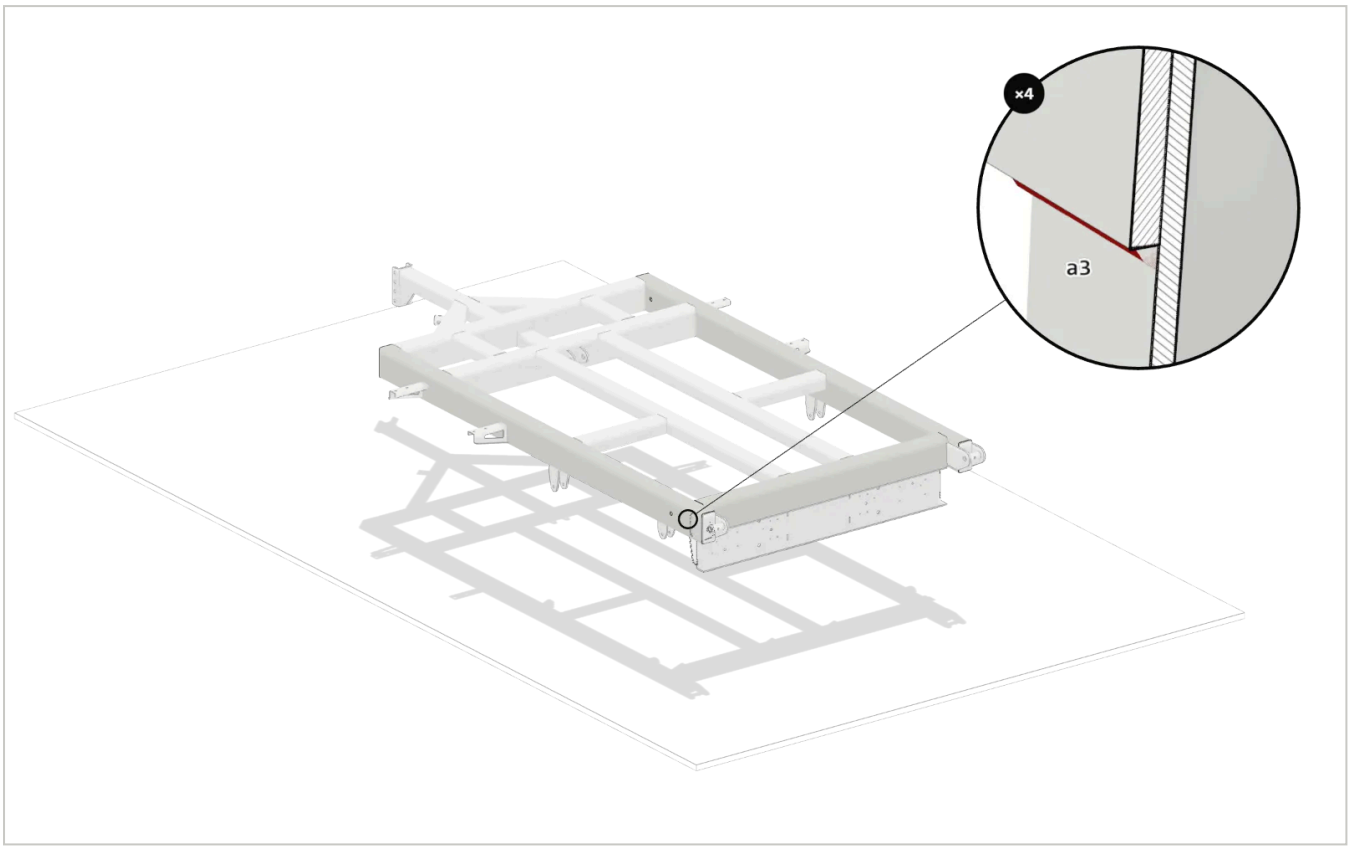
MAG (135), fillet a3, continuous, 1 run. Size proposed at the EN 1993-1-8 minimum; confirm with engineering. Parts here are thinner than the a3 minimum (1.95 mm): the engineer specifies those welds. 2 seams are under 30 mm: not load carrying under EN 1993-1-8. Weld all 2 joints of this type the same way.

22 Weld out the gussets, end caps and step arms, joint 1 of 4 (×4)



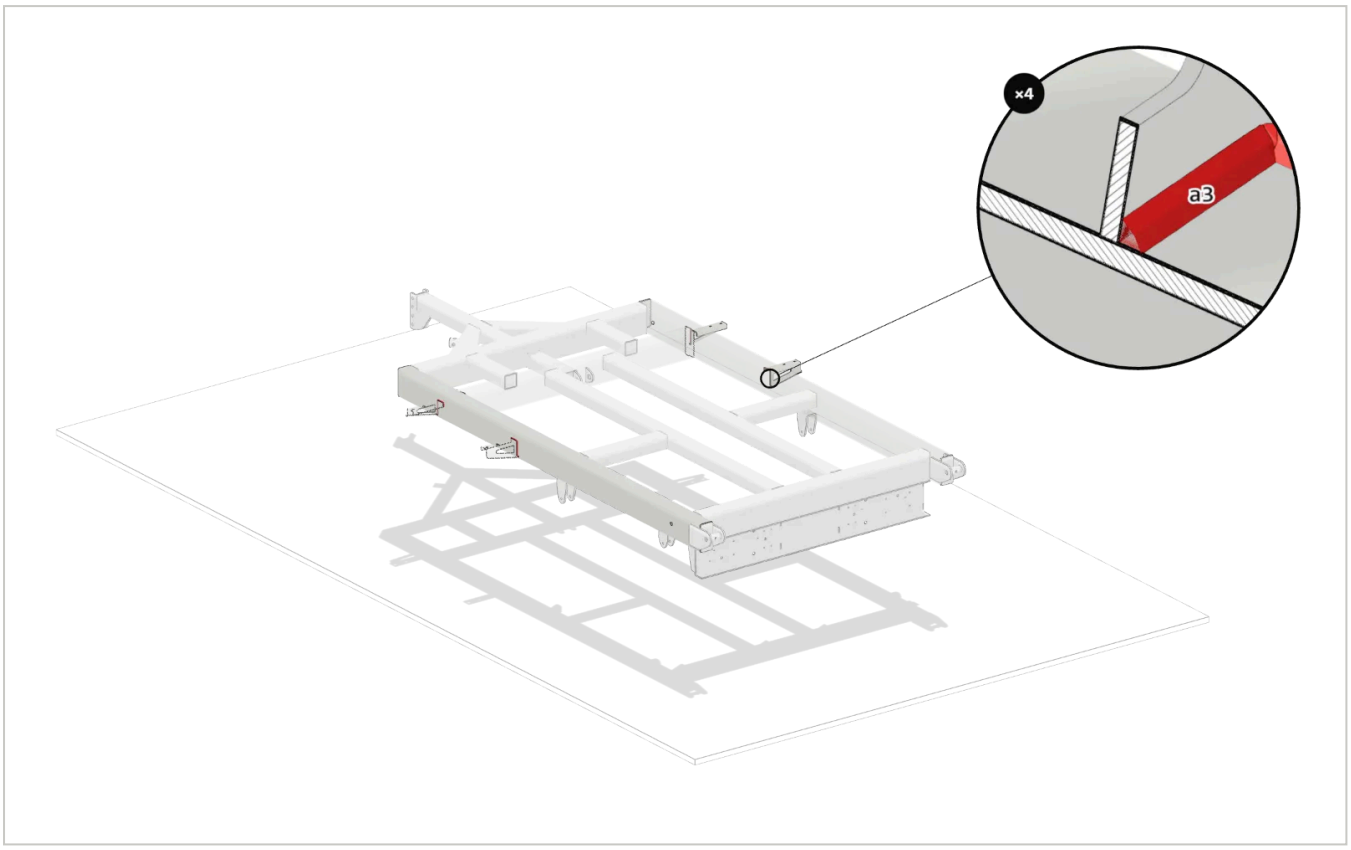
MAG (135), fillet a3, continuous, 1 run. Size proposed at the EN 1993-1-8 minimum; confirm with engineering. a3 is close to the 4 mm wall: keep the heat down and watch for burn-through. Weld all 4 joints of this type the same way.

23 Weld out the gussets, end caps and step arms, joint 2 of 4 (×4)



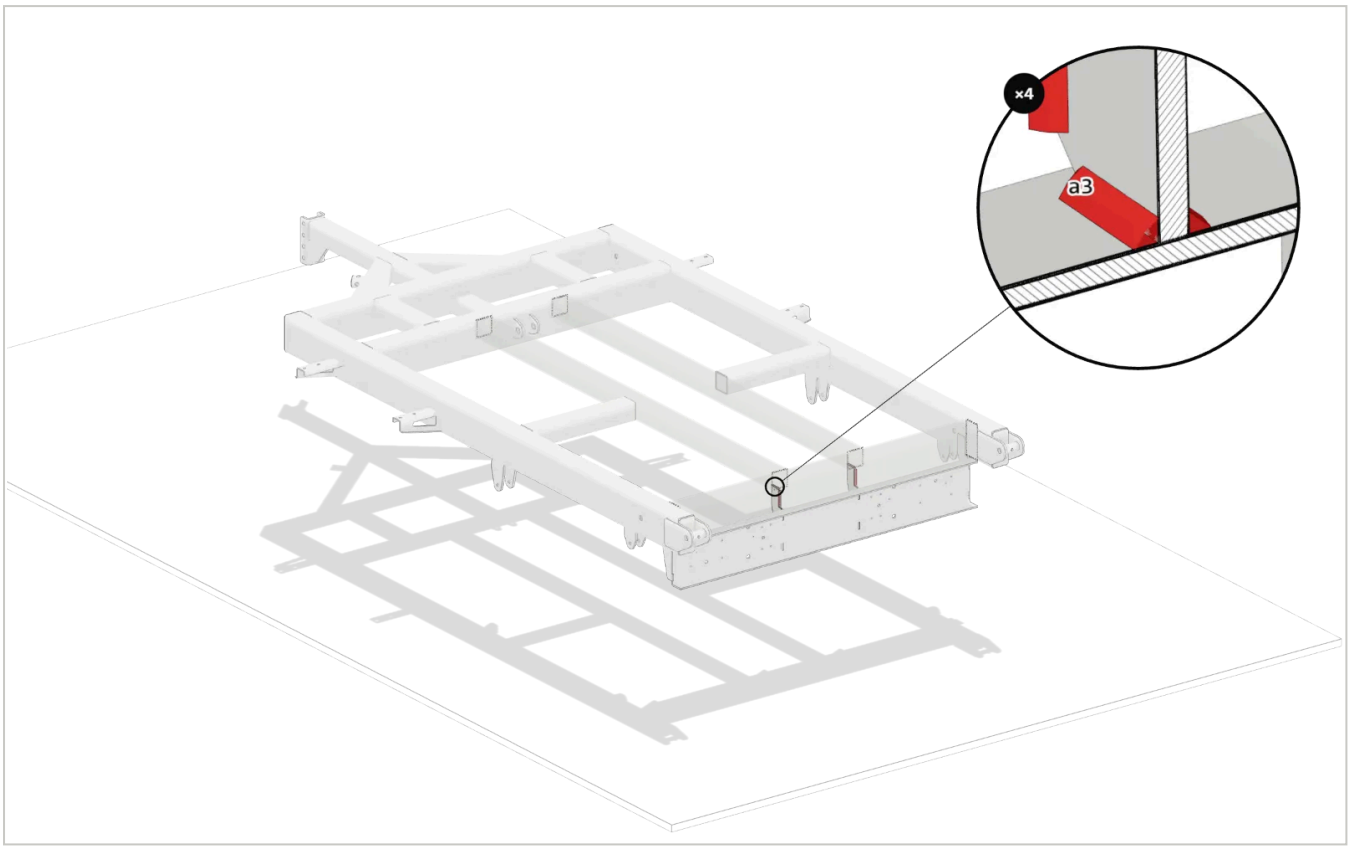
MAG (135), fillet a3, continuous, 1 run. Size proposed at the EN 1993-1-8 minimum; confirm with engineering. a3 is close to the 4 mm wall: keep the heat down and watch for burn-through. Weld all 4 joints of this type the same way.

24 Weld out the gussets, end caps and step arms, joint 3 of 4 (×4)



MAG (135), fillet a3, continuous, 1 run. Size proposed at the EN 1993-1-8 minimum; confirm with engineering. Parts here are thinner than the a3 minimum (2.83 mm): the engineer specifies those welds. Weld all 4 joints of this type the same way.

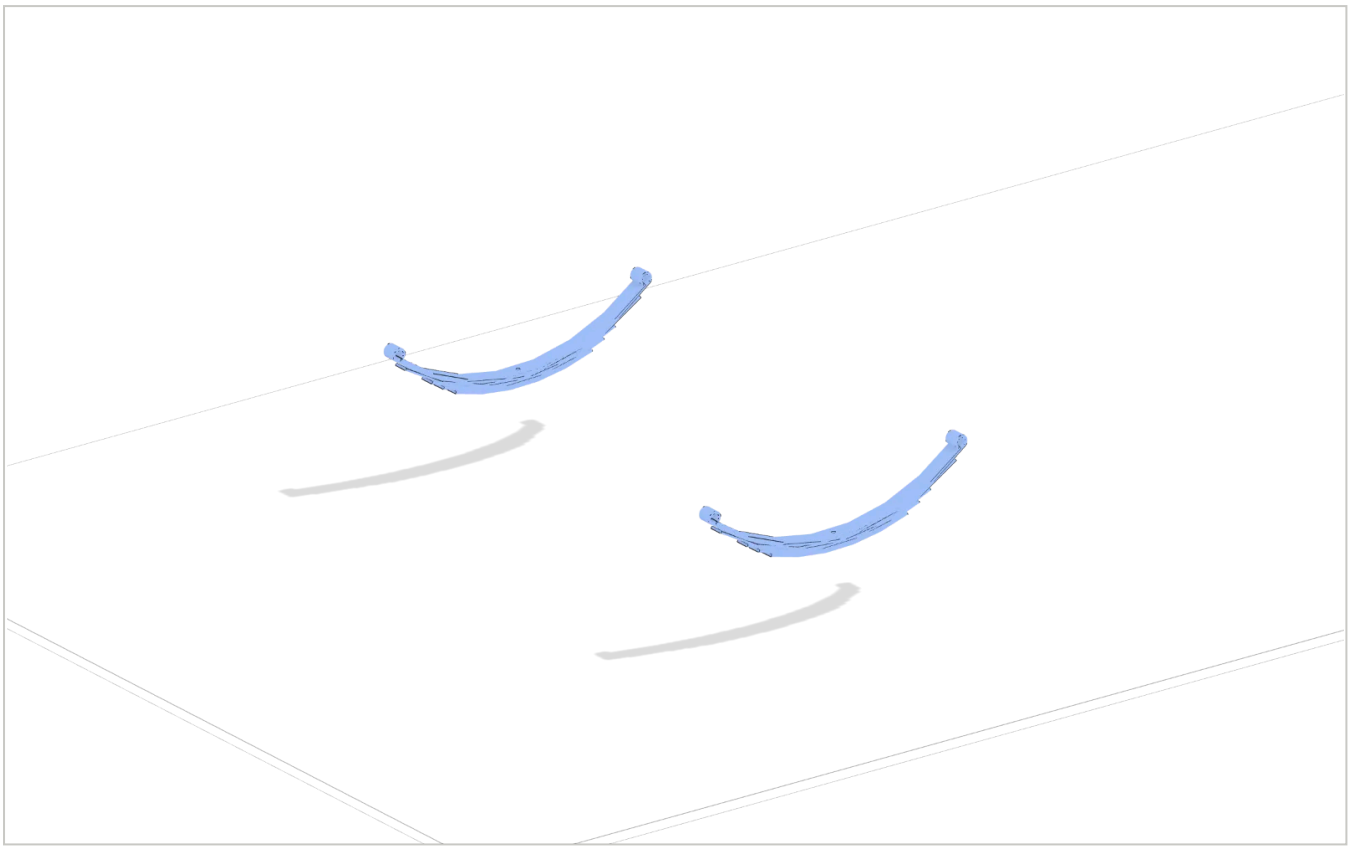
25 Weld out the gussets, end caps and step arms, joint 4 of 4 (×4)



MAG (135), fillet a3, continuous, 1 run. Size proposed at the EN 1993-1-8 minimum; confirm with engineering. a3 is close to the 4 mm wall: keep the heat down and watch for burn-through. Weld all 4 joints of this type the same way.

Leaf spring packs (bench)

26 Stack the leaves

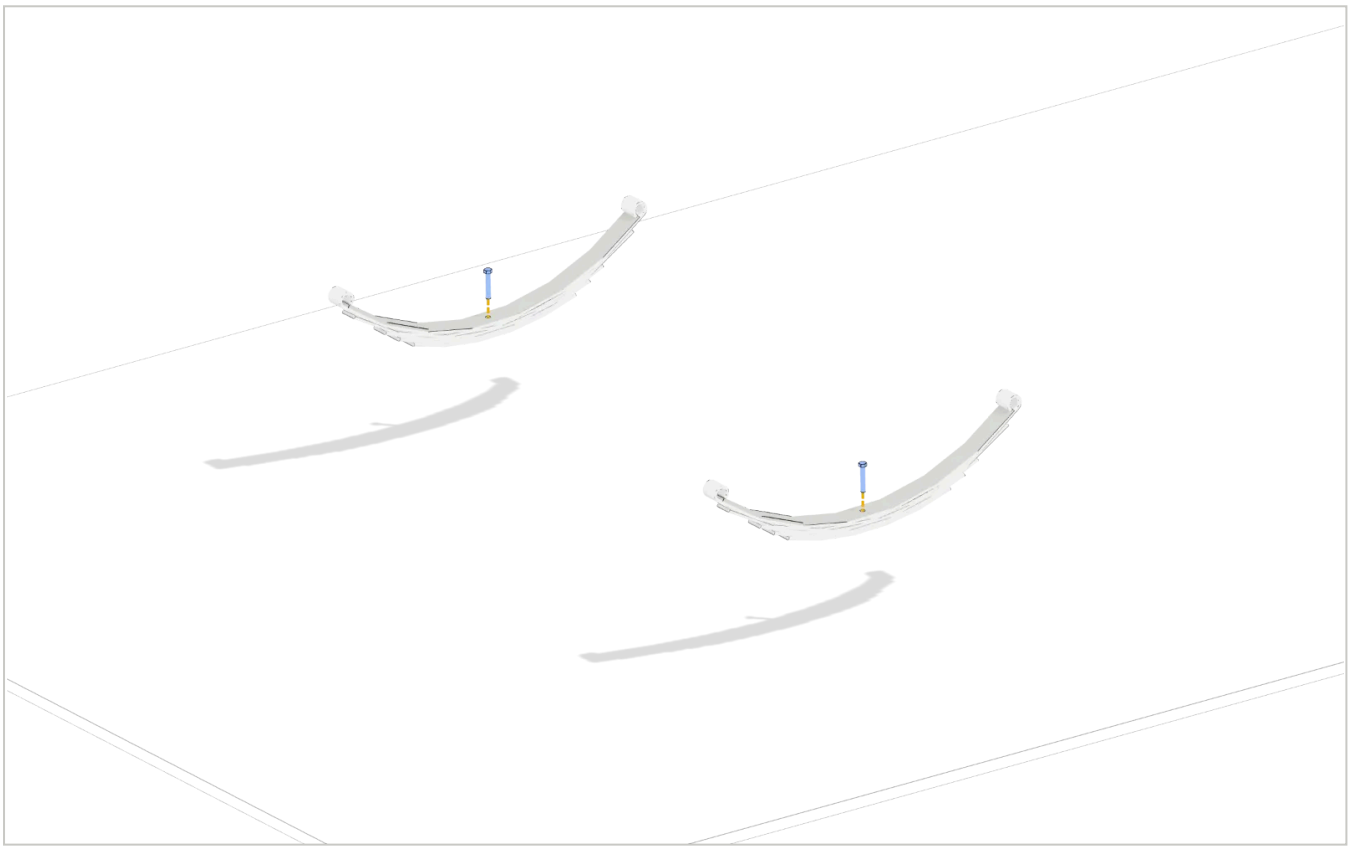


Stack the leaves of each pack on the bench, shortest leaf F at the bottom up to the longest leaf A on top, centre holes lined up on a drift. Make two packs, one per side.



Item	Part number	Description	Qty
116	LEAF_SPRING_A	Leaf Spring A_1	2
117	LEAF_SPRING_B	Leaf Spring B_1	2
119	LEAF_SPRING_C	Leaf Spring C_1	2
120	LEAF_SPRING_D	Leaf Spring D_1	2
121	LEAF_SPRING_E	Leaf Spring E_1	2
122	LEAF_SPRING_F	Leaf Spring F_1	2

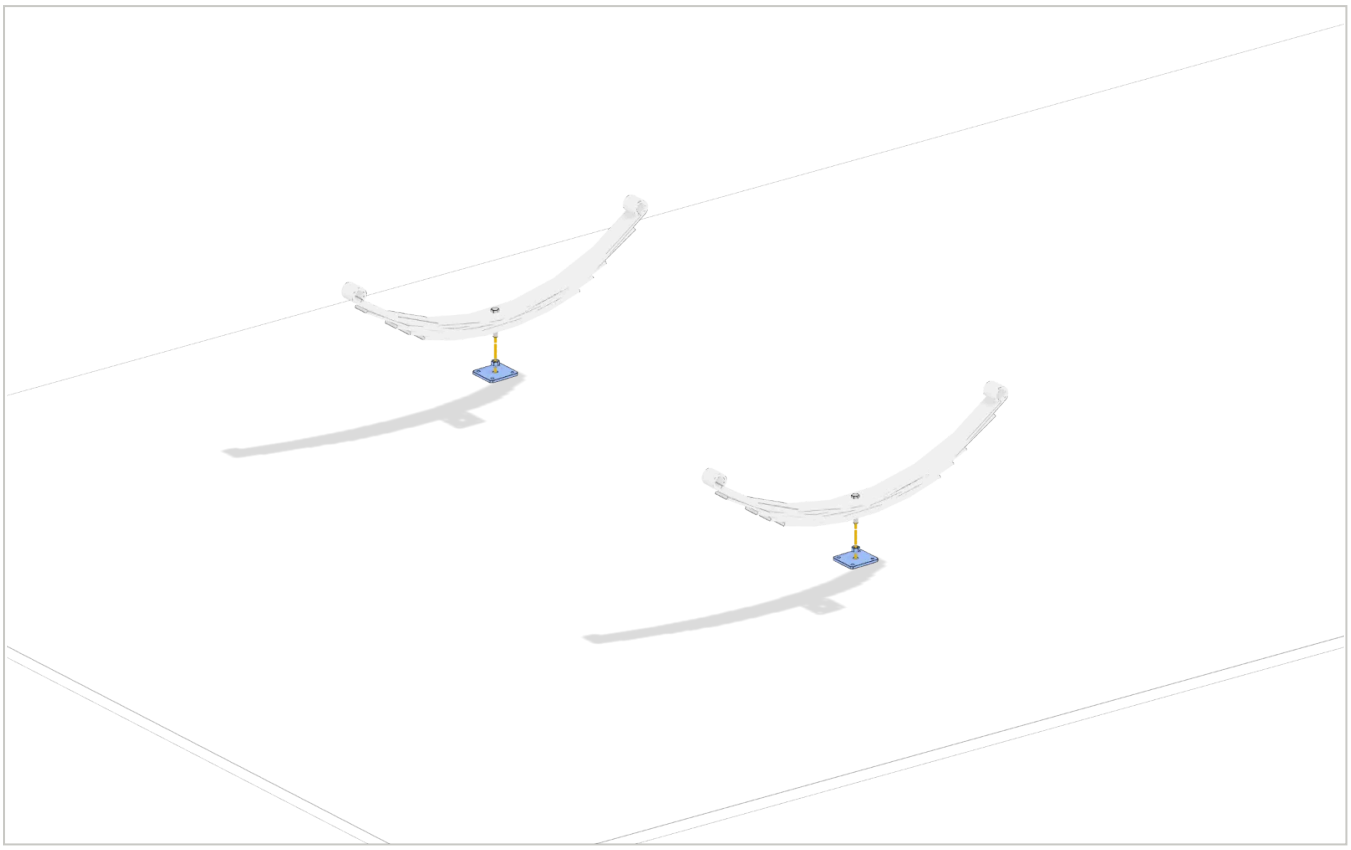
27 Fit the centre bolts



Drop the M12 x 70 centre bolt down through each pack, head on top.

Item	Part number	Description	Qty
444	Hex head bolt grade C M12x1.75 x 70	Hex head bolt grade C M12x1.75 x 70	2

28 Fit the U-bolt plates and the centre bolt nuts



Fit the U-bolt plate under each pack, centre bolt through its middle hole, and tighten the M12 lock nut from below to 80 Nm.

Item	Part number	Description	Qty
445	Prevailing torque nut M12x1.75	Prevailing torque nut M12x1.75	2
446	U-bolt plate, LH	U-bolt plate, LH	2

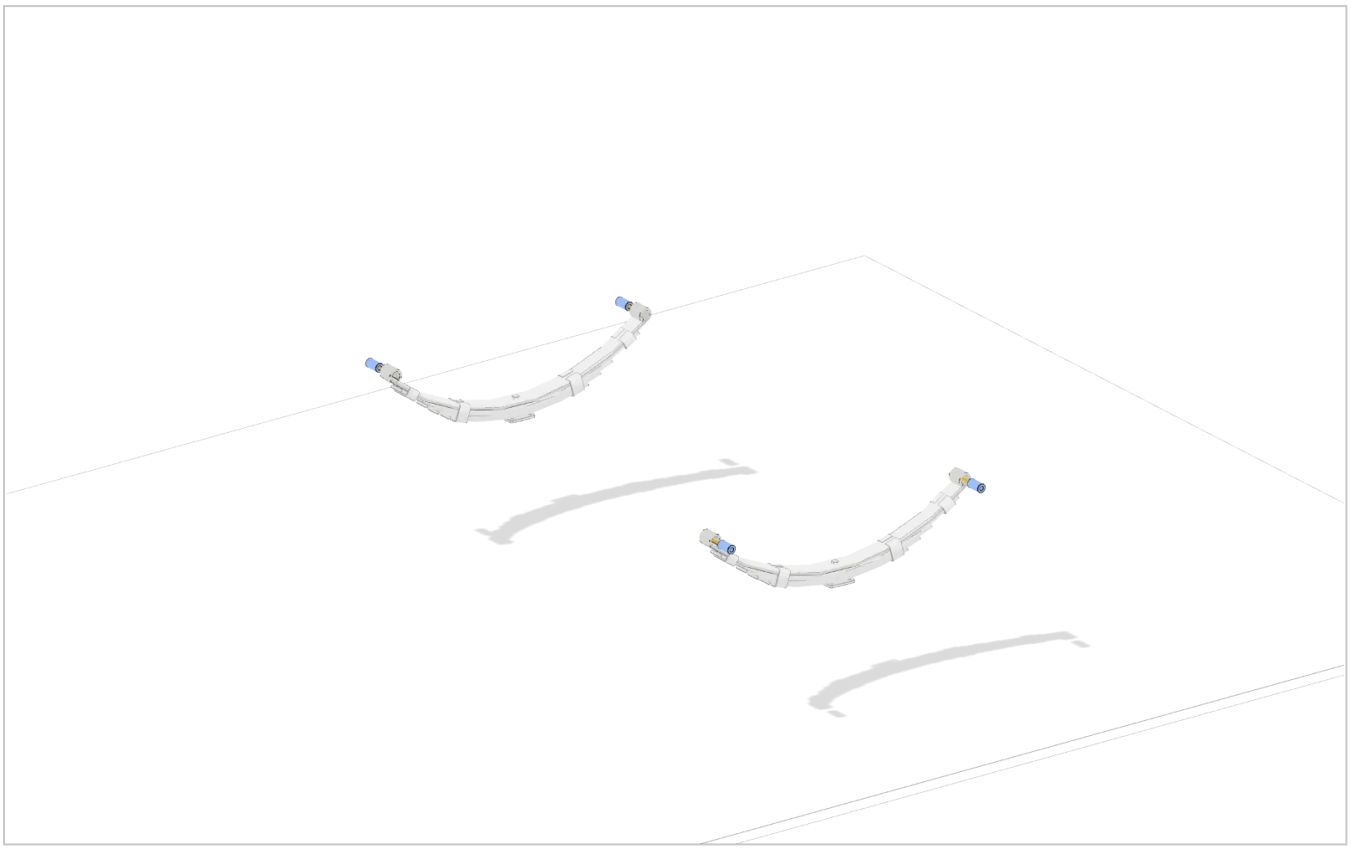
29 Fit the rebound clips



Fit the two-leaf and six-leaf rebound clips up around each pack and close them over the top leaf.

Item	Part number	Description	Qty
321	REBOUND_CLIP_2_LEAF	Rebound Clip, 2 Leaf_3	4
322	REBOUND_CLIP_6_LEAF	Rebound Clip, 6 Leaf_3	4

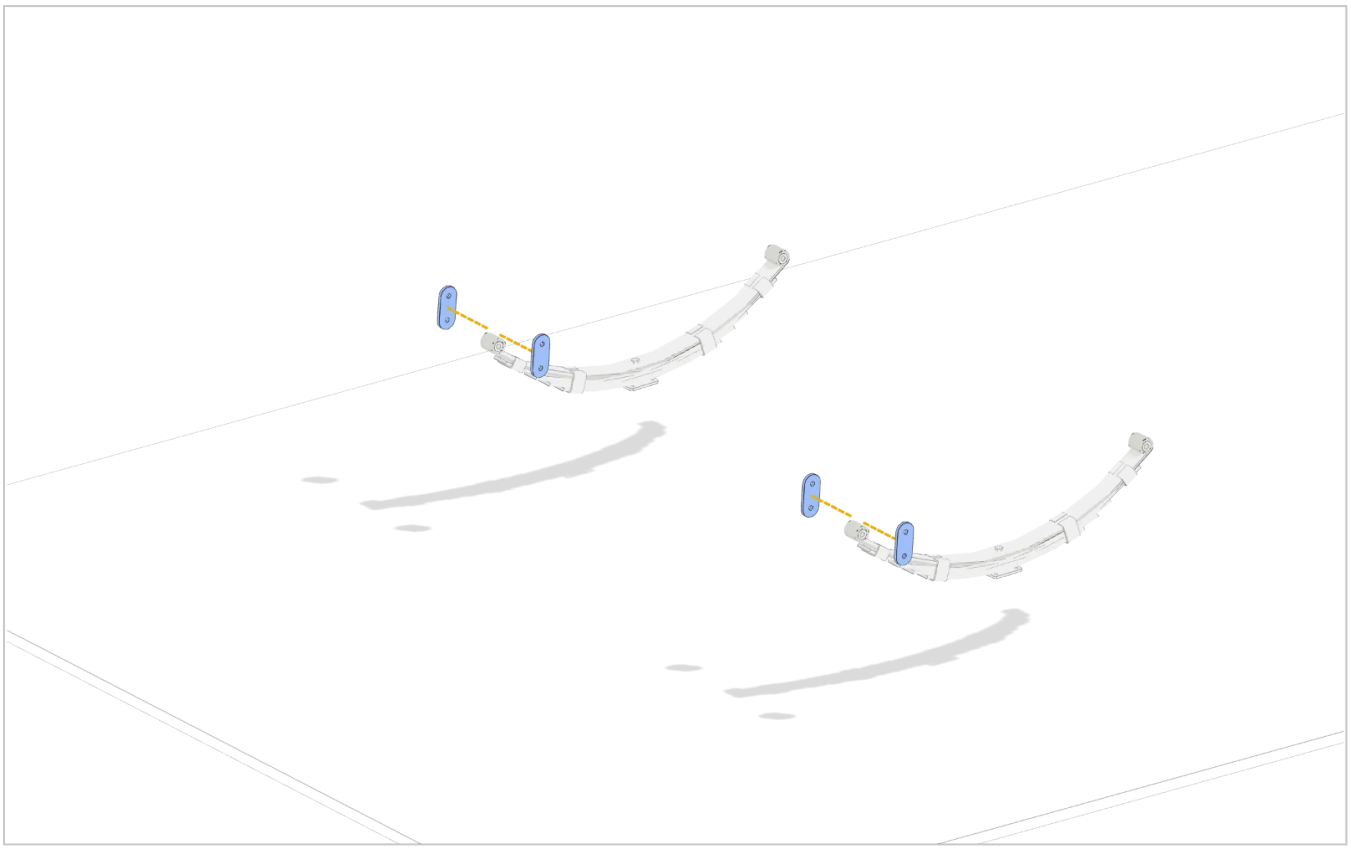
30 Press the bushings into the spring eyes



Press a bushing into the front and rear eye of each pack from the outside, centred in the eye.

Item	Part number	Description	Qty
118	LEAF_SPRING_BUSHING	Leaf Spring Bushing_3	4

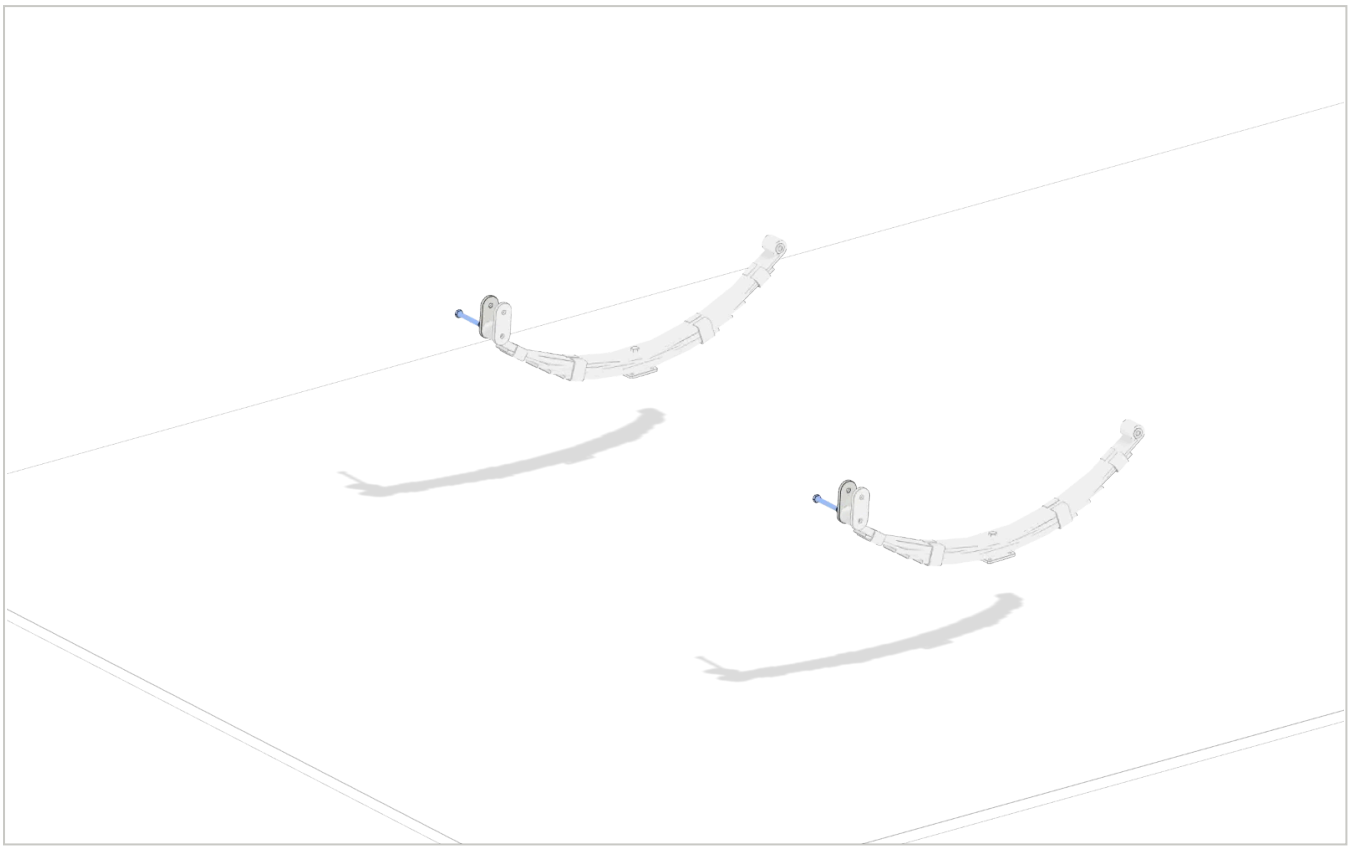
31 Fit the shackle plates



Hold a shackle plate on each side of the rear eye of each pack, holes lined up with the bushing.

Item	Part number	Description	Qty
115	LEAF_SHACKLE	Leaf Shackle_3	4

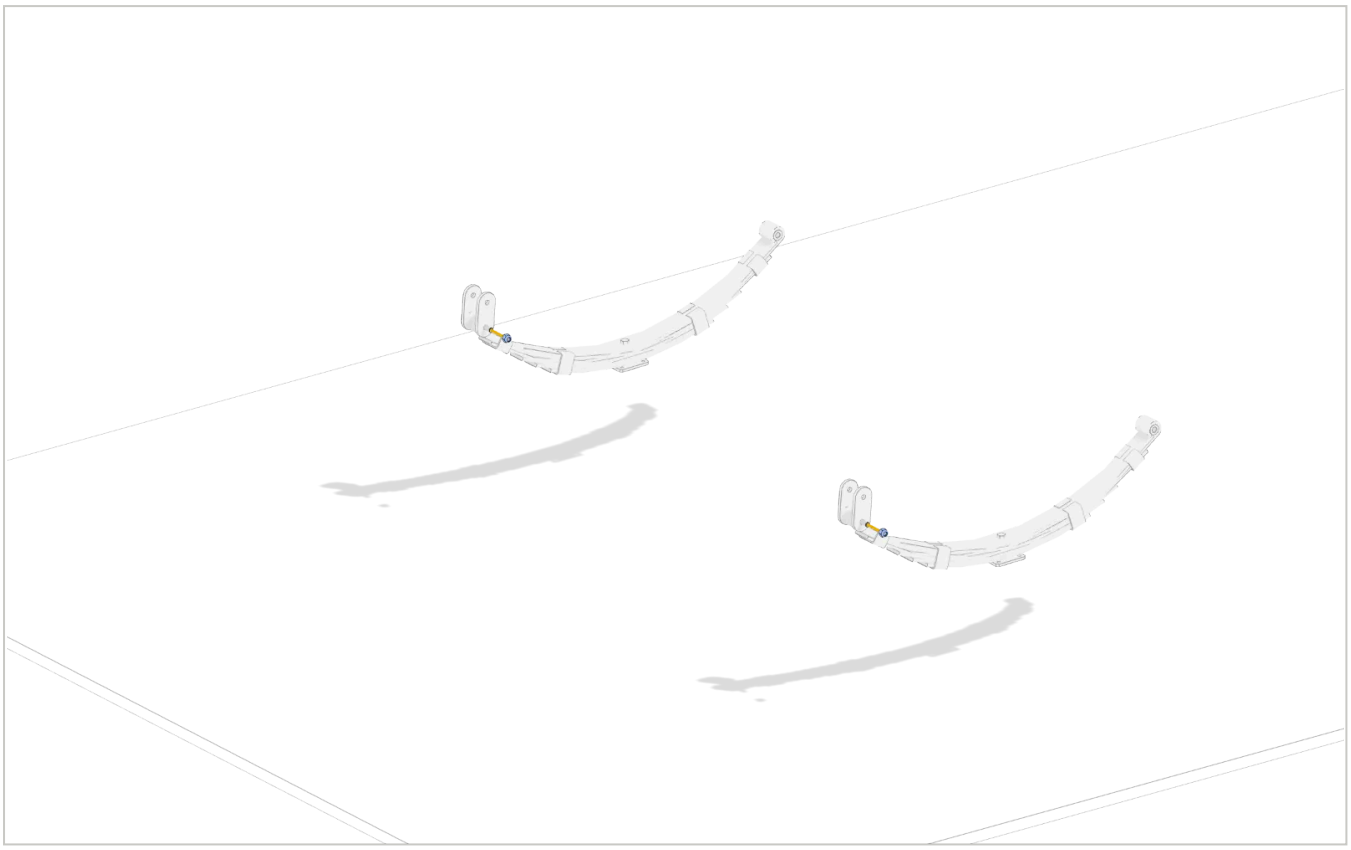
32 Fit the shackle bolts



Push an M12 x 90 bolt through the shackle plates and the rear eye bushing of each pack.

Item	Part number	Description	Qty
447	Hex head bolt grade C M12x1.75 x 90 x 30	Hex head bolt grade C M12x1.75 x 90 x 30	2

33 Fit the shackle nuts

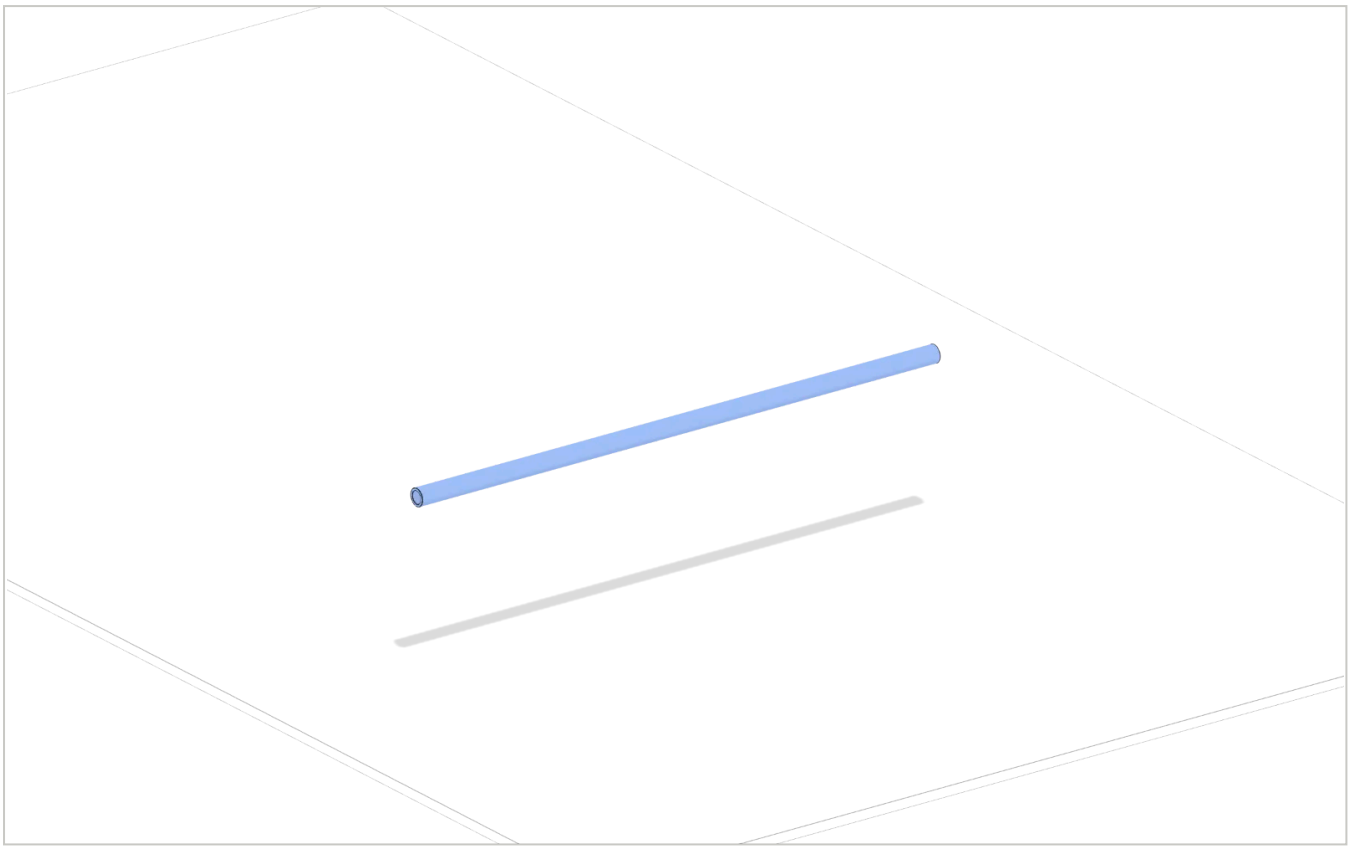


Fit an M12 lock nut on each shackle bolt, finger tight: the shackle must still swing.

Item	Part number	Description	Qty
445	Prevailing torque nut M12x1.75	Prevailing torque nut M12x1.75	2

Axle weldment (bench)

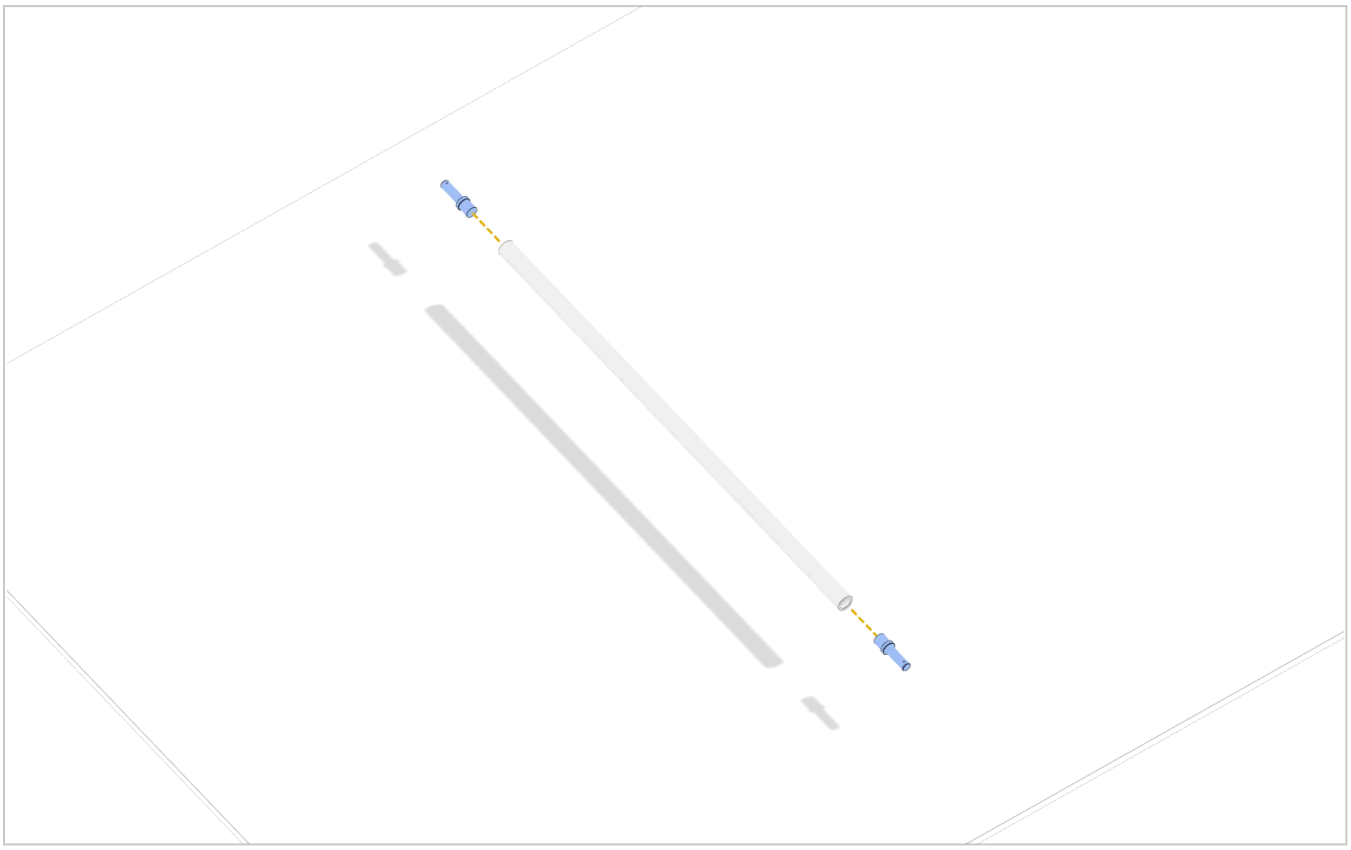
34 Set the axle tube on the bench



Set the axle tube in the vee blocks on the bench.

Item	Part number	Description	Qty
39	AXLE	Axle	1

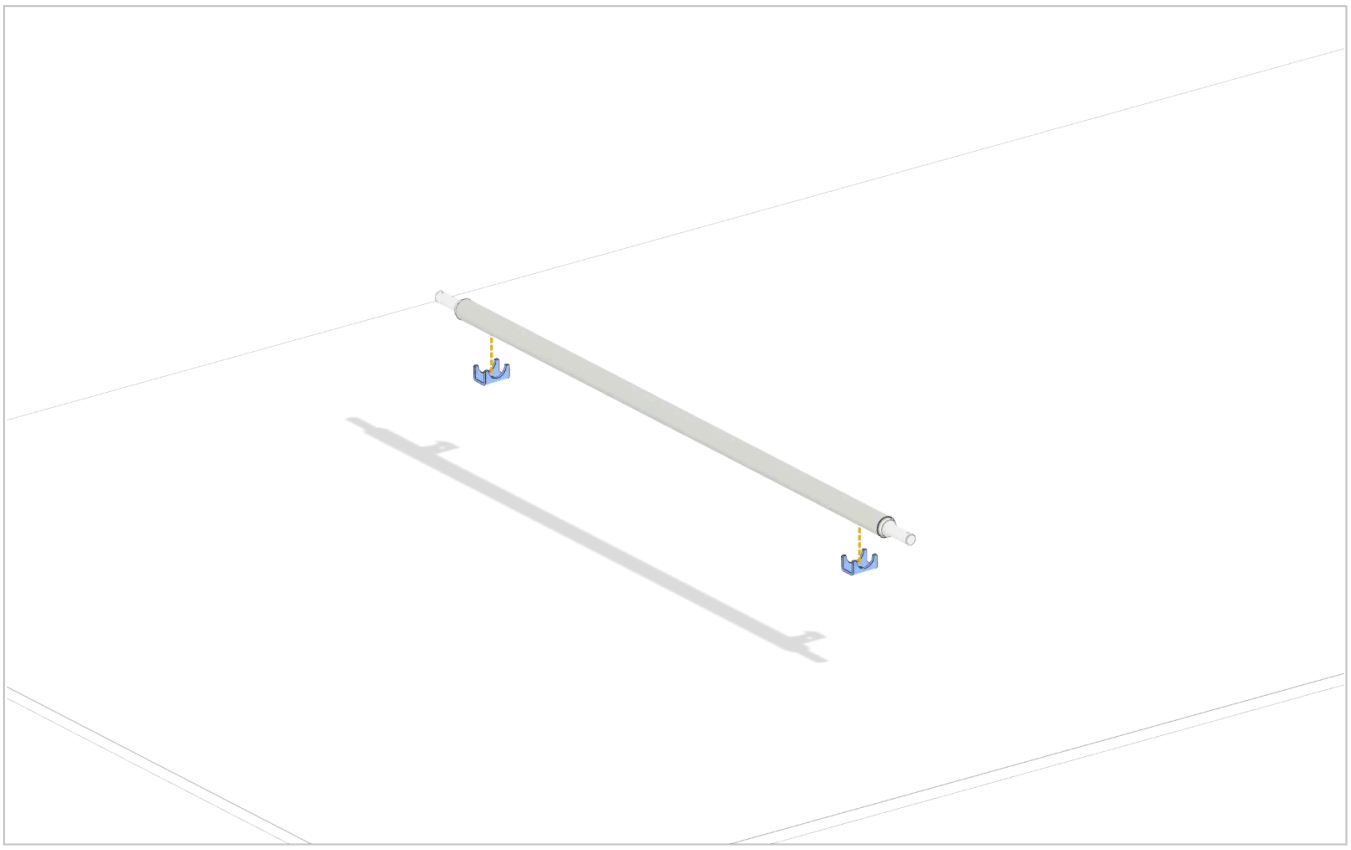
35 Press the spindles into the axle tube



Press a spindle into each end of the tube from the outside, up to its shoulder, then weld the shoulder all round, to the drawing.

Item	Part number	Description	Qty
41	AXLE_SPINDLE	Axle Spindle_1	2

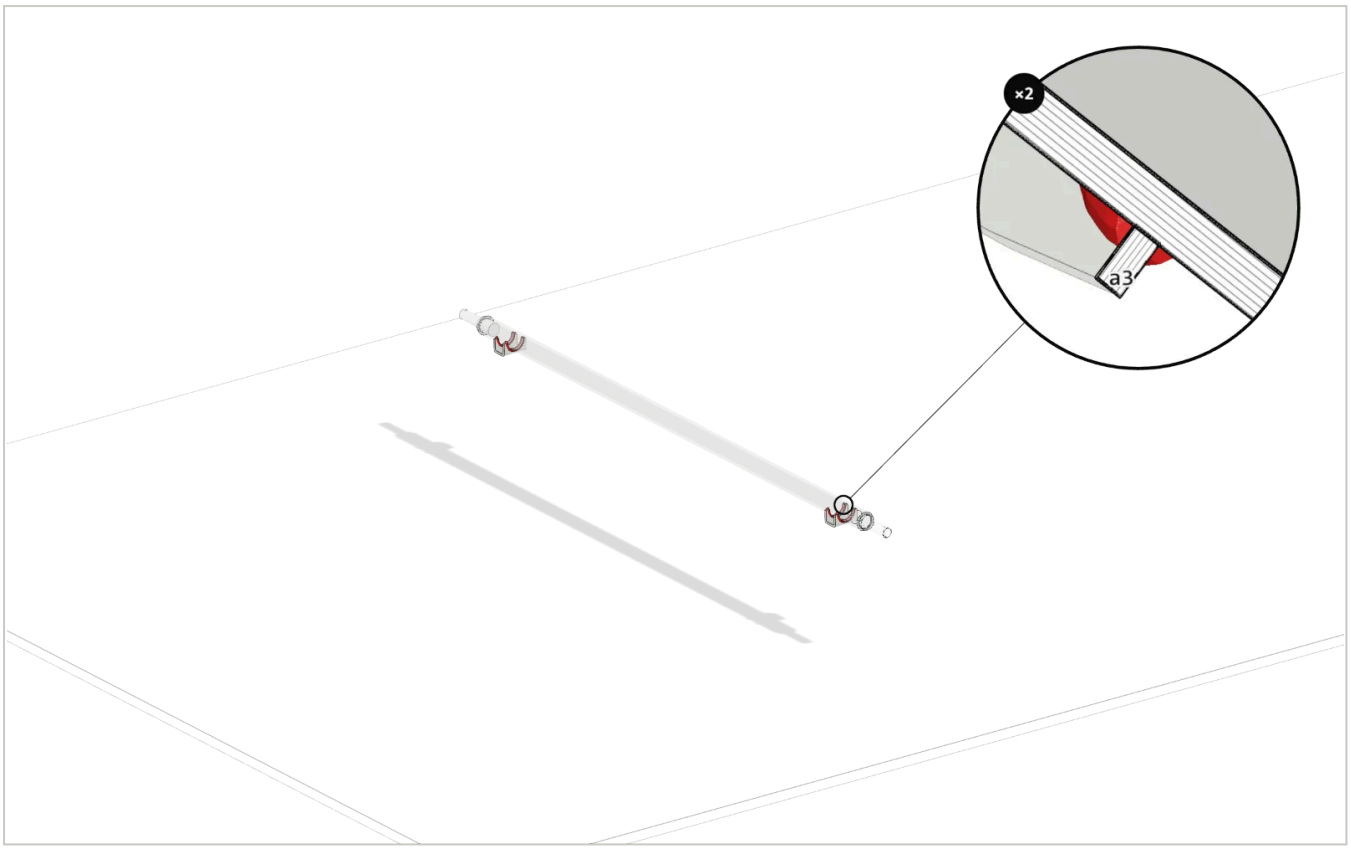
36 Fit and tack the spring seats



Offer the two spring seats up under the tube, 1,570 mm apart on the centres, and tack them.

Item	Part number	Description	Qty
124	LEAF_SPRING_OFFSET_BRACKET	Spring seat, RH	2

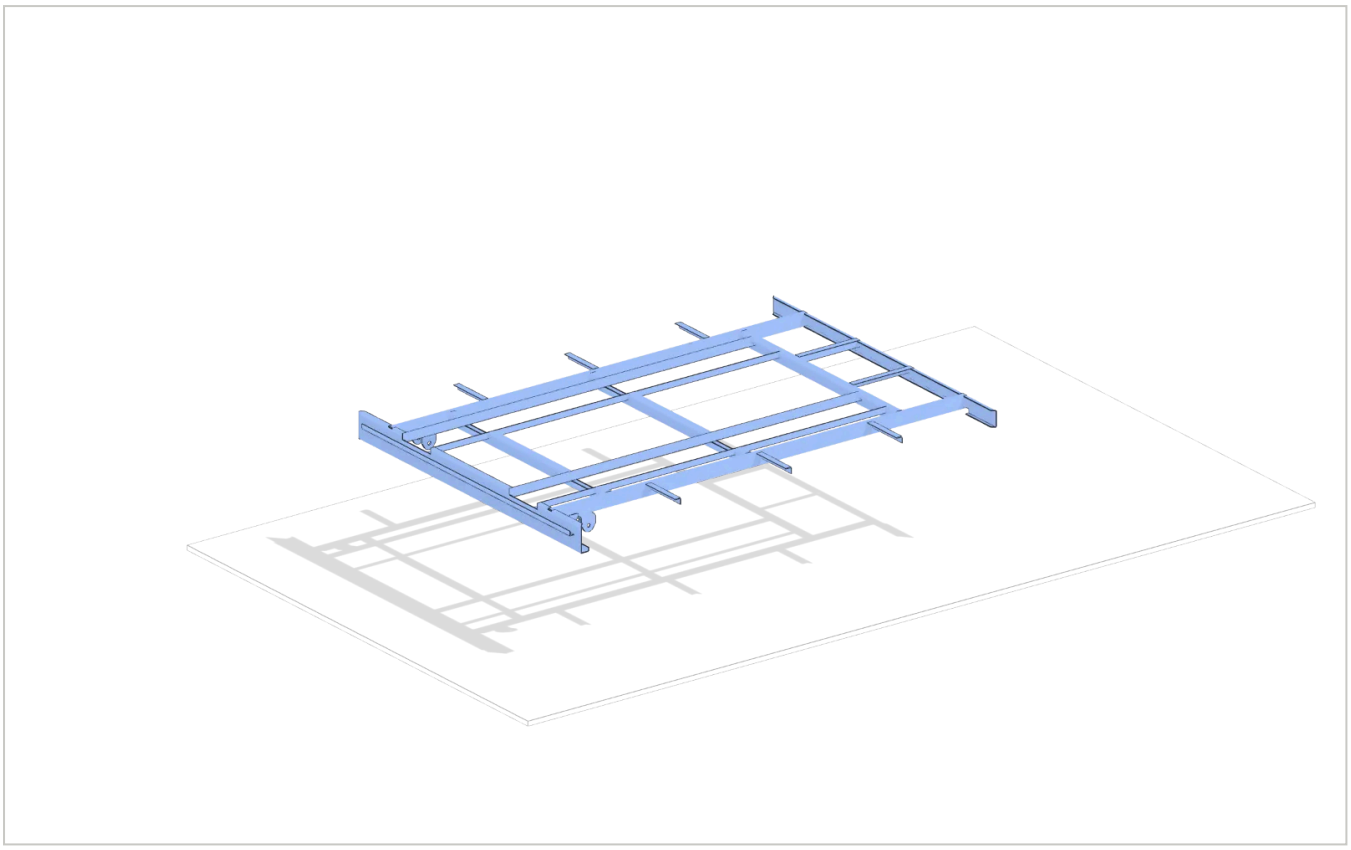
37 Weld out the spring seats (×2)



Check the seats' spacing and alignment before the first run, then weld the two seats alternately. MAG (135), fillet a3, continuous, 1 run. Size proposed at the EN 1993-1-8 minimum; confirm with engineering. Weld all 2 joints of this type the same way.

Dump bed weldment (bench)

38 Fit and tack the bed sub-frame

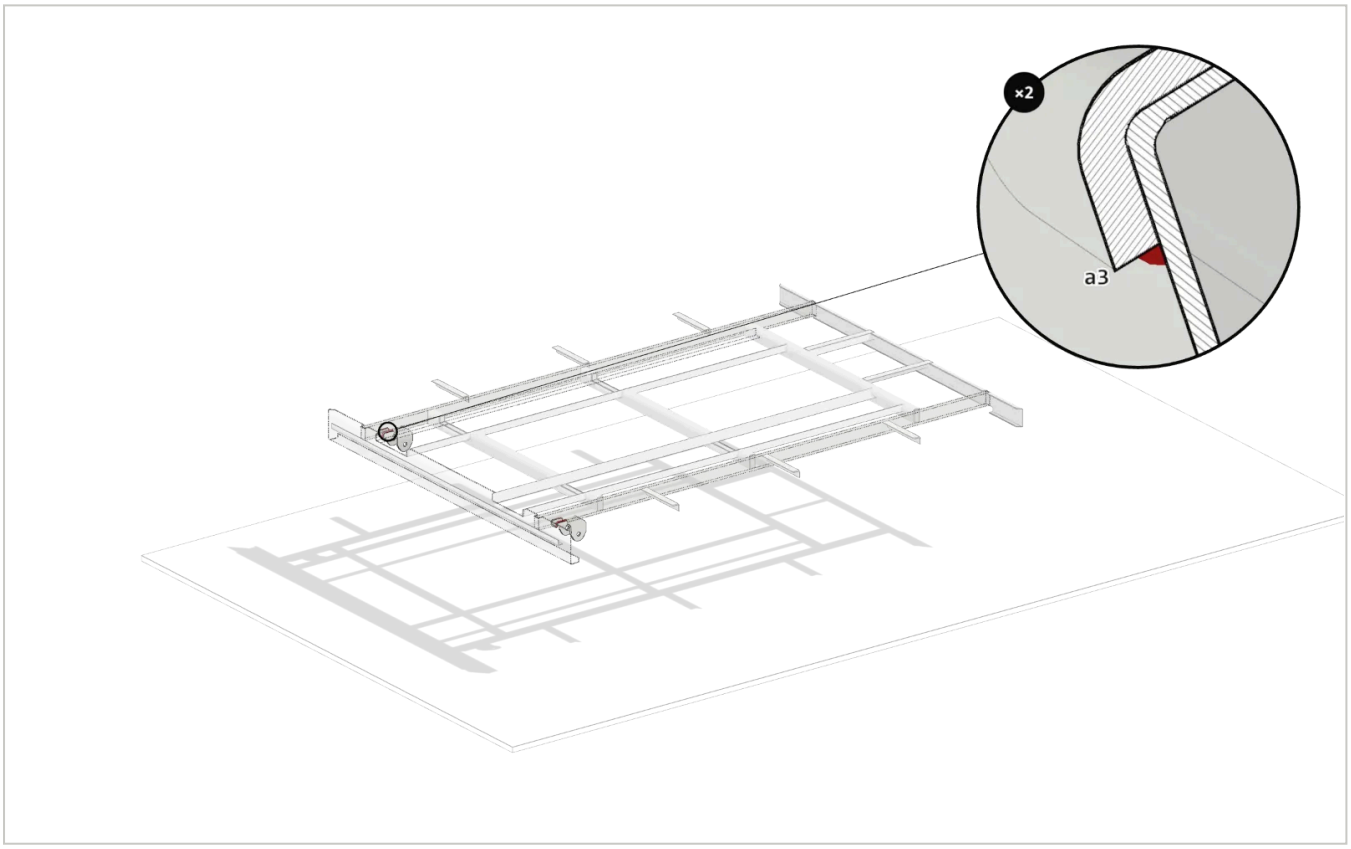


Lay the two bed rails and the four floor stringers on the jig, fit the cross members and stubs, the front and rear sills, the tailgate stop bar, the two pivot lugs and the six outrigger stubs, and tack each joint; do not weld out yet.

Item	Part number	Description	Qty
274	PART_5_3	Bed rail, LH	1
287	PART_6_3	Bed rail, RH	1
177	PART_18_2	Floor stringer	1
181	PART_19_3	Floor stringer	1
187	PART_20_3	Floor stringer	1
190	PART_21_3	Floor stringer	1
162	PART_13_2	Bed cross stub	1
174	PART_17_2	Bed cross stub	1
293	PART_7_3	Bed cross member	1
296	PART_8_3	Bed cross member	1
299	PART_9_3	Bed cross member	1
204	PART_26_2	Tailgate stop bar	1

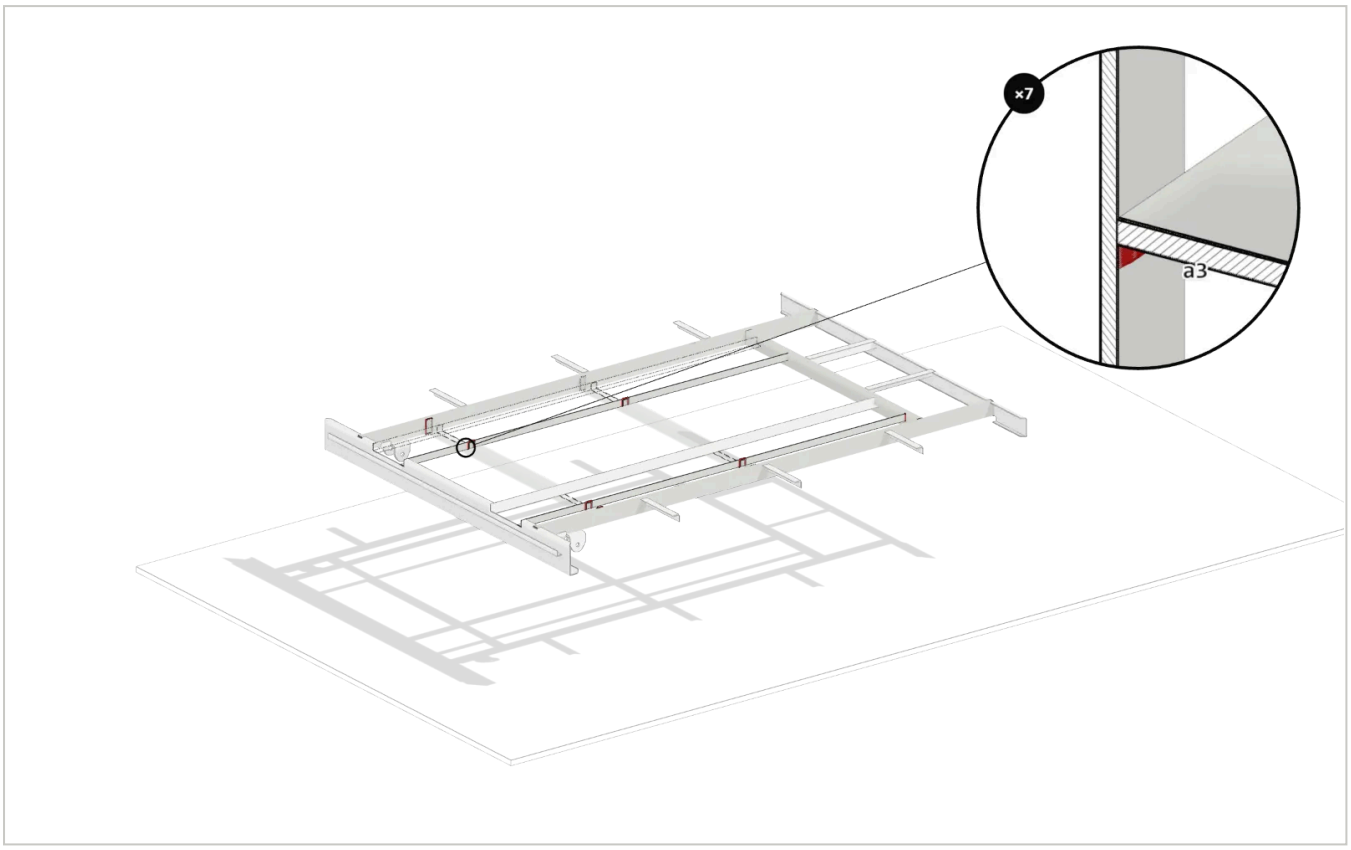
Item	Part number	Description	Qty
236	PART_3_3	Front sill	1
256	PART_4_3	Rear sill	1
221	PART_33_2	Bed pivot lug, LH	1
224	PART_34_3	Bed pivot lug, RH	1
145	PART_10_2	Outrigger stub	1
148	PART_11_2	Outrigger stub	1
155	PART_12_2	Outrigger stub	1
165	PART_14_2	Outrigger stub	1
168	PART_15_2	Outrigger stub	1
171	PART_16_2	Outrigger stub	1

39 Weld out the bed sub-frame, joint 1 of 10 (×2)



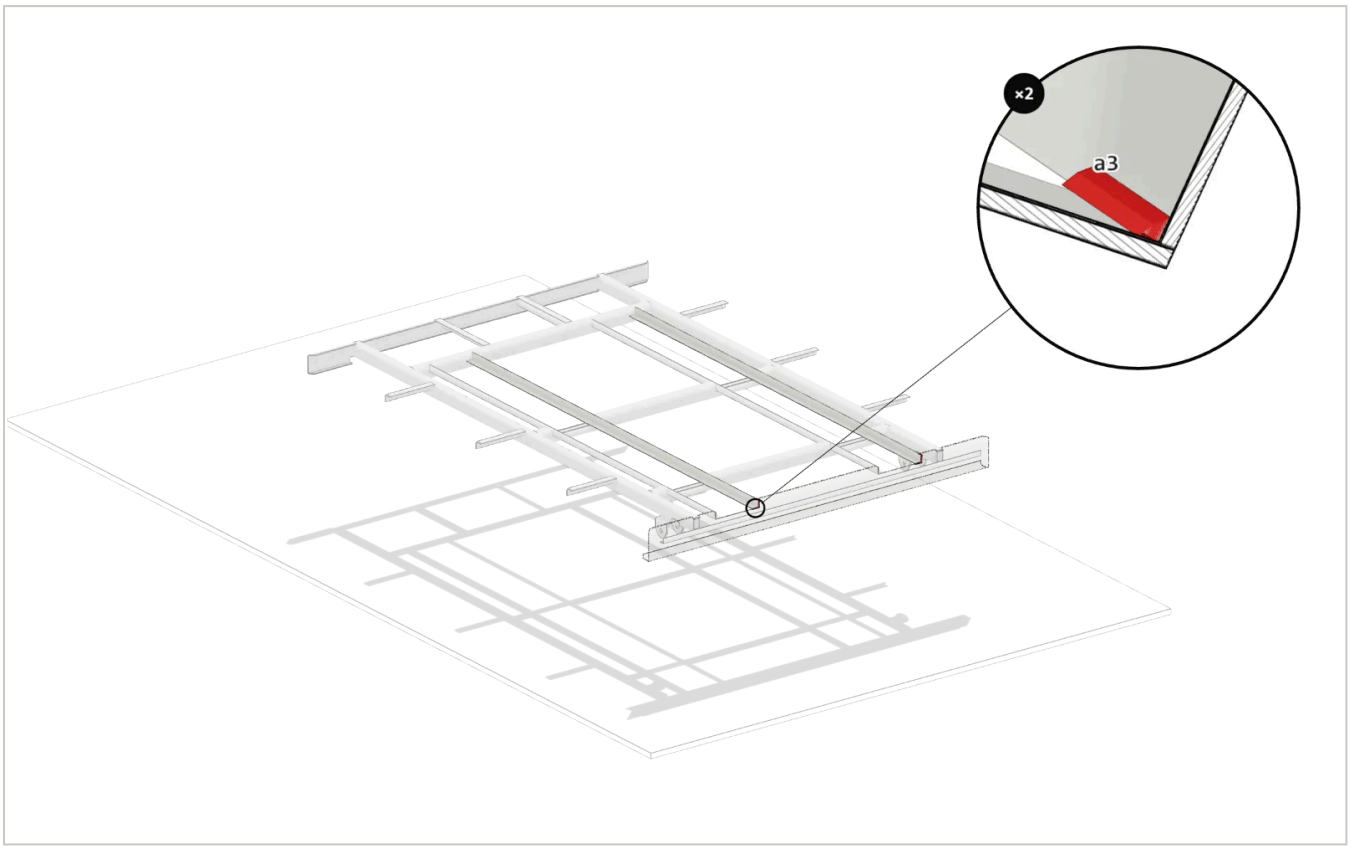
Check the weldment square across the diagonals before the first run, then weld out balanced, opposite sides in turn; backstep long seams. MAG (135), fillet a3, continuous, 1 run. Size proposed at the EN 1993-1-8 minimum; confirm with engineering. a3 is close to the 4 mm wall: keep the heat down and watch for burn-through. Weld all 2 joints of this type the same way.

40 Weld out the bed sub-frame, joint 2 of 10 (×7)



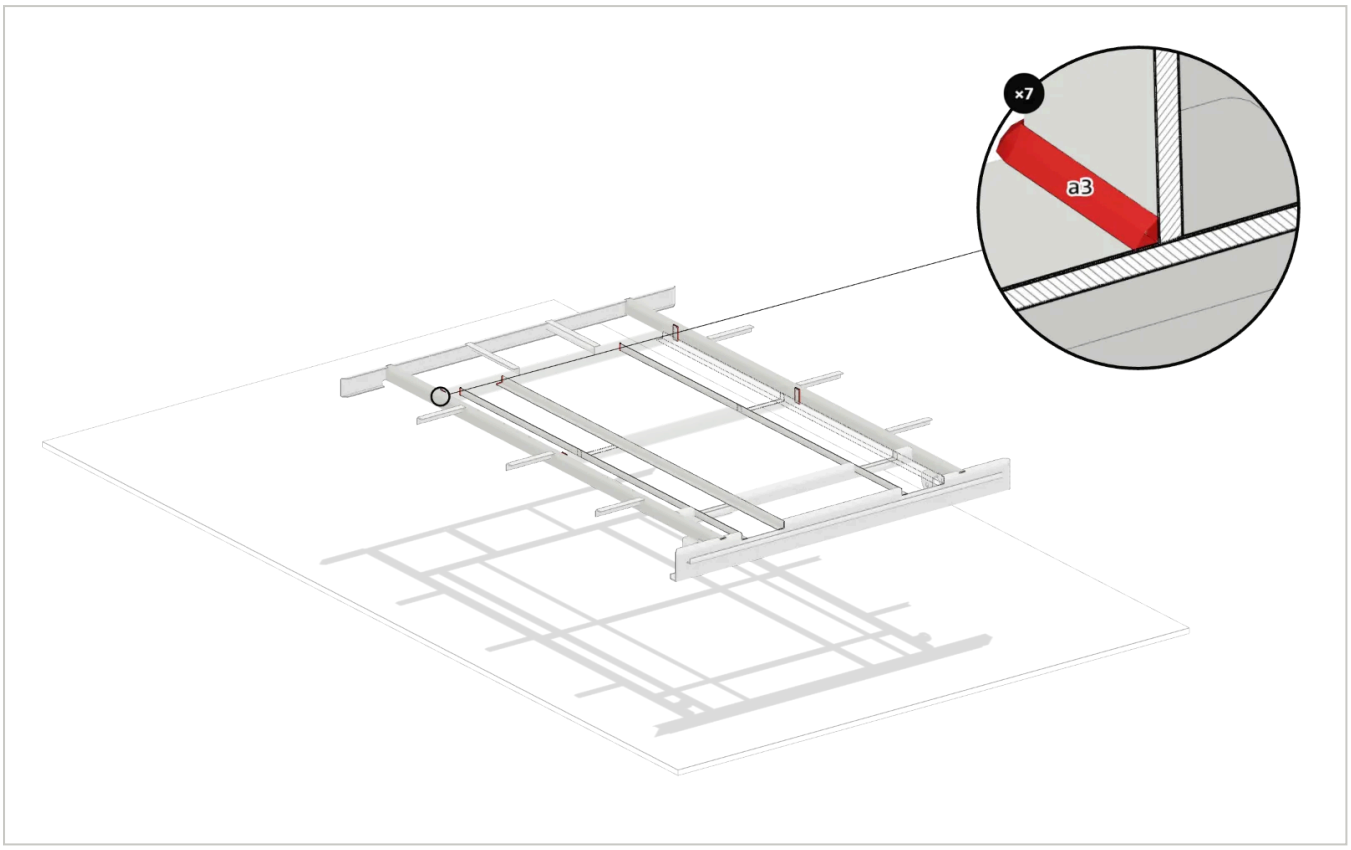
MAG (135), fillet a3, continuous, 1 run. Size proposed at the EN 1993-1-8 minimum; confirm with engineering. Parts here are thinner than the a3 minimum (2.99 mm): the engineer specifies those welds. a3 is close to the 4 mm wall: keep the heat down and watch for burn-through. Weld all 7 joints of this type the same way.

41 Weld out the bed sub-frame, joint 3 of 10 (×2)



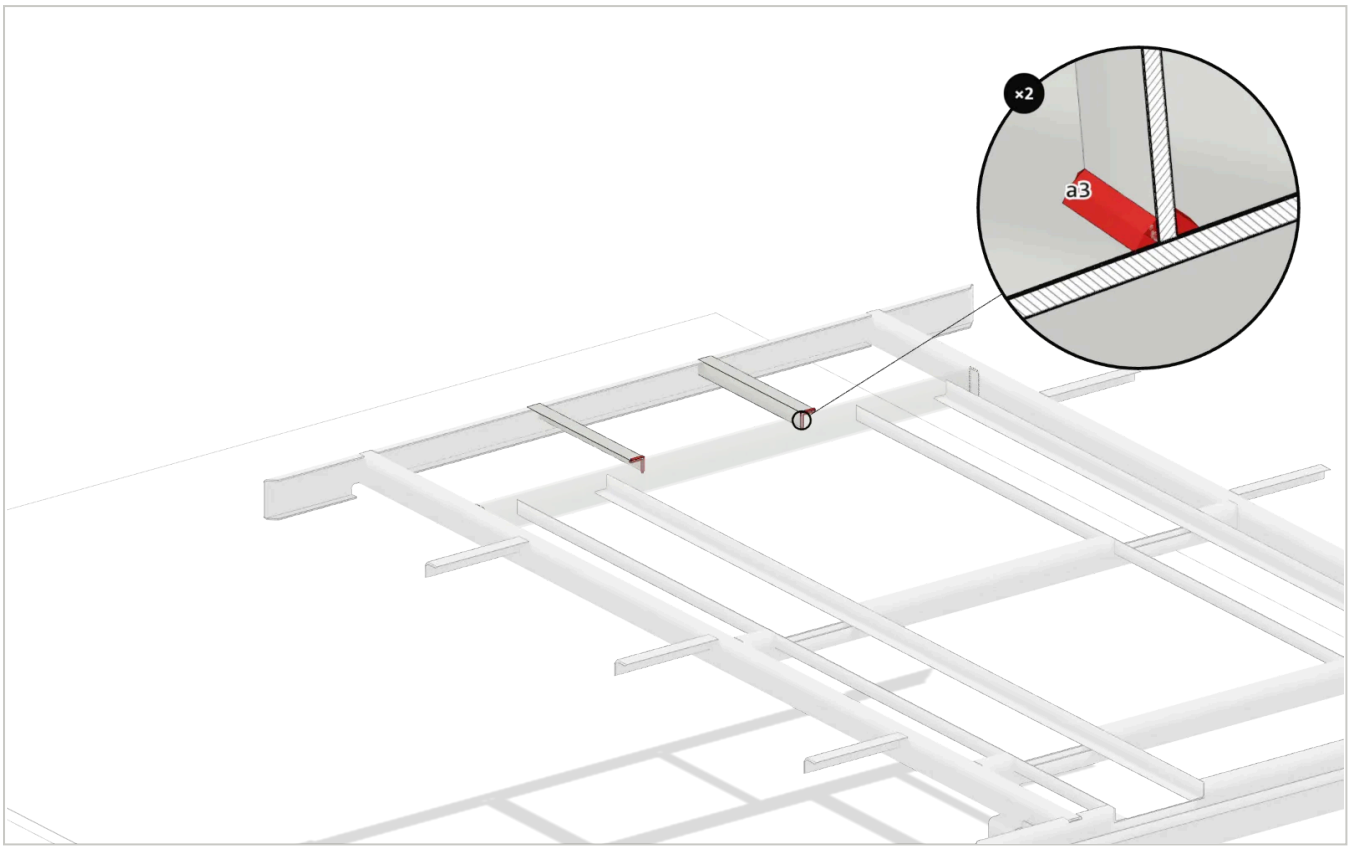
MAG (135), fillet a3, continuous, 1 run. Size proposed at the EN 1993-1-8 minimum; confirm with engineering. Parts here are thinner than the a3 minimum (2.96 mm): the engineer specifies those welds. Weld all 2 joints of this type the same way.

42 Weld out the bed sub-frame, joint 4 of 10 (×7)



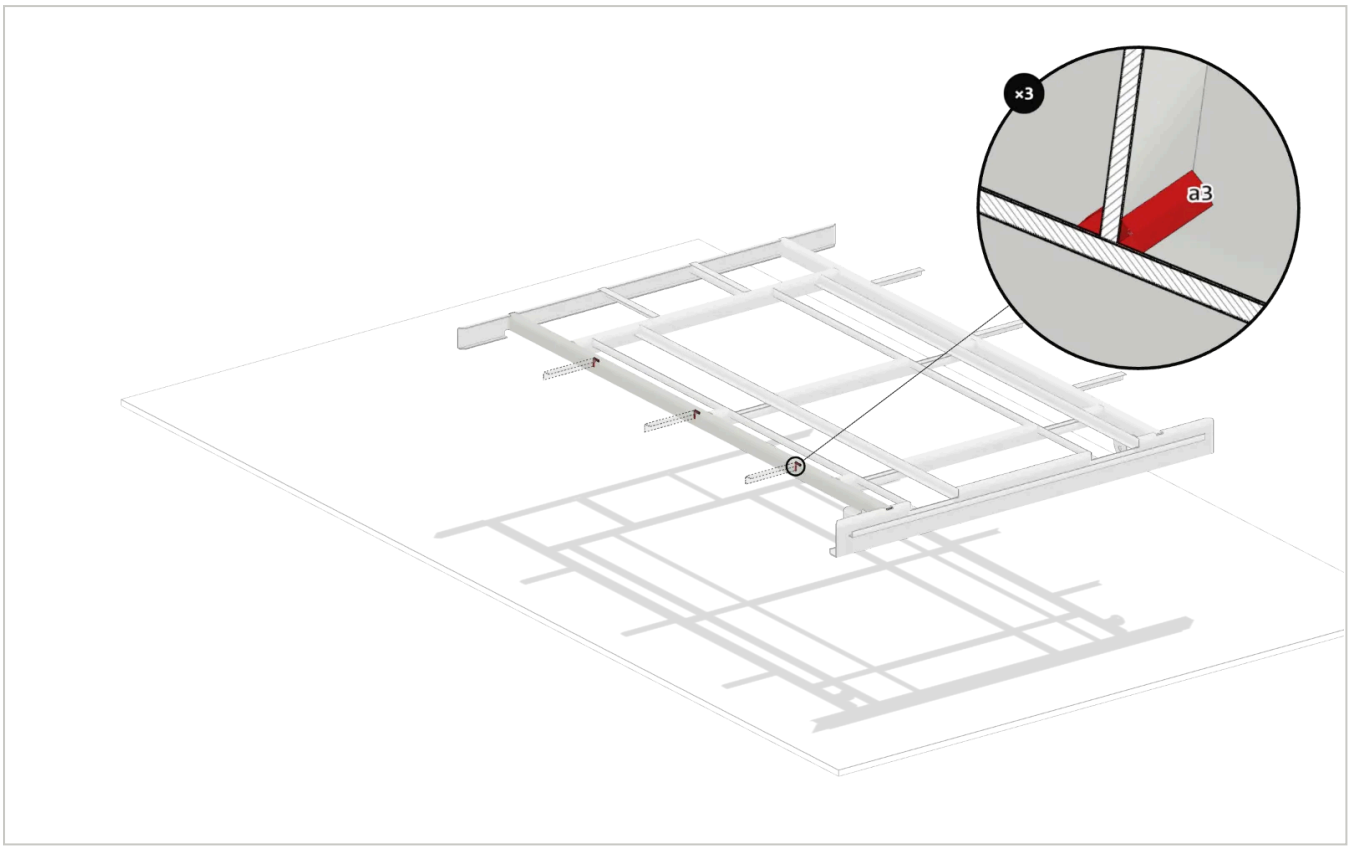
MAG (135), fillet a3, continuous, 1 run. Size proposed at the EN 1993-1-8 minimum; confirm with engineering. Parts here are thinner than the a3 minimum (2.99 mm): the engineer specifies those welds. a3 is close to the 4 mm wall: keep the heat down and watch for burn-through. Weld all 7 joints of this type the same way.

43 Weld out the bed sub-frame, joint 5 of 10 (×2)



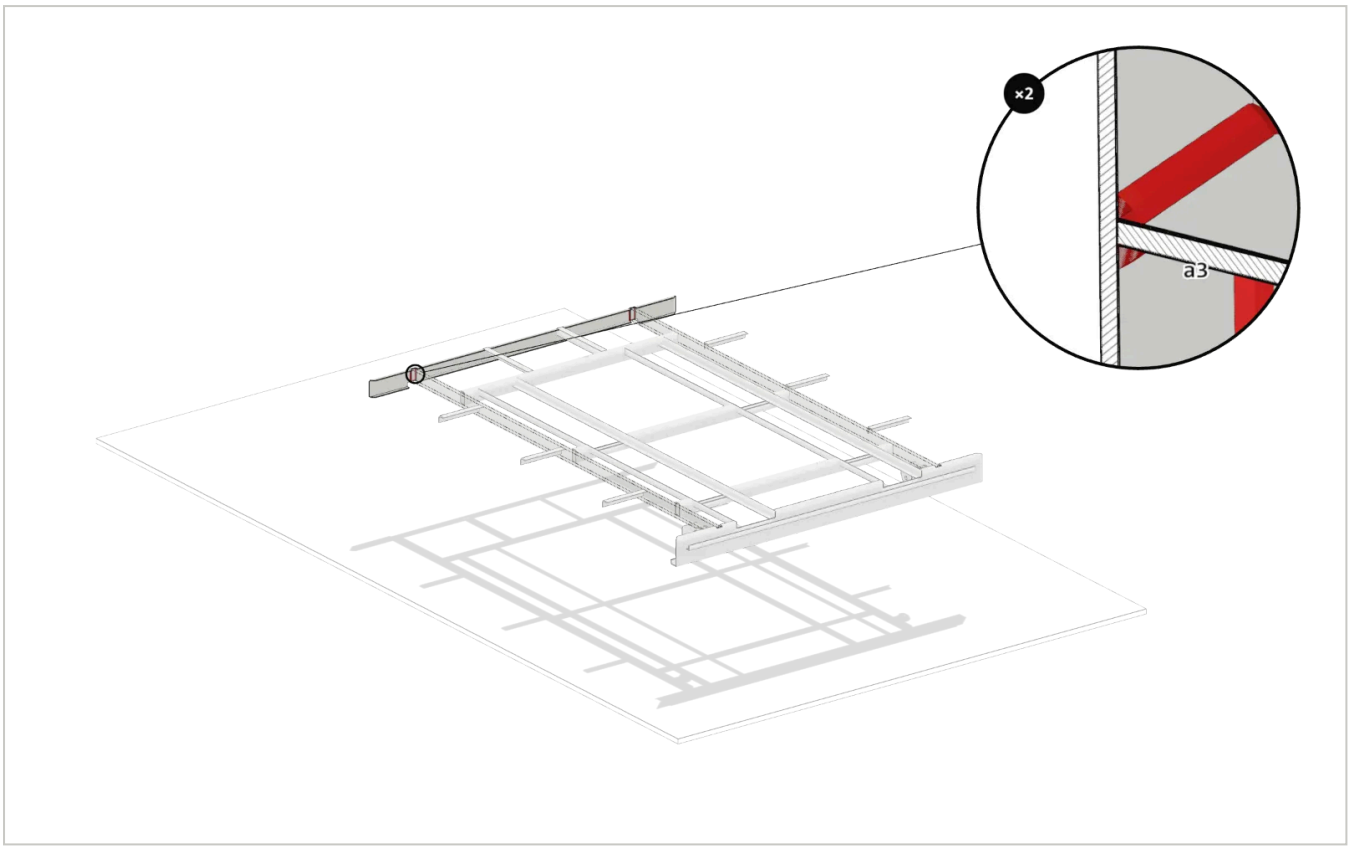
MAG (135), fillet a3, continuous, 1 run. Size proposed at the EN 1993-1-8 minimum; confirm with engineering. Parts here are thinner than the a3 minimum (2.98 mm): the engineer specifies those welds. Weld all 2 joints of this type the same way.

44 Weld out the bed sub-frame, joint 6 of 10 (×3)



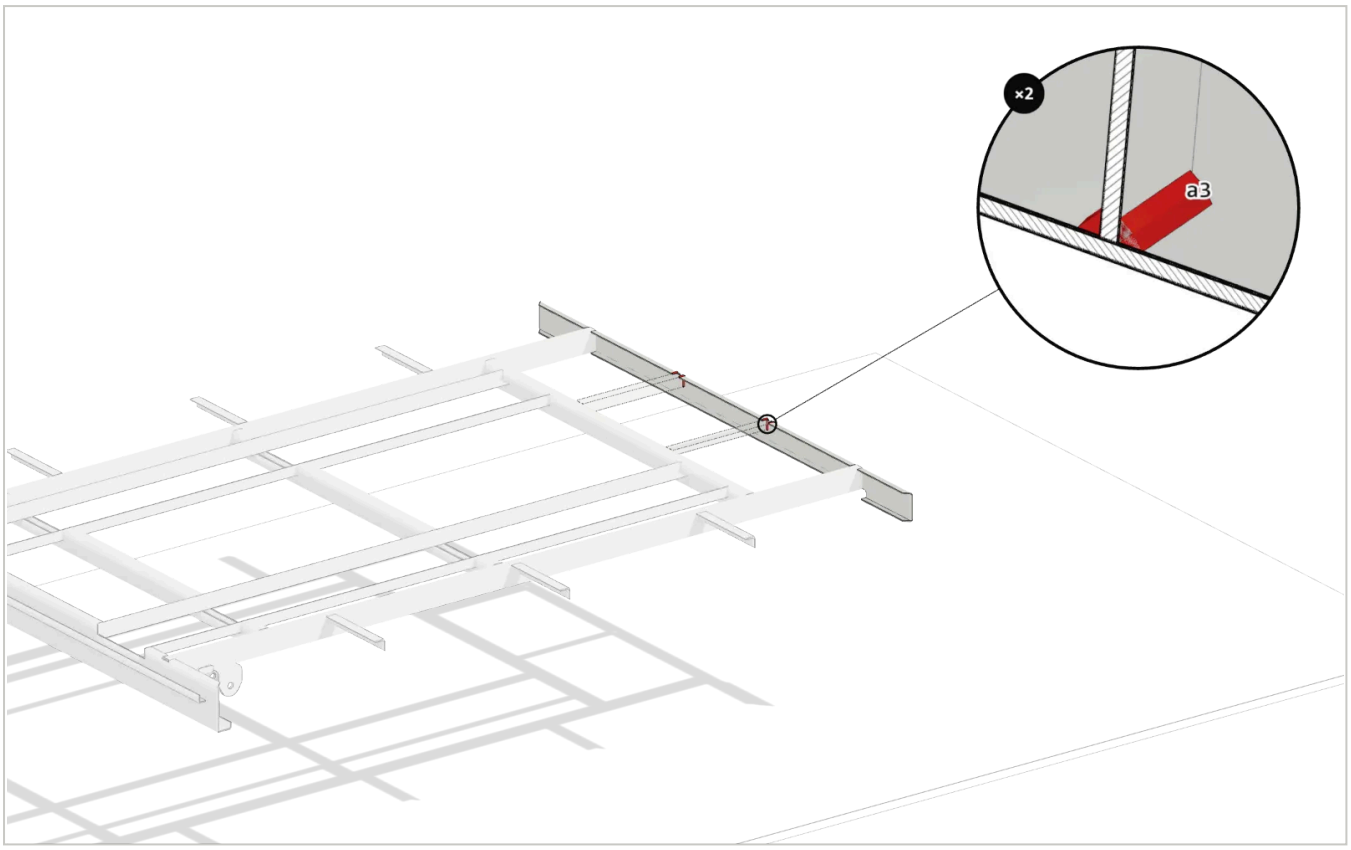
MAG (135), fillet a3, continuous, 1 run. Size proposed at the EN 1993-1-8 minimum; confirm with engineering. Parts here are thinner than the a3 minimum (2.96 mm): the engineer specifies those welds. Weld all 3 joints of this type the same way.

45 Weld out the bed sub-frame, joint 7 of 10 (×2)



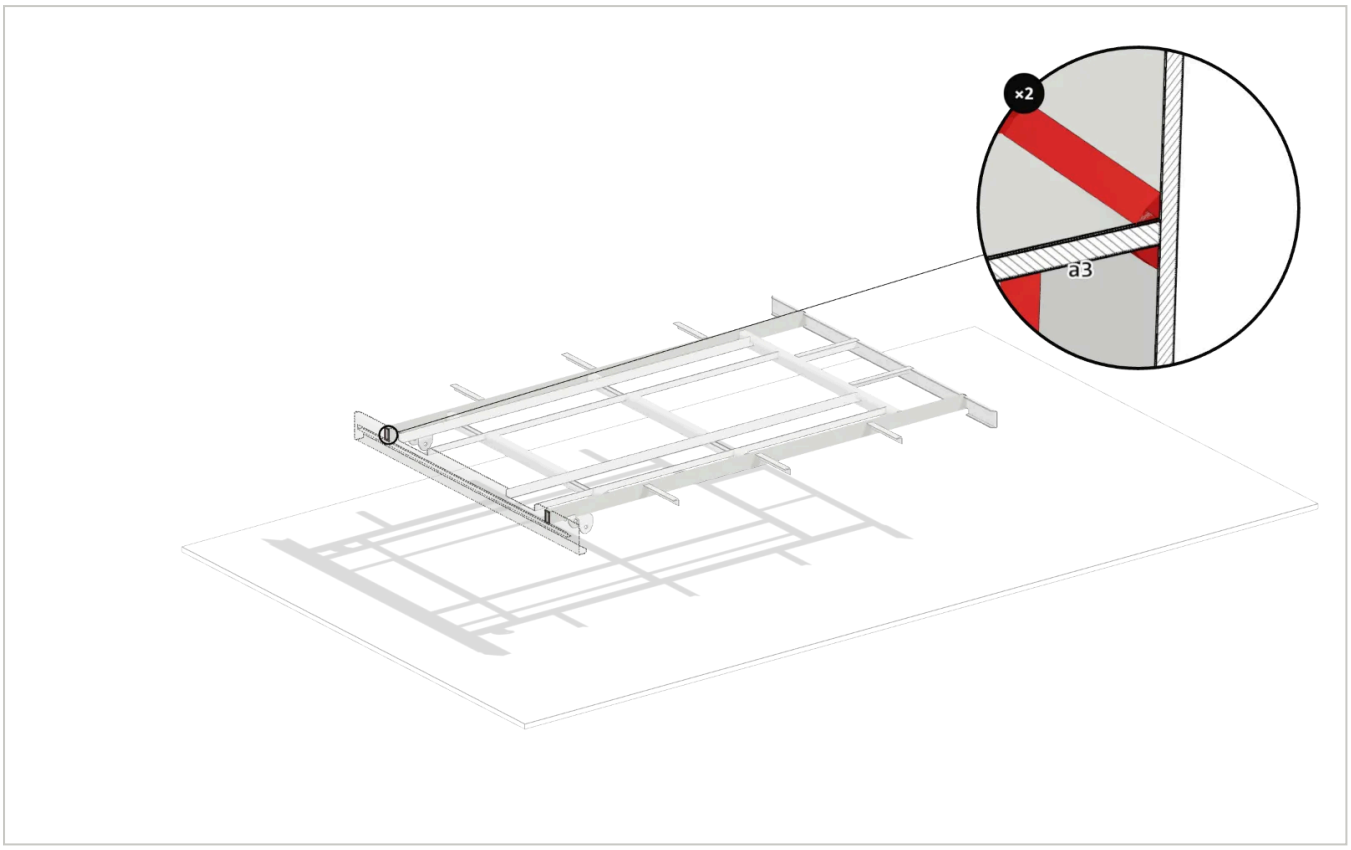
MAG (135), fillet a3, continuous, 1 run. Size proposed at the EN 1993-1-8 minimum; confirm with engineering. Parts here are thinner than the a3 minimum (2.92 mm): the engineer specifies those welds. Weld all 2 joints of this type the same way.

46 Weld out the bed sub-frame, joint 8 of 10 (×2)



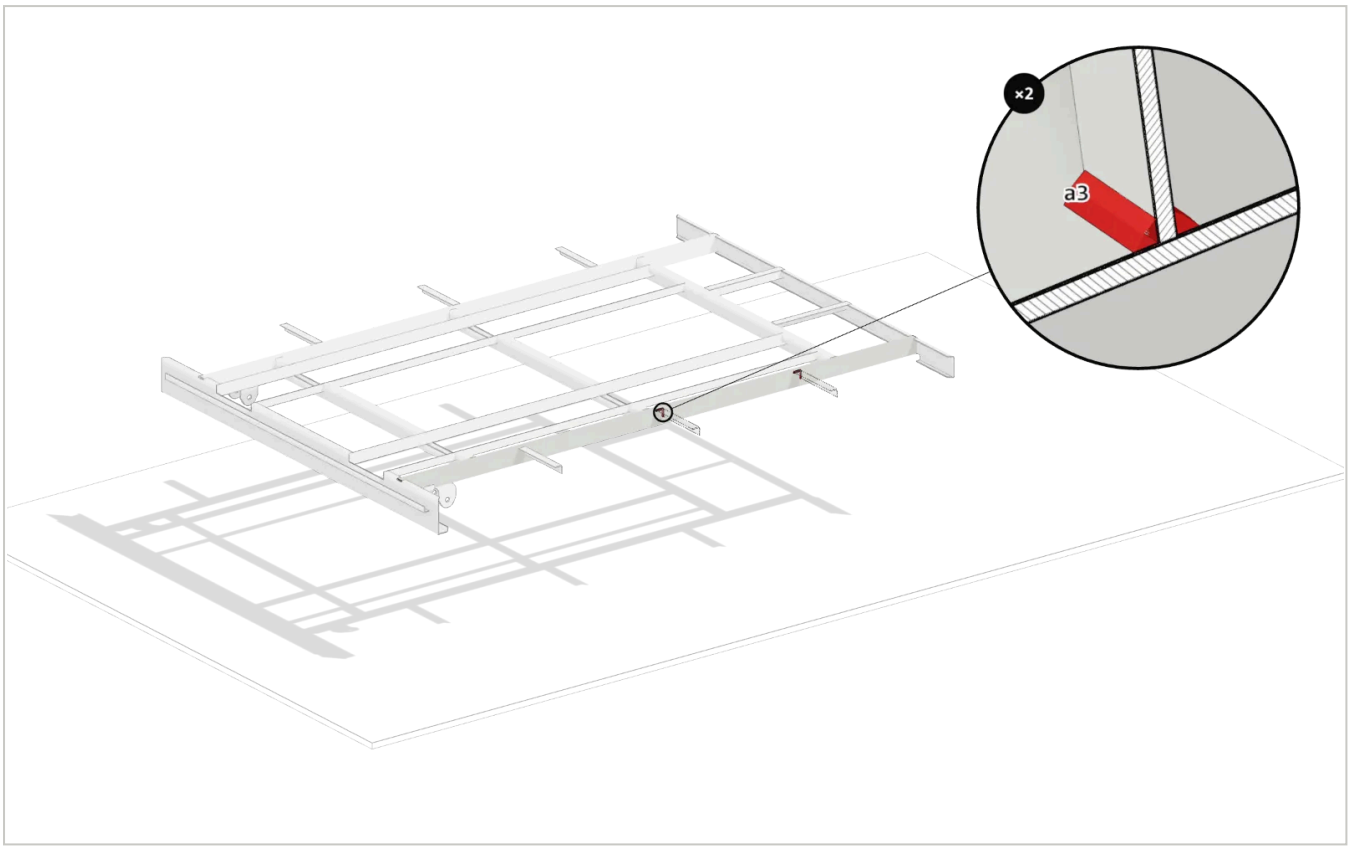
MAG (135), fillet a3, continuous, 1 run. Size proposed at the EN 1993-1-8 minimum; confirm with engineering. Parts here are thinner than the a3 minimum (2.92 mm): the engineer specifies those welds. Weld all 2 joints of this type the same way.

47 Weld out the bed sub-frame, joint 9 of 10 (×2)



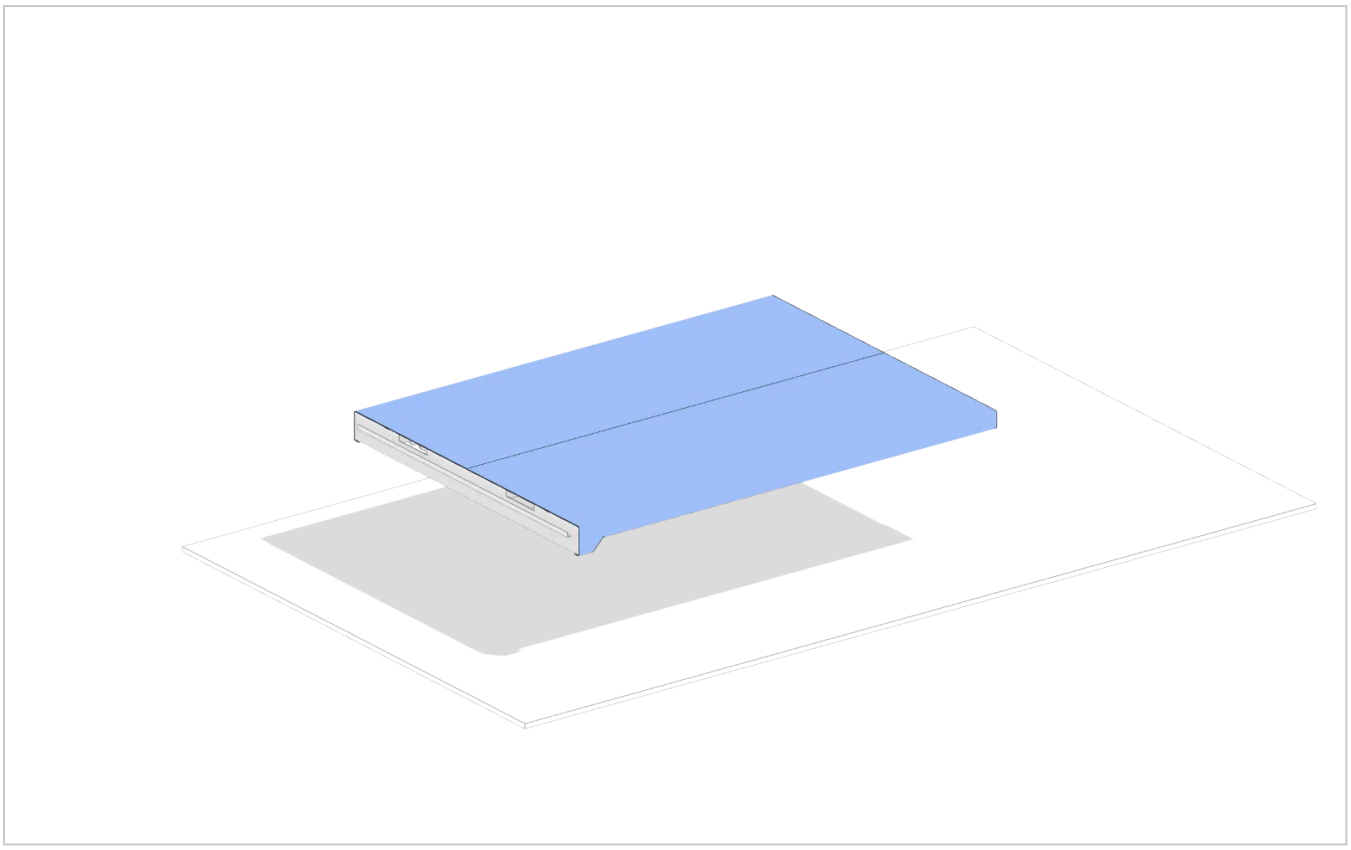
MAG (135), fillet a3, continuous, 1 run. Size proposed at the EN 1993-1-8 minimum; confirm with engineering. Parts here are thinner than the a3 minimum (2.96 mm): the engineer specifies those welds. Weld all 2 joints of this type the same way.

48 Weld out the bed sub-frame, joint 10 of 10 (×2)



MAG (135), fillet a3, continuous, 1 run. Size proposed at the EN 1993-1-8 minimum; confirm with engineering. Parts here are thinner than the a3 minimum (2.96 mm): the engineer specifies those welds. Weld all 2 joints of this type the same way.

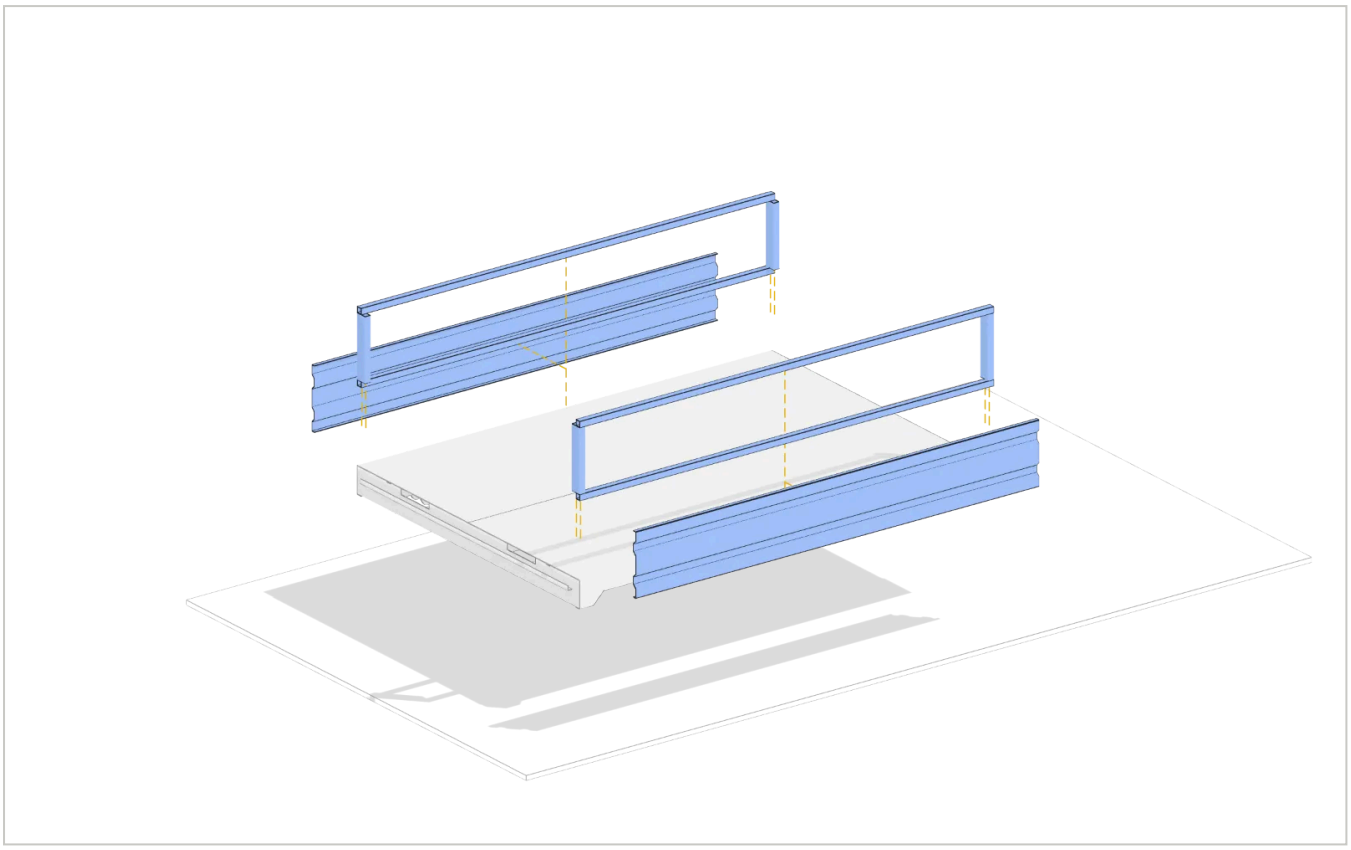
49 Lay the floor



Lay the two floor panels on the sub-frame, butt them on the centre line and plug weld through the stringers, with stitches along the rails, to the drawing.

Item	Part number	Description	Qty
183	PART_1_3	Floor panel, RH	1
212	PART_2_3	Floor panel, LH	1

50 Build the lower side frames

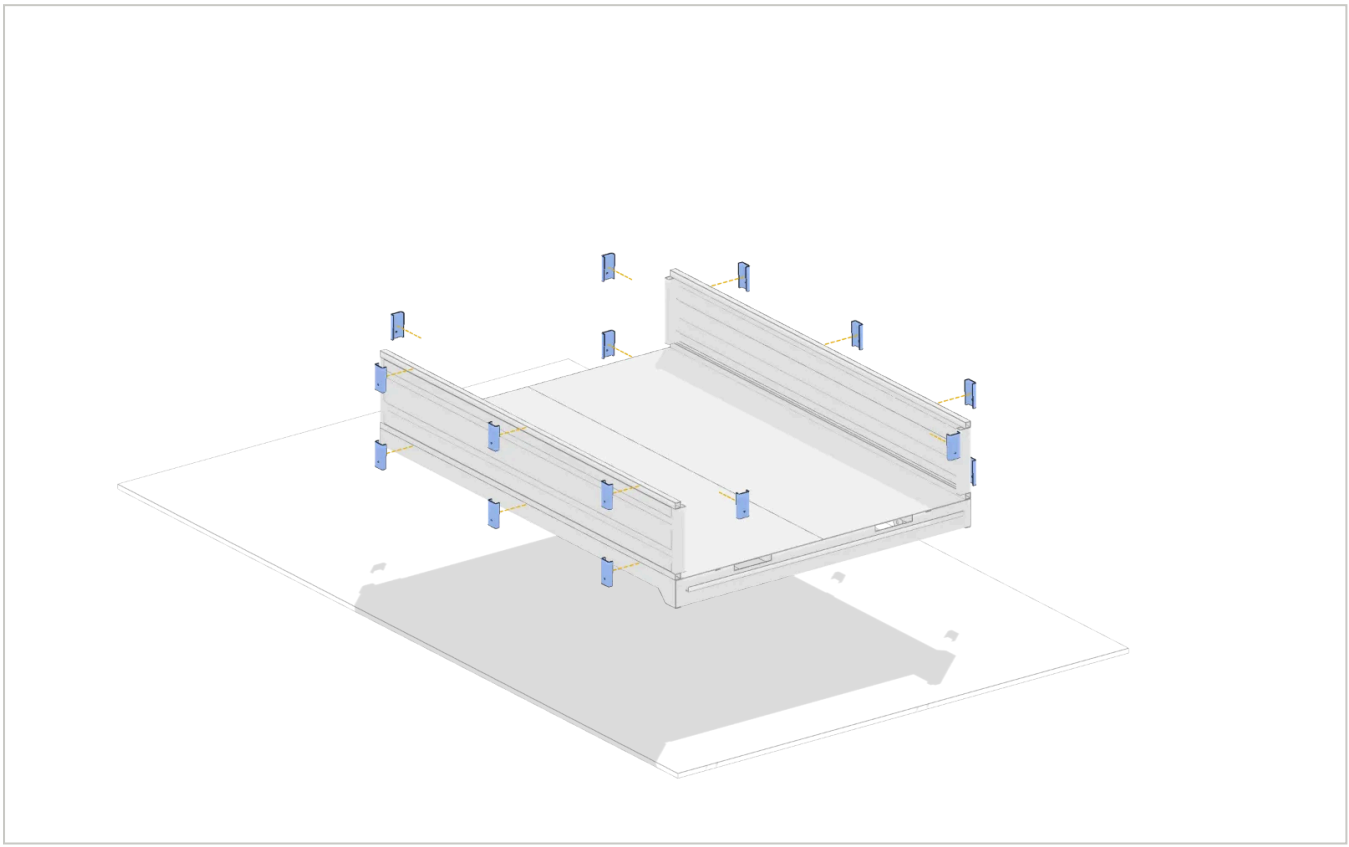


Fit the bottom and mid side rails and the four corner posts each side, then offer the side panels up from the outside. Weld the tubes and stitch the sheet panels, to the drawing.

Item	Part number	Description	Qty
146	PART_10_3	Side rail, bottom, LH	1
156	PART_12_3	Side rail, mid, LH	1
182	PART_1_2	Side rail, bottom, RH	1
235	PART_3_2	Side rail, mid, RH	1
149	PART_11_3	Corner post	1
163	PART_13_3	Corner post	1
186	PART_20_2	Corner post	1
192	PART_22_2	Corner post	1
211	PART_2_2	Corner post	1
255	PART_4_2	Corner post	1
269	PART	Corner post	2
178	PART_18_3	Side panel, LH	1

Item	Part number	Description	Qty
298	PART_9_2	Side panel, RH	1

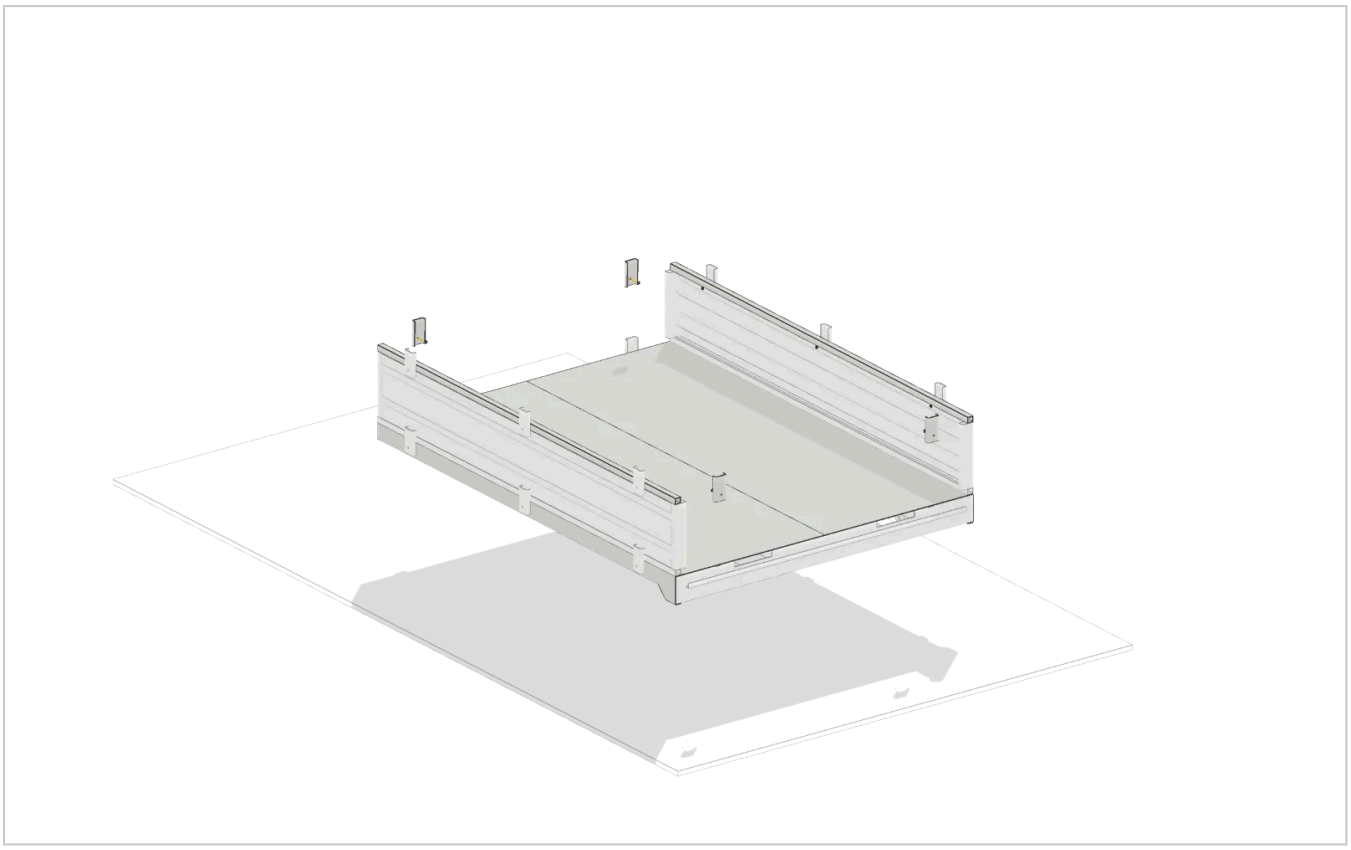
51 Fit and tack the inner fence mounts



Fit the eighteen inner fence mounts to the outside of the side, front and tailgate rails, and tack them.

Item	Part number	Description	Qty
59	FENCE_MOUNT_INNER	Fence Mount, Inner_9	18

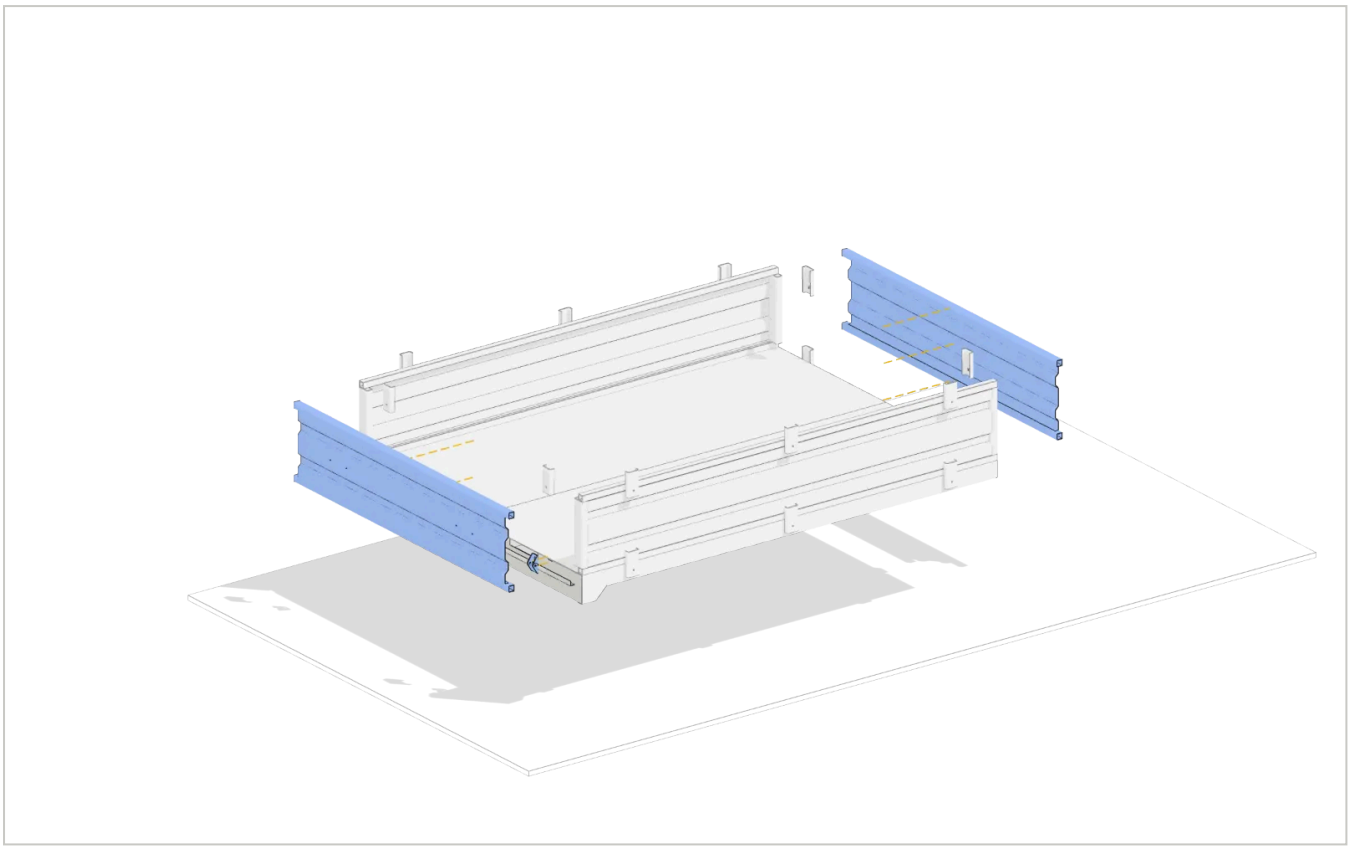
52 Weld the square nuts to the mounts



Weld an M8 square nut over the hole in each inner fence mount with two tacks.

Item	Part number	Description	Qty
344	WELD_NUT_SQUARE_M8X1_25MM	Weld Nut, Square, M8x1.25mm_9	18

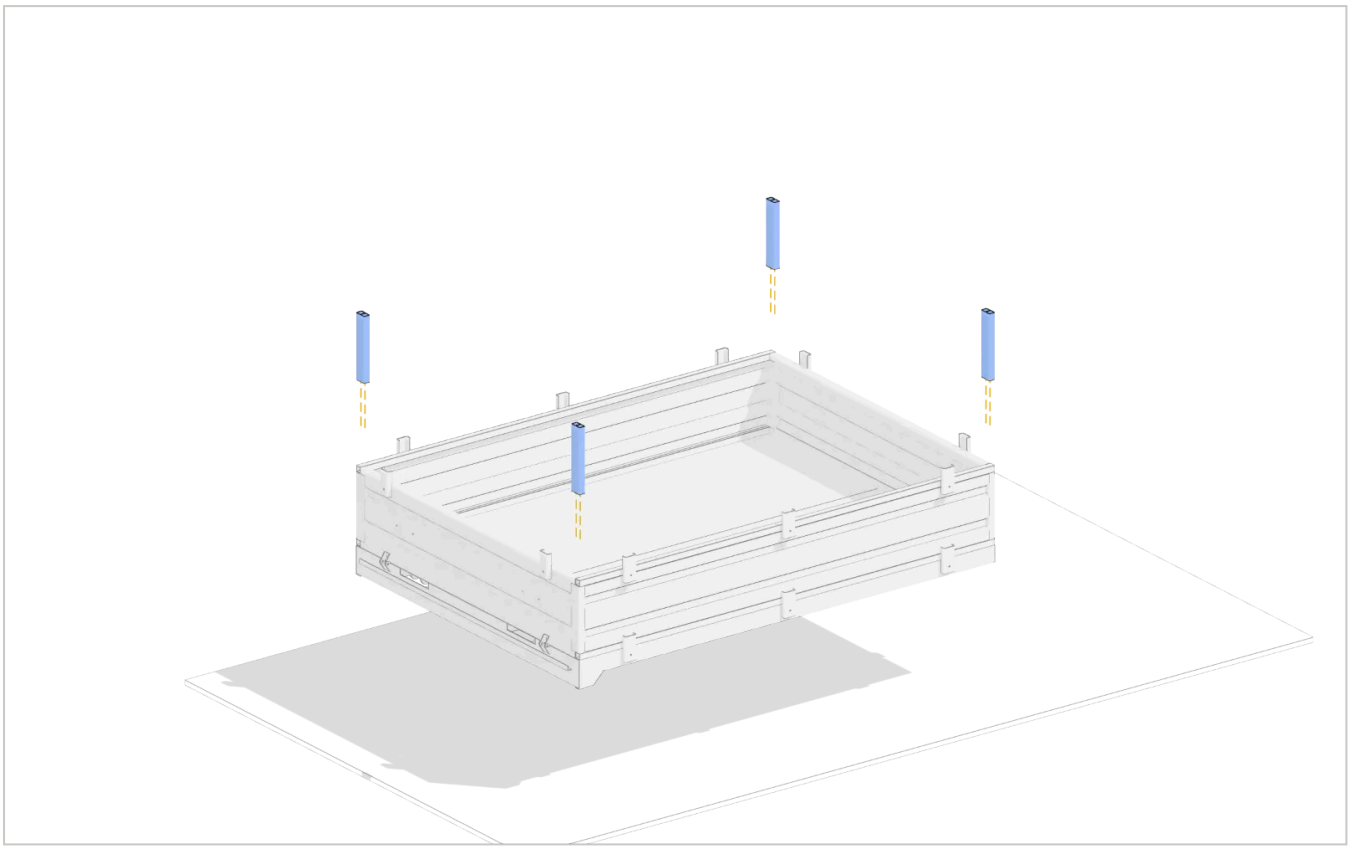
53 Fit the front wall and the tailgate



Fit the front wall rails and panel between the front posts from the front. Fit the tailgate rails and panel on the two hinge halves at the rear sill. Rails 3 mm fillet, sheet 2 mm stitches, hinge halves 4 mm fillet both sides.

Item	Part number	Description	Qty
180	PART_19_2	Front wall rail	1
189	PART_21_2	Front wall rail	1
268	PART	Tailgate rail	2
205	PART_27	Front panel	1
291	PART_72	Tailgate panel	1
89	HINGE_INNER	Hinge, Inner_1	2
90	HINGE_OUTER	Hinge, Outer_1	2

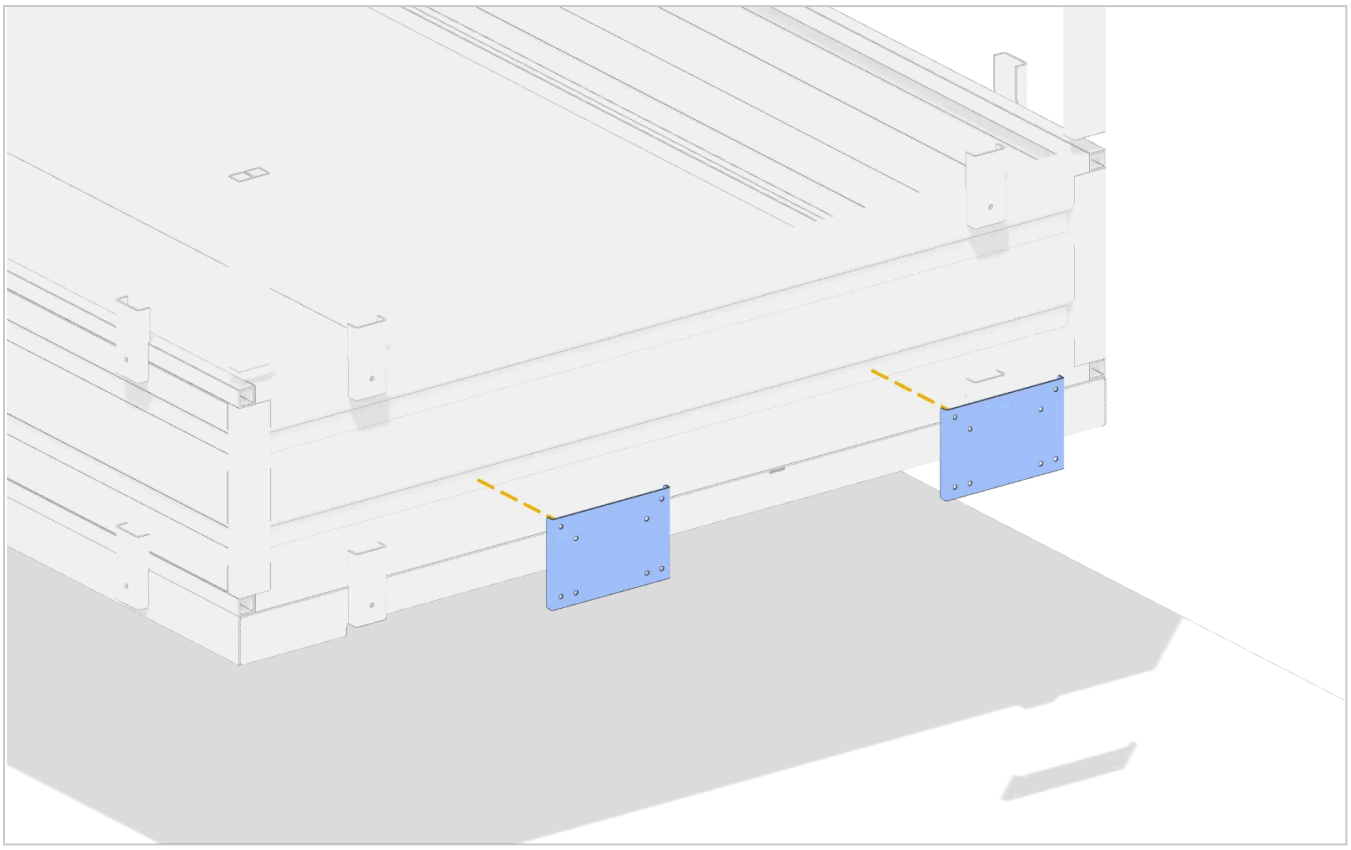
54 Fit the extension posts



Drop the eight extension posts into the fence mounts.

Item	Part number	Description	Qty
209	PART	Extension post	4
232	PART_38_2	Extension post	1
239	PART_40_2	Extension post	1
250	PART_47_2	Extension post	1
254	PART_49_2	Extension post	1

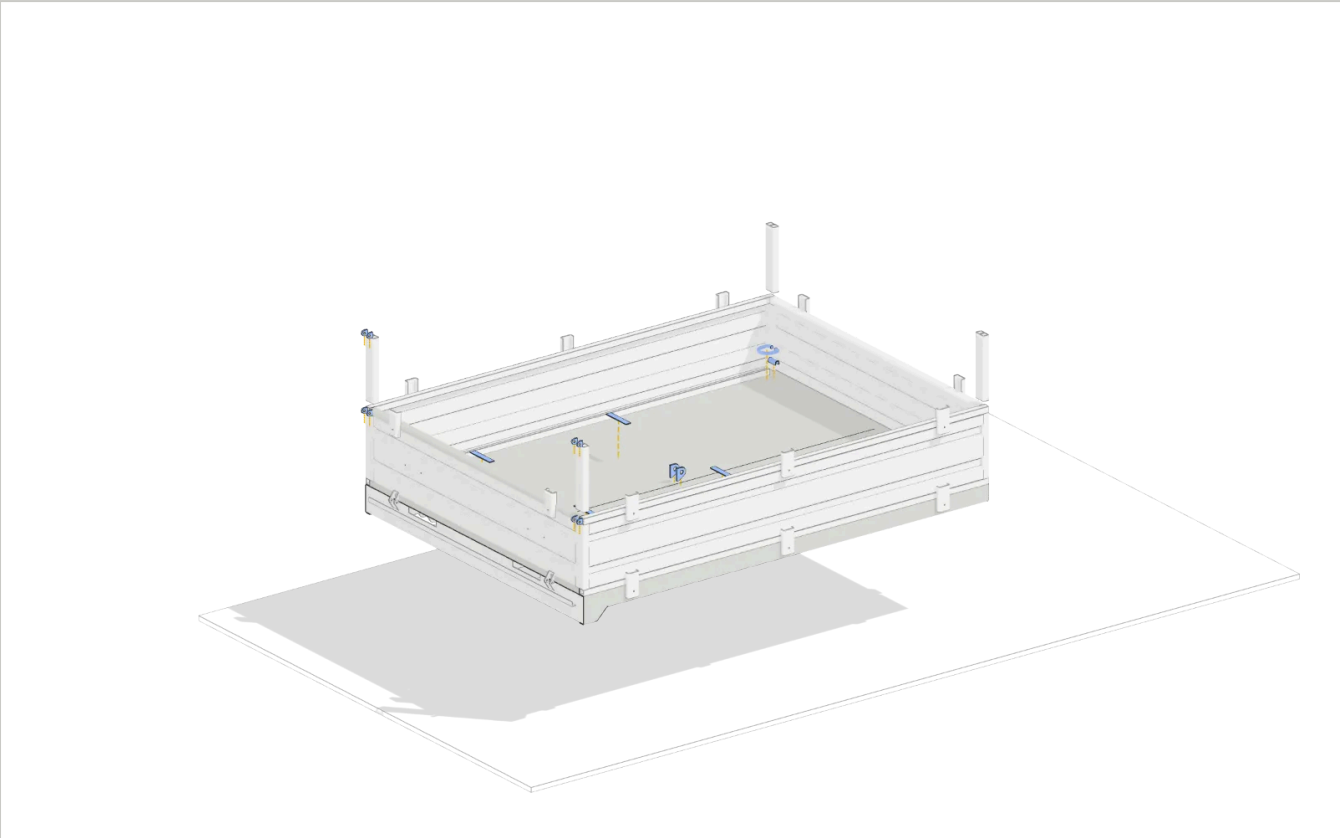
55 Fit and tack the chock plates



Fit the two wheel chock plates to the outside of the front wall and tack them.

Item	Part number	Description	Qty
349	WHEEL_CHOCK_WELD_PLATE	Wheel Chock Weld Plate_1	2

56 Fit and tack the tabs, plates and strips

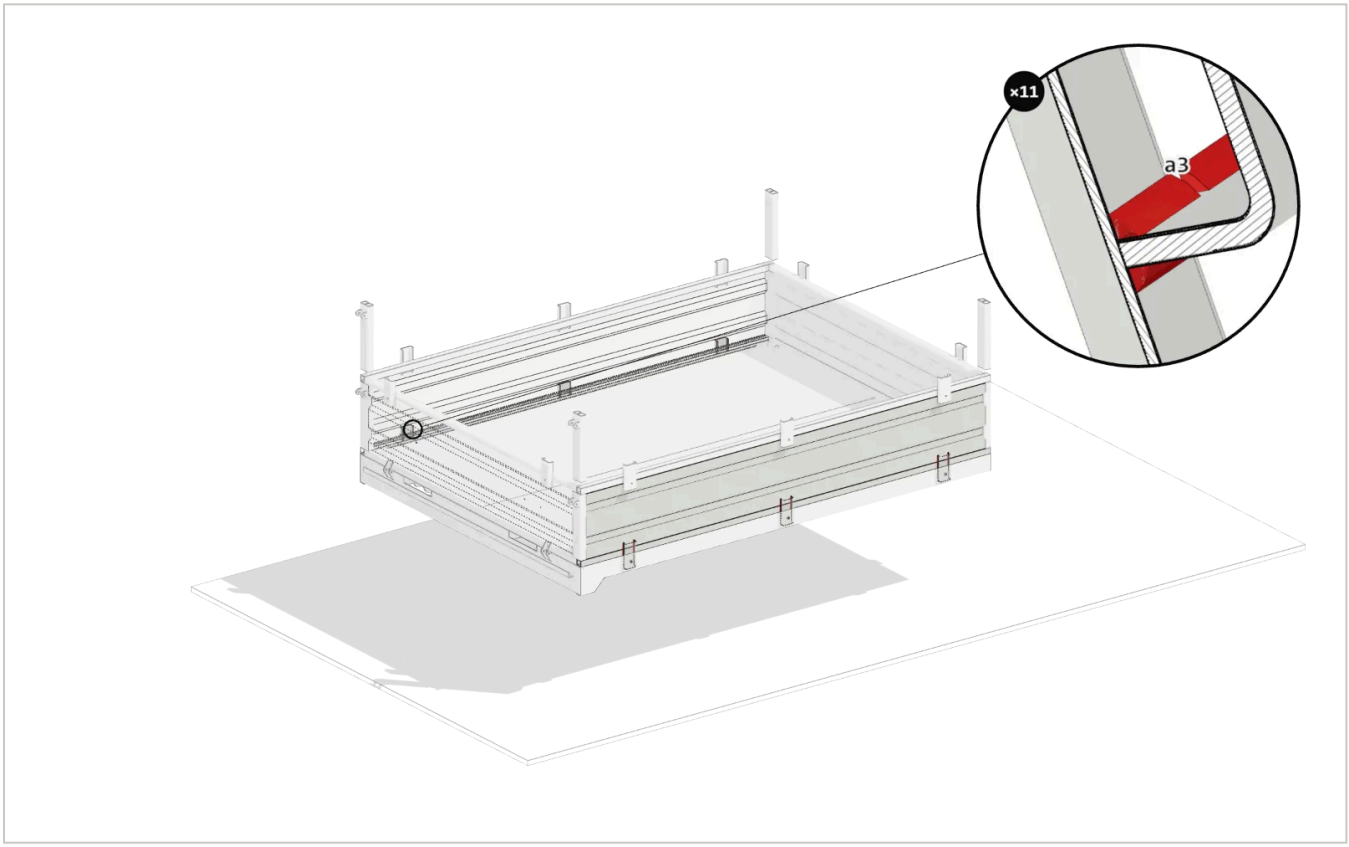


Fit the remaining tabs, plates and strips: the tie-down tabs on the rails, the stake pocket plates and the wear strips, and tack them.

Item	Part number	Description	Qty
151	PART_125	Part 125	1
152	PART_126	Part 126	1
153	PART_127	Part 127	1
154	PART_128	Part 128	1
158	PART_133	Part 133	1
159	PART_134	Part 134	1
160	PART_135	Part 135	1
161	PART_136	Part 136	1
193	PART_22_3	Part 22_2	1
196	PART_23_3	Part 23_2	1
199	PART_24_3	Part 24_2	1
202	PART_25_3	Part 25_2	1
246	PART_45_2	Part 45_1	1

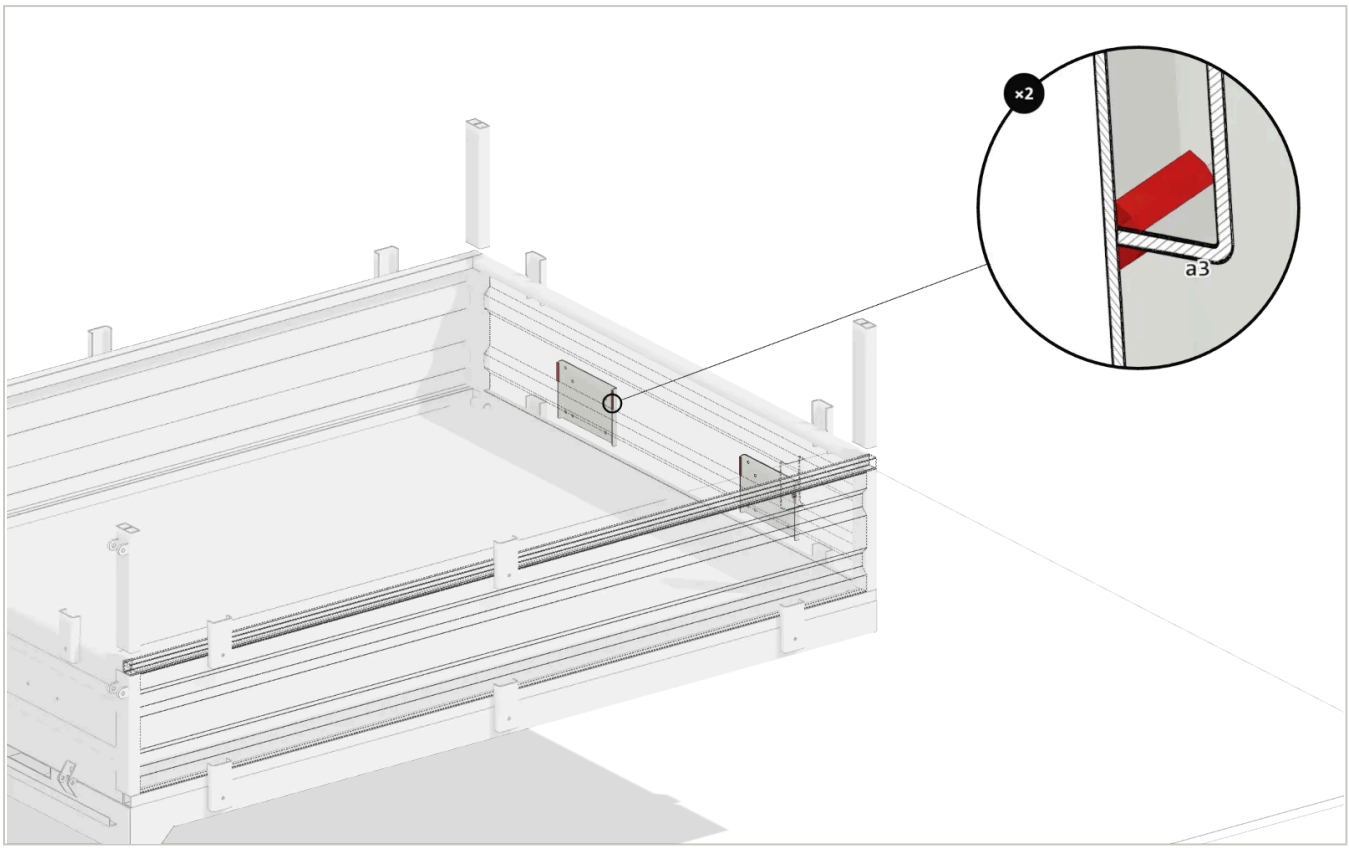
Item	Part number	Description	Qty
247	PART_46	Part 46	1
249	PART_47	Part 47	1
251	PART_48	Part 48	1
253	PART_49	Part 49	1
258	PART_50	Part 50	1
260	PART_51	Part 51	1
262	PART_52	Part 52	1
264	PART_53	Part 53	1
266	PART_54	Part 54	1

57 Weld out the inner fence mounts (×11)



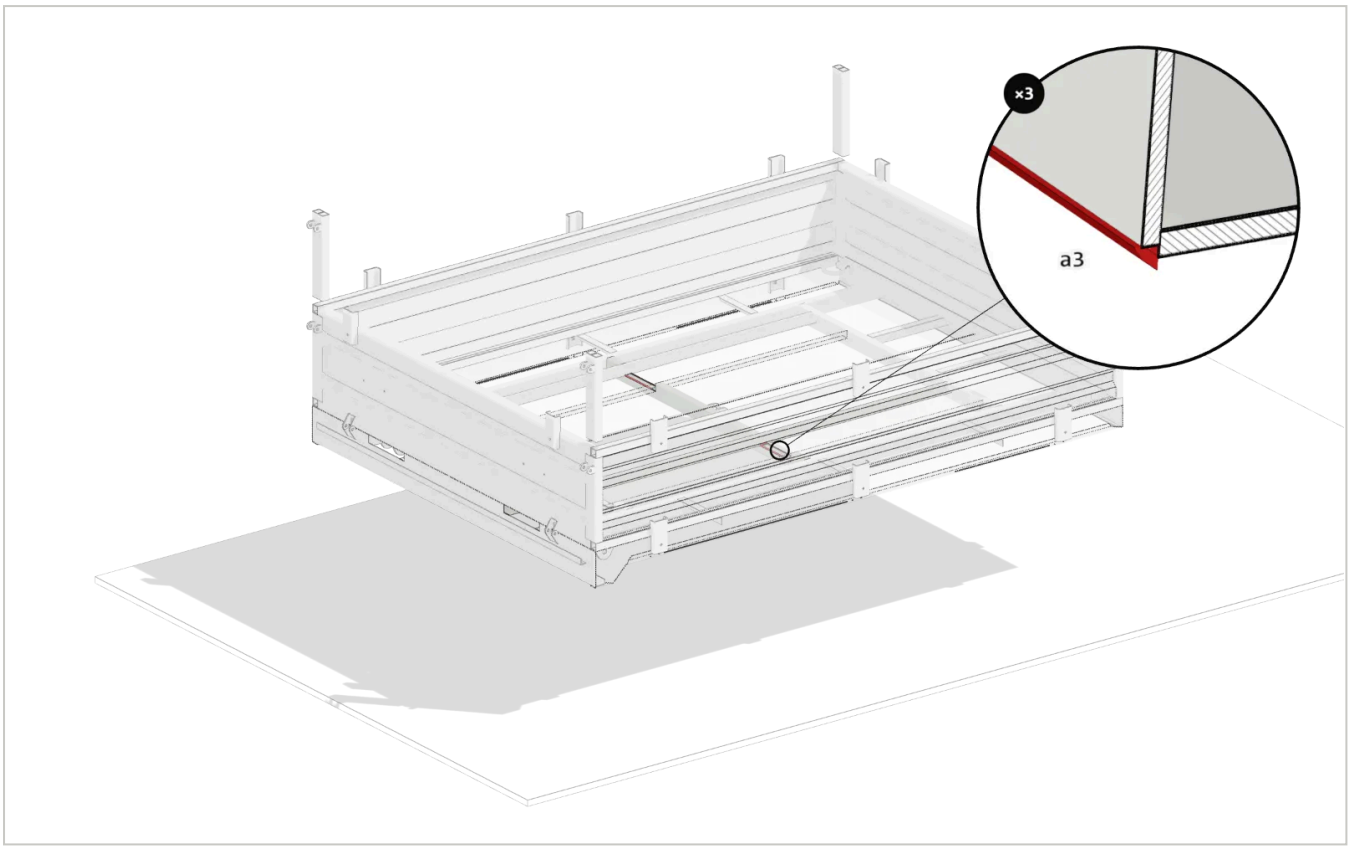
MAG (135), fillet a3, continuous, 1 run. Size proposed at the EN 1993-1-8 minimum; confirm with engineering. Parts here are thinner than the a3 minimum (1.99 mm): the engineer specifies those welds. a3 is close to the 3 mm wall: keep the heat down and watch for burn-through. Weld all 11 joints of this type the same way.

58 Weld out the chock plates (×2)



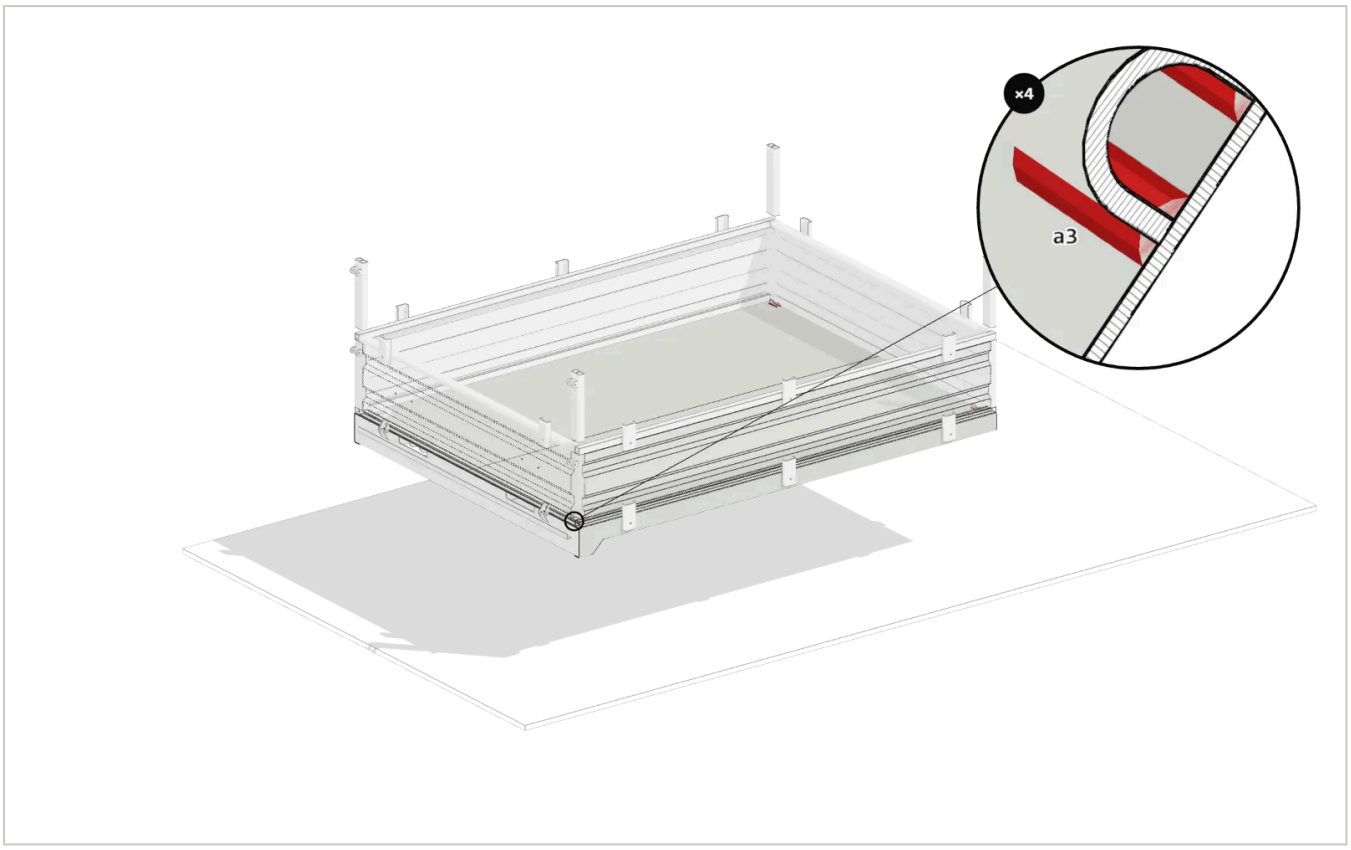
MAG (135), fillet a3, continuous, 1 run. Size proposed at the EN 1993-1-8 minimum; confirm with engineering. Parts here are thinner than the a3 minimum (1.99 mm): the engineer specifies those welds. Weld all 2 joints of this type the same way.

59 Weld out the tabs, plates and strips, joint 1 of 5 (×3)



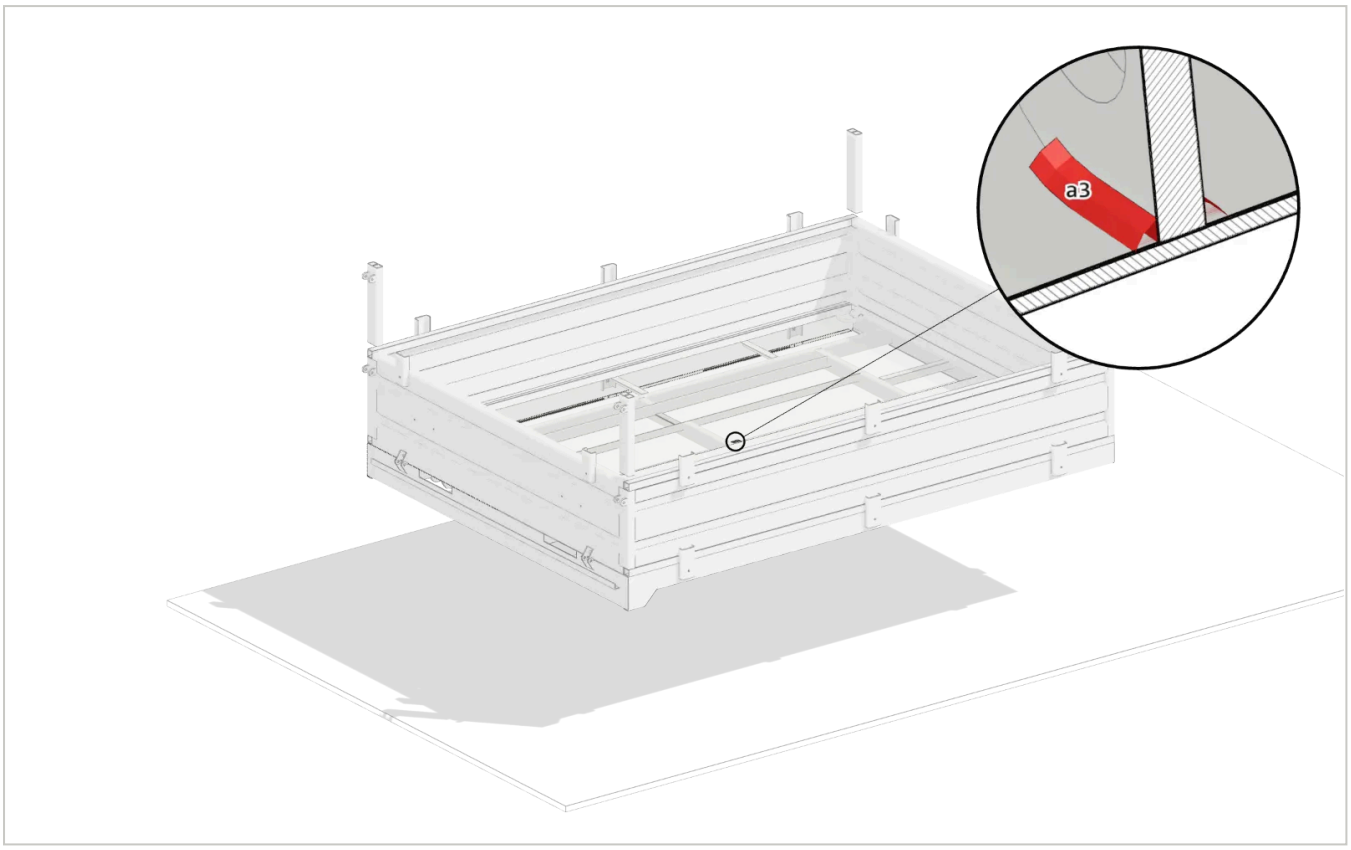
MAG (135), fillet a3, continuous, 1 run. Size proposed at the EN 1993-1-8 minimum; confirm with engineering. Parts here are thinner than the a3 minimum (2.99 mm): the engineer specifies those welds. a3 is close to the 3 mm wall: keep the heat down and watch for burn-through. Weld all 3 joints of this type the same way.

60 Weld out the tabs, plates and strips, joint 2 of 5 (×4)



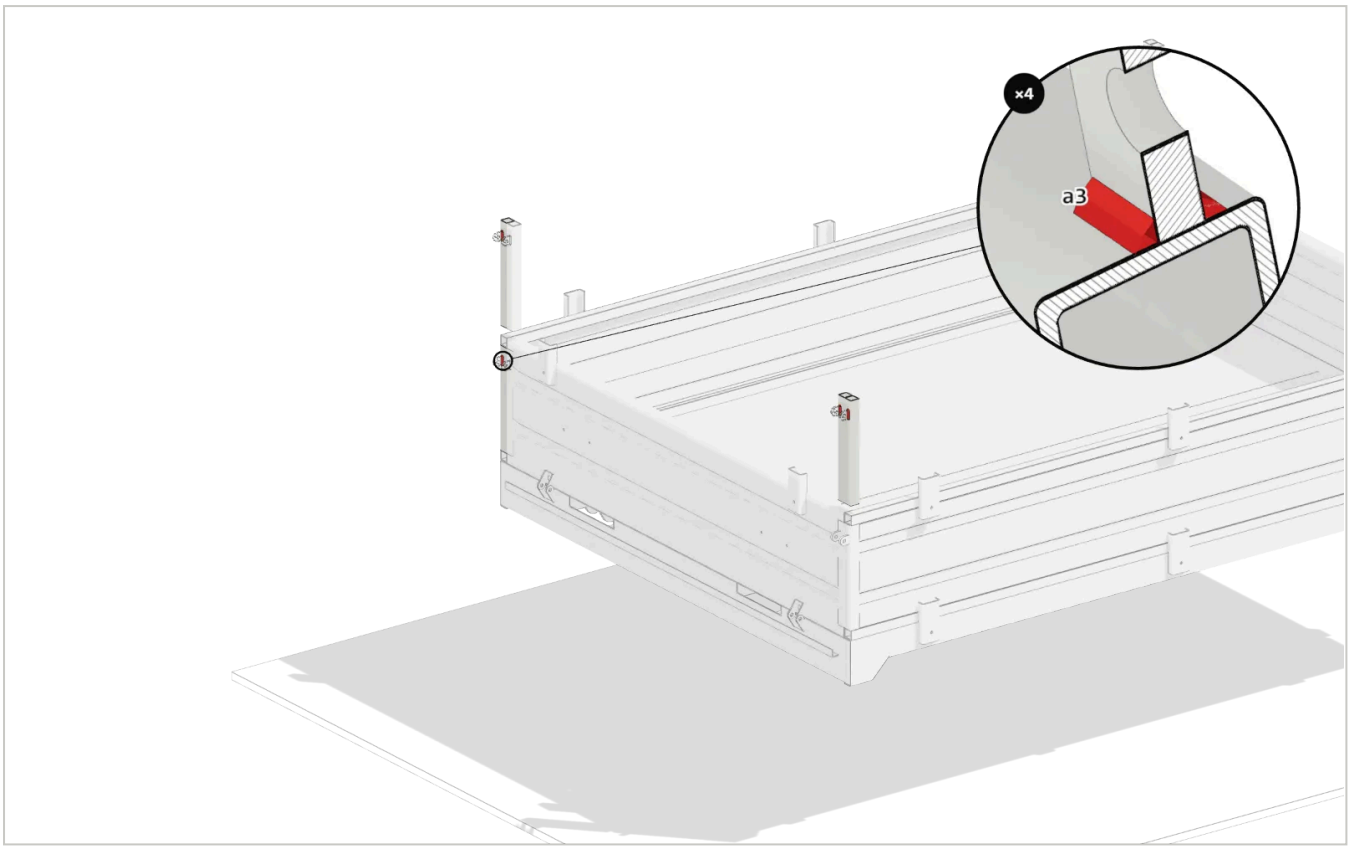
MAG (135), fillet a3, continuous, 1 run. Size proposed at the EN 1993-1-8 minimum; confirm with engineering. Parts here are thinner than the a3 minimum (2.99 mm): the engineer specifies those welds. Weld all 4 joints of this type the same way.

61 Weld out the tabs, plates and strips, joint 3 of 5



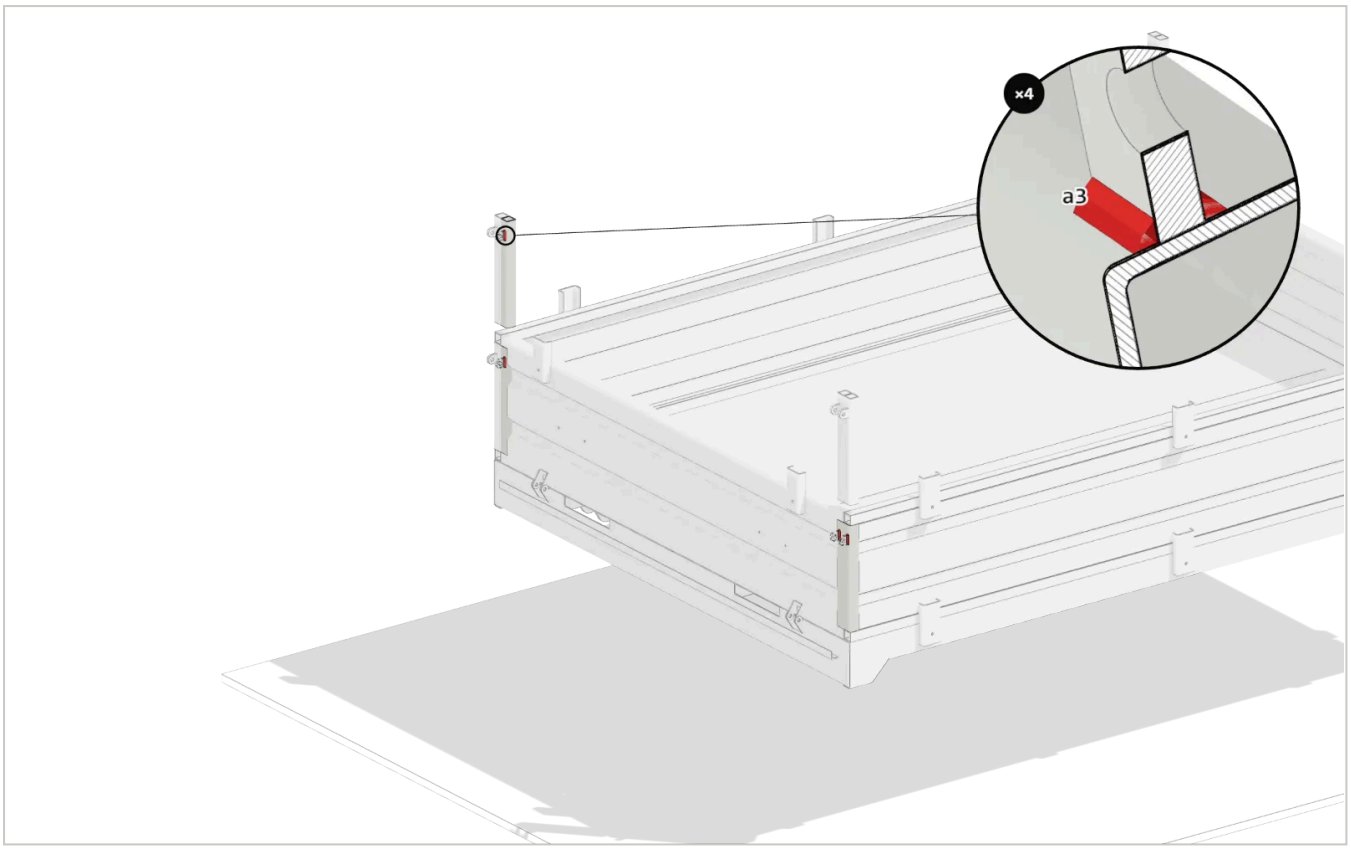
MAG (135), fillet a3, continuous, 1 run. Size proposed at the EN 1993-1-8 minimum; confirm with engineering. Parts here are thinner than the a3 minimum (2.99 mm): the engineer specifies those welds.

62 Weld out the tabs, plates and strips, joint 4 of 5 (×4)



MAG (135), fillet a3, continuous, 1 run. Size proposed at the EN 1993-1-8 minimum; confirm with engineering. a3 is close to the 3 mm wall: keep the heat down and watch for burn-through. Weld all 4 joints of this type the same way.

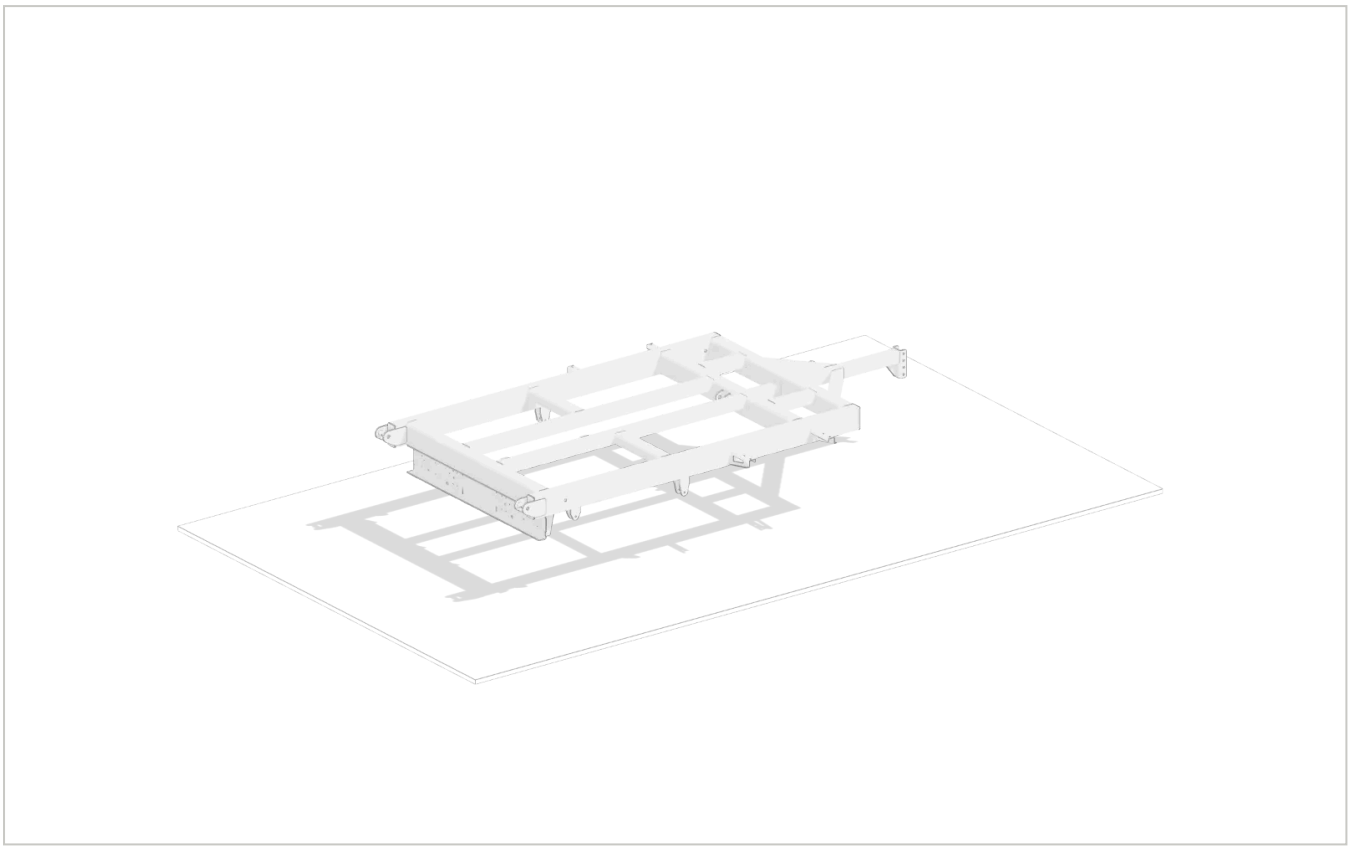
63 Weld out the tabs, plates and strips, joint 5 of 5 (×4)



MAG (135), fillet a3, continuous, 1 run. Size proposed at the EN 1993-1-8 minimum; confirm with engineering. a3 is close to the 3 mm wall: keep the heat down and watch for burn-through. Weld all 4 joints of this type the same way.

Coating

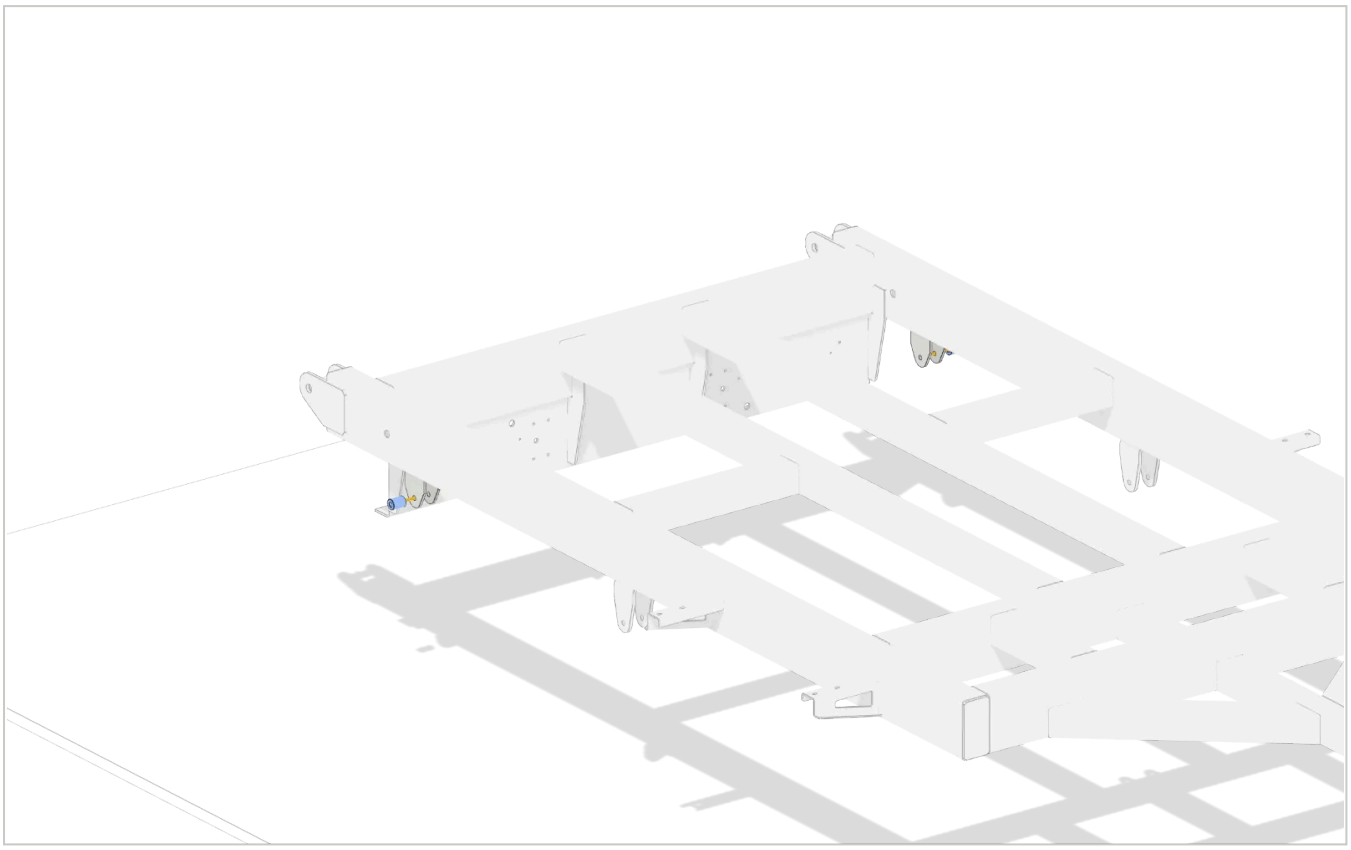
64 Blast and coat the frame, the axle and the bed



Blast clean the welded frame, axle and bed to the finish specification, then paint or galvanise them as it specifies. Mask the bores, threads, pivot faces and grease fittings first. Nothing is bolted on until the coating has cured.

Main frame fit-out

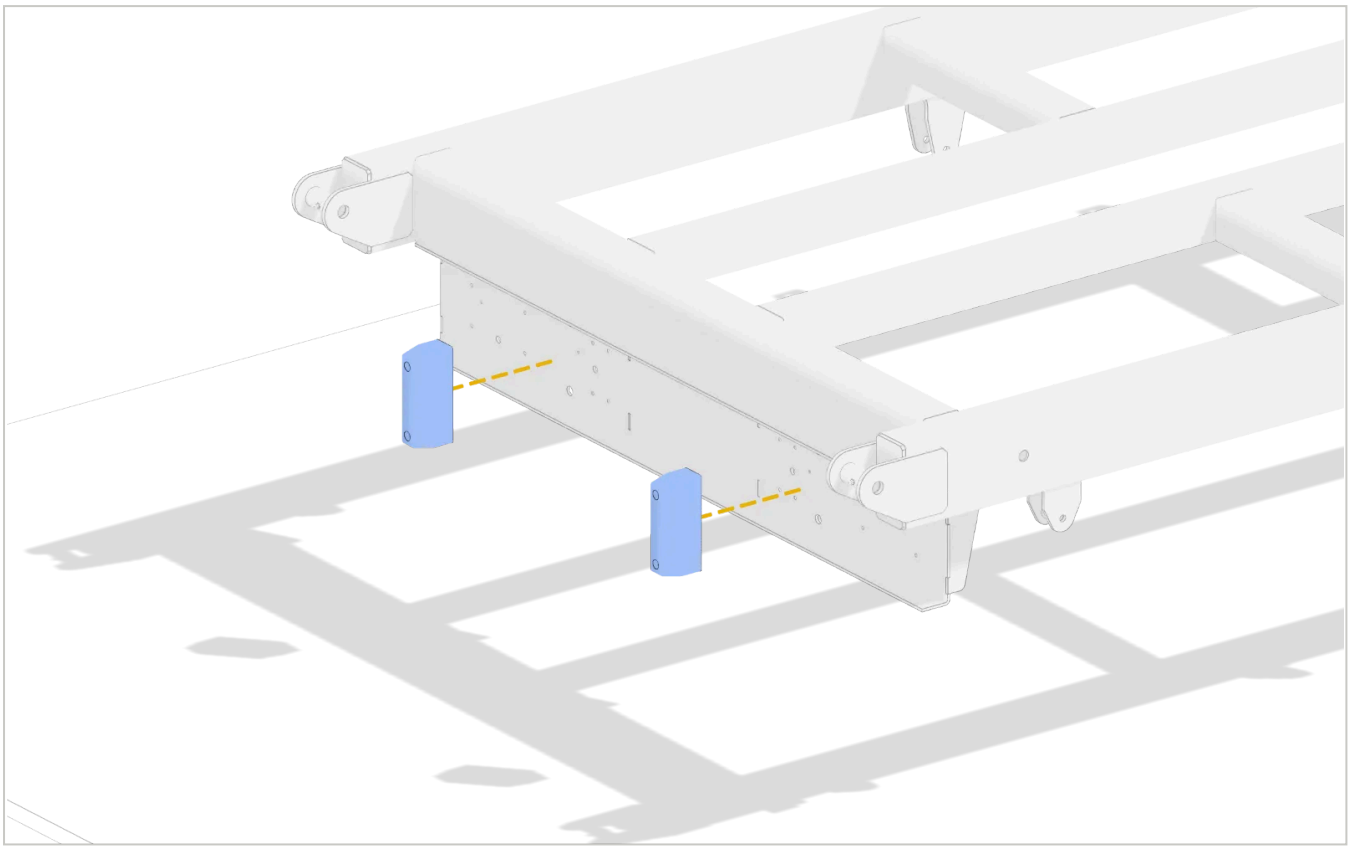
65 Press the rear hanger bushings



Press a bushing into each rear hanger from the outside, flush with the hanger face.

Item	Part number	Description	Qty
320	REAR_HANGER_BUSHING	Rear Hanger Bushing_1	2

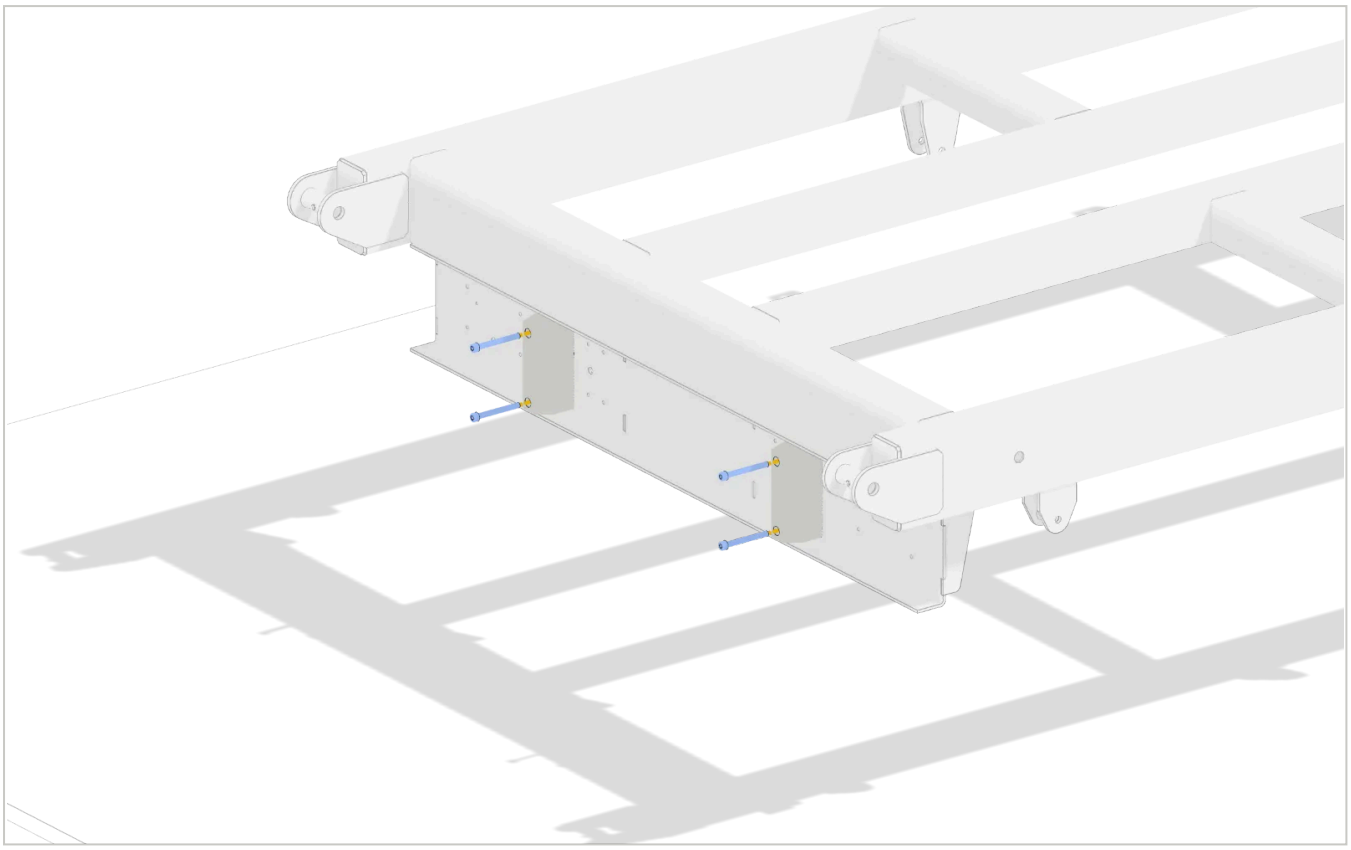
66 Fit the bumper blocks



Hold each bumper block against the rear face of the bumper bar, over its two bolt holes.

Item	Part number	Description	Qty
44	BUMPER_BLOCK	Bumper Block_1	2

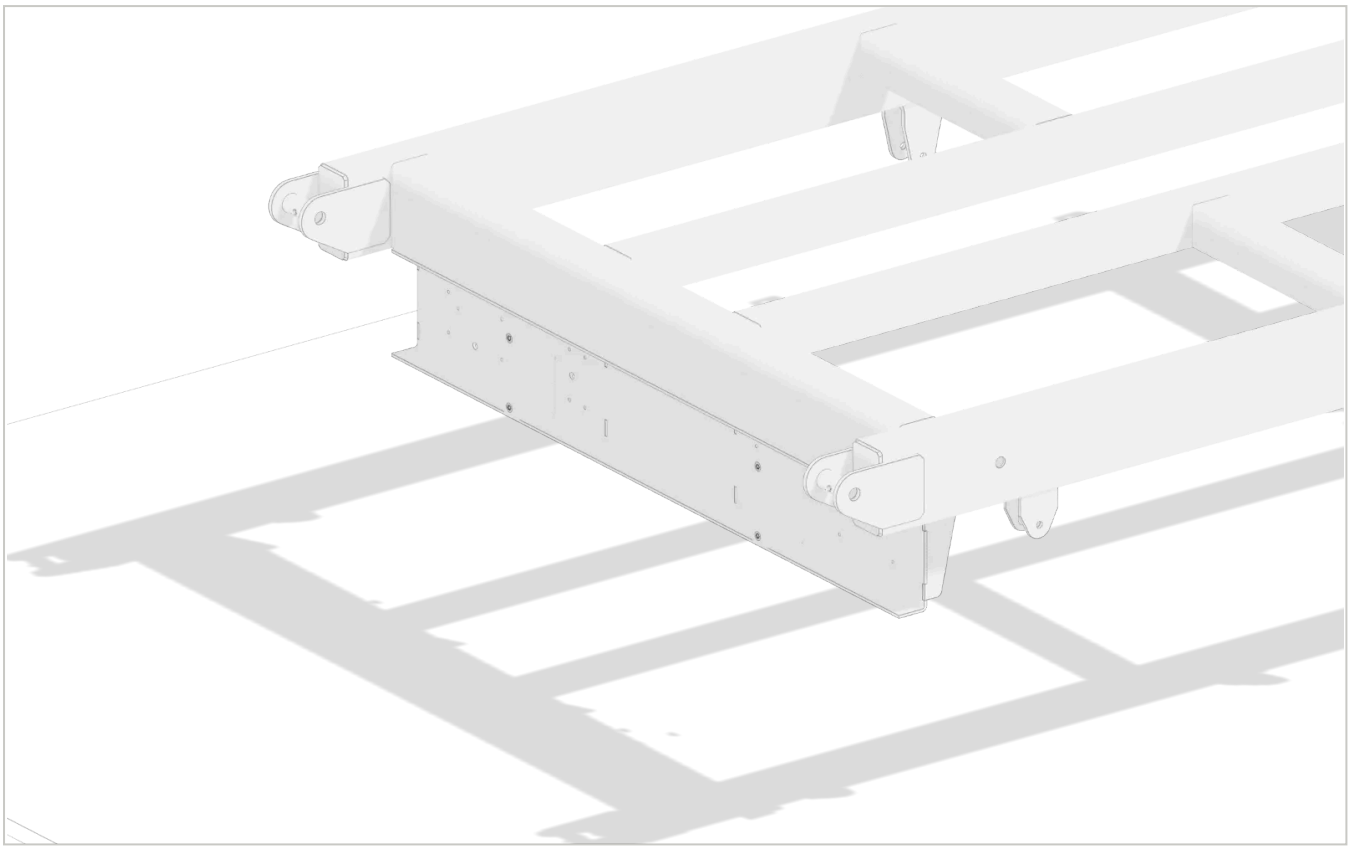
67 Fit the M10 cap screws



Push the four M10 x 90 cap screws through the bumper blocks and the bar from the rear.

Item	Part number	Description	Qty
448	Hex socket head cap screw M10x1.50 x 90 x 32	Hex socket head cap screw M10x1.50 x 90 x 32	4

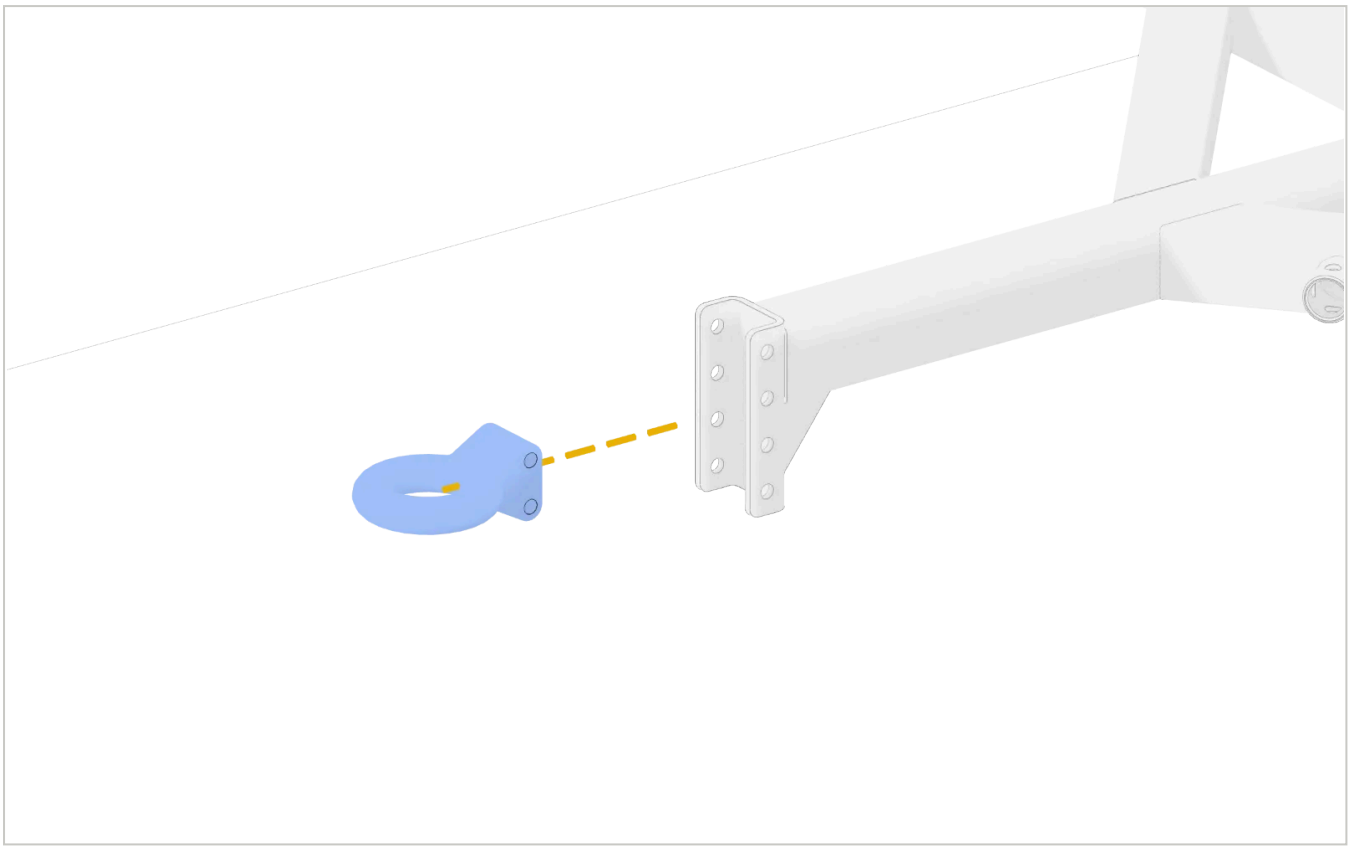
68 Fit the M10 washers and nuts



Fit a washer and an M10 nut on each cap screw from the front of the bar and torque to 45 Nm.

Item	Part number	Description	Qty
449	Hex nut grade A & B M10x1.5	Hex nut grade A & B M10x1.5	4
305	PLAIN_WASHER_NORMAL_GRADE_A_M10	Plain washer normal grade A M10_1	4

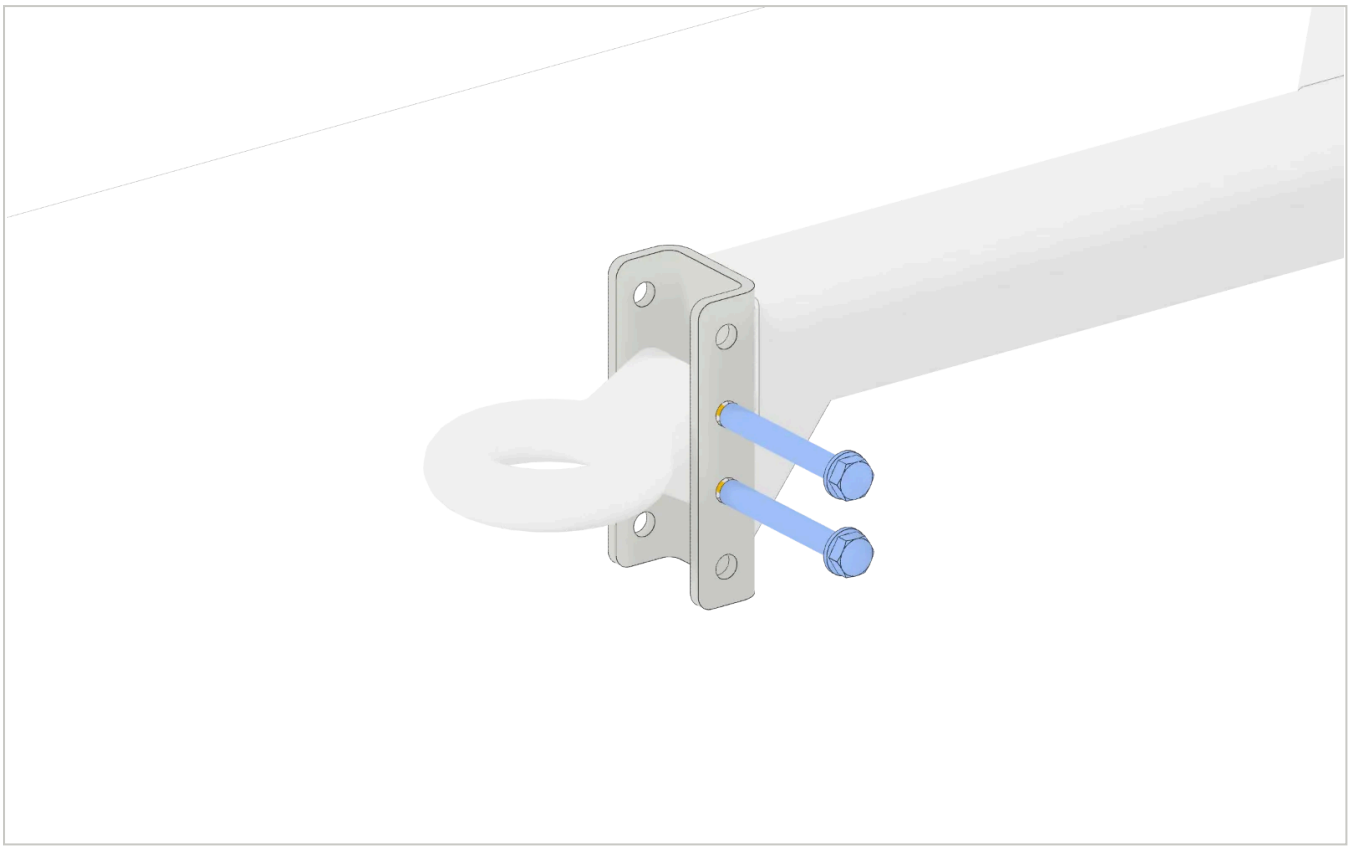
69 Set the drawbar ring on the coupler



Slide the drawbar ring onto the coupler plate from the front until its bolt holes line up with the plate.

Item	Part number	Description	Qty
54	DRAWBAR_RING	Drawbar Ring	1

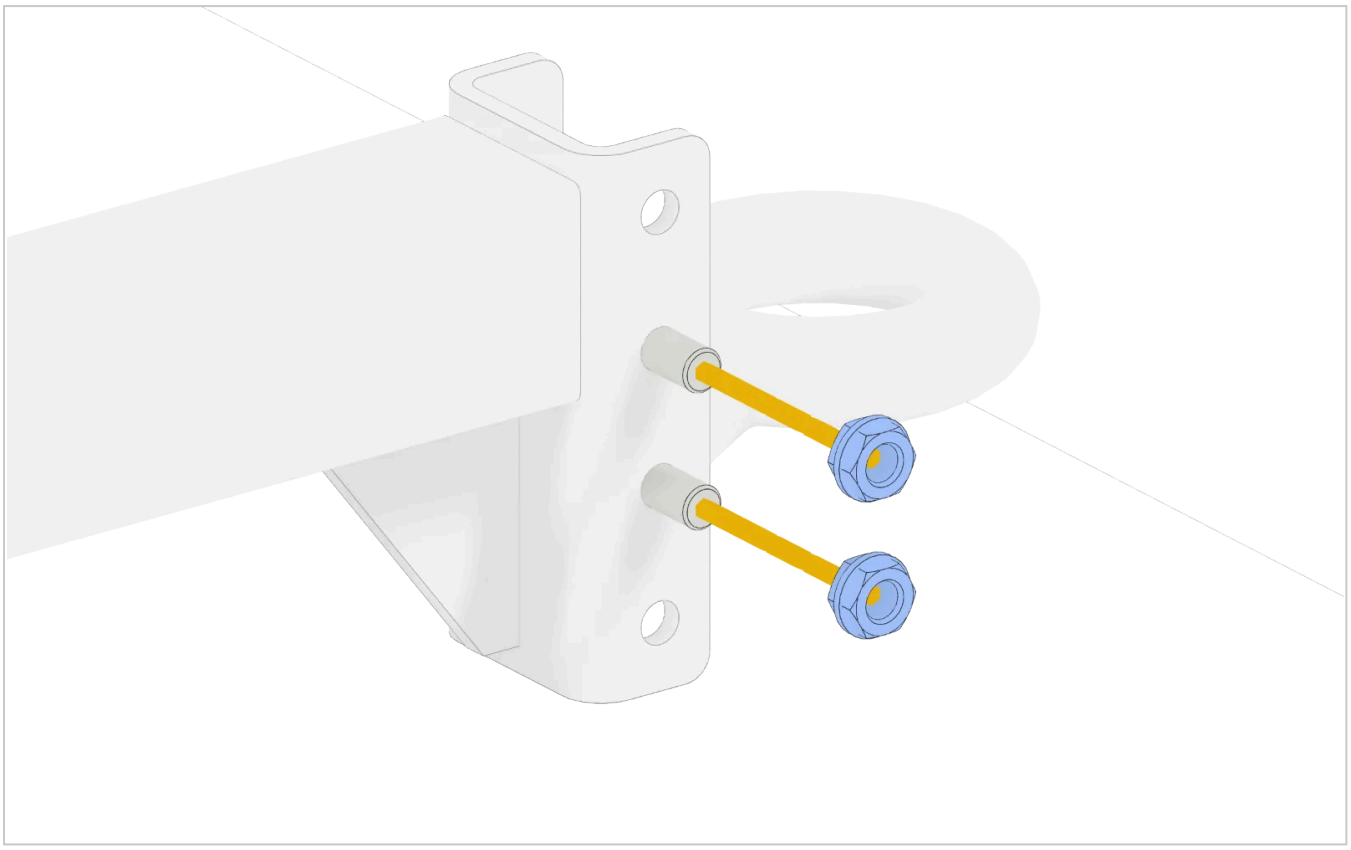
70 Fit the M16 bolts



Push the two M16 x 120 bolts through the ring and the coupler plate, a washer under each head.

Item	Part number	Description	Qty
450	Hex head bolt grade A & B M16x2.00 x 120 x 38	Hex head bolt grade A & B M16x2.00 x 120 x 38	2
307	PLAIN_WASHER_NORMAL_GRADE_A_M16	Plain washer normal grade A M16_3	2

71 Fit the M16 washers and nuts

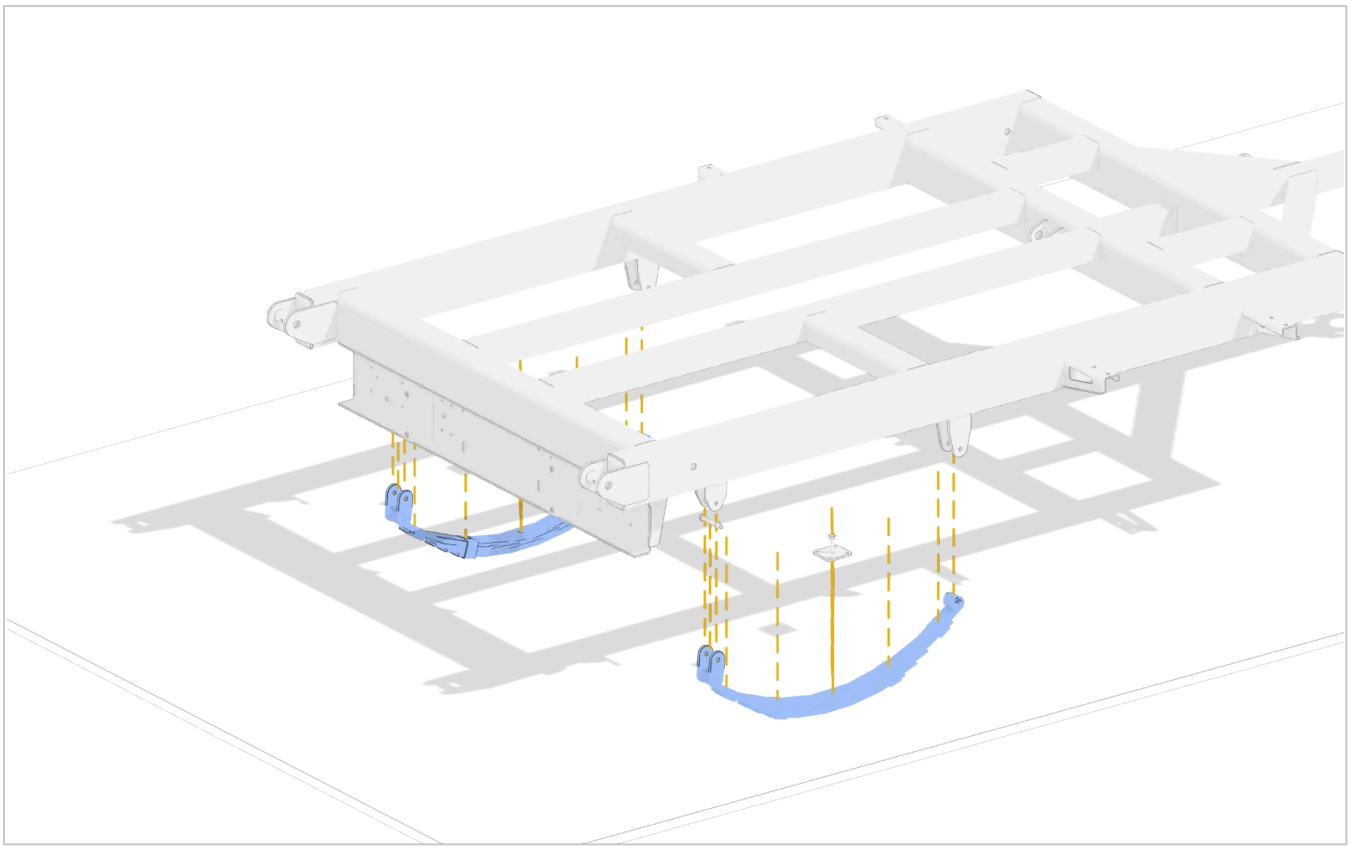


Fit a washer and an M16 nut on each bolt and torque to the coupler manufacturer's value (200 Nm for a grade 8.8 bolt).

Item	Part number	Description	Qty
451	Hex nut grade A & B M16x2	Hex nut grade A & B M16x2	2
307	PLAIN_WASHER_NORMAL_GRADE_A_M16	Plain washer normal grade A M16_3	2

Hang the springs

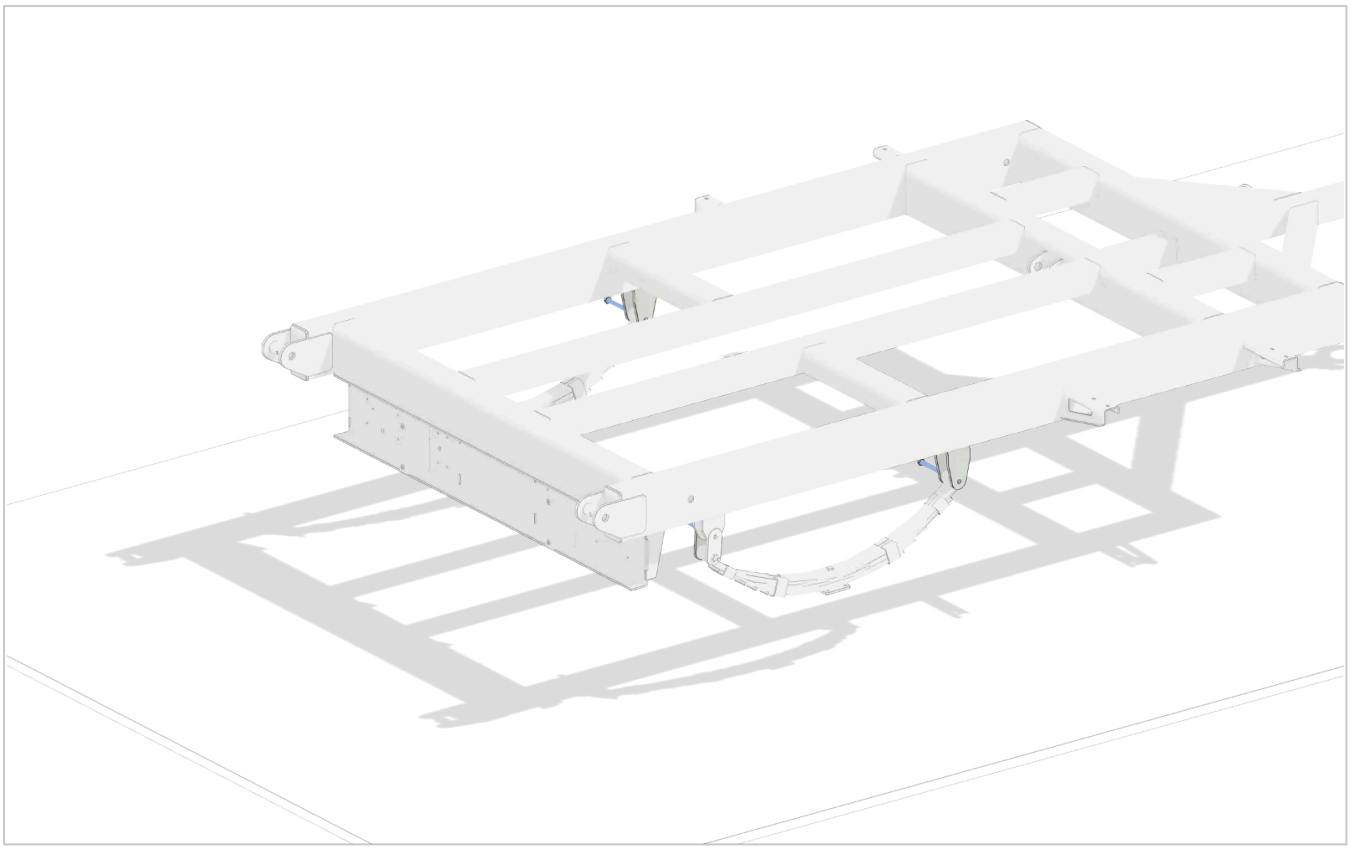
72 Hang the spring packs



Lift each pack up under the frame: front eye into the front hanger, shackle plates either side of the rear hanger bushing.

Item	Part number	Description	Qty
115	LEAF_SHACKLE	Leaf Shackle_3	4
116	LEAF_SPRING_A	Leaf Spring A_1	2
117	LEAF_SPRING_B	Leaf Spring B_1	2
118	LEAF_SPRING_BUSHING	Leaf Spring Bushing_3	4
119	LEAF_SPRING_C	Leaf Spring C_1	2
120	LEAF_SPRING_D	Leaf Spring D_1	2
121	LEAF_SPRING_E	Leaf Spring E_1	2
122	LEAF_SPRING_F	Leaf Spring F_1	2
321	REBOUND_CLIP_2_LEAF	Rebound Clip, 2 Leaf_3	4
322	REBOUND_CLIP_6_LEAF	Rebound Clip, 6 Leaf_3	4

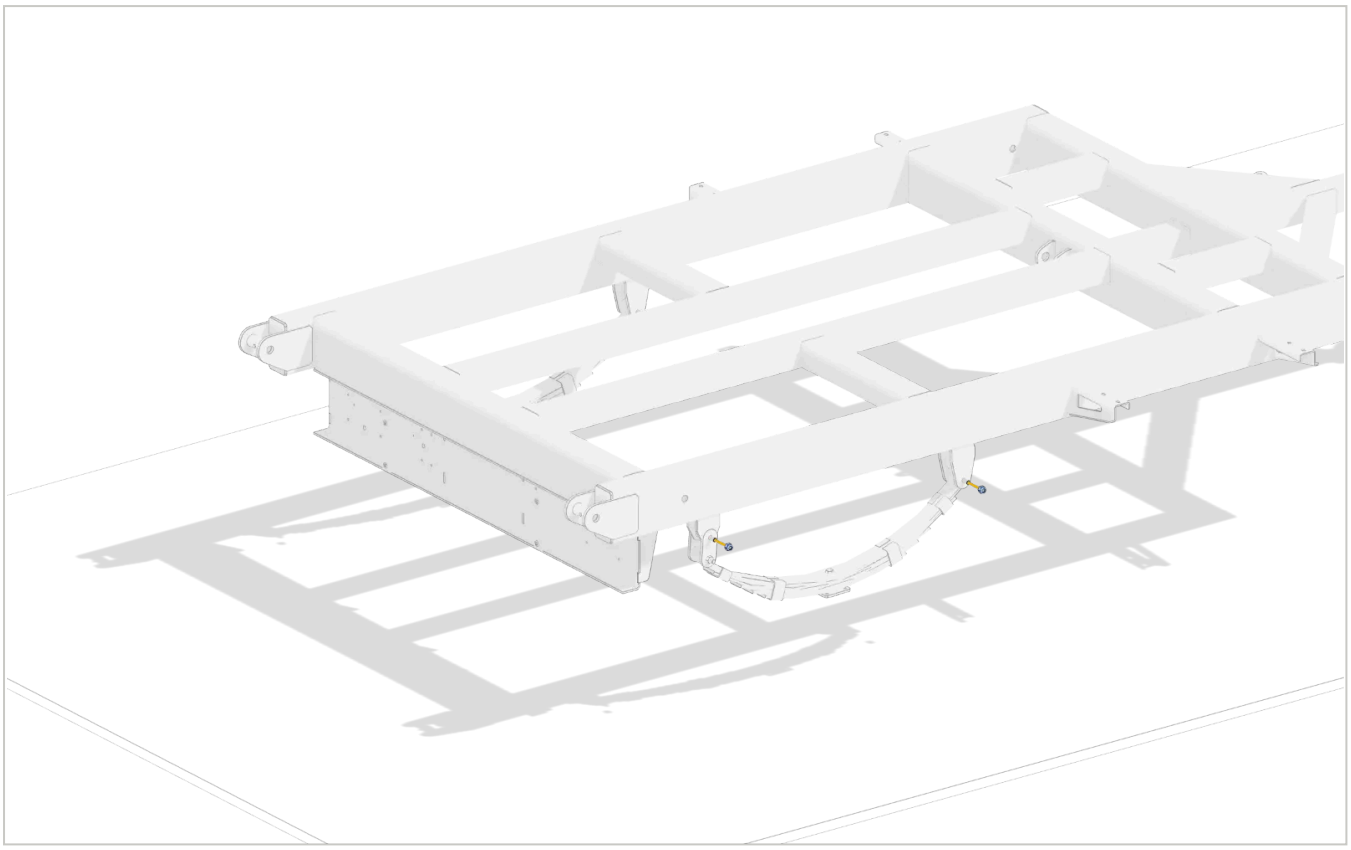
73 Fit the hanger bolts



Push an M12 x 90 bolt through each front hanger and eye, and through each pair of shackle plates and the rear hanger bushing.

Item	Part number	Description	Qty
447	Hex head bolt grade C M12x1.75 x 90 x 30	Hex head bolt grade C M12x1.75 x 90 x 30	4

74 Fit the M12 lock nuts

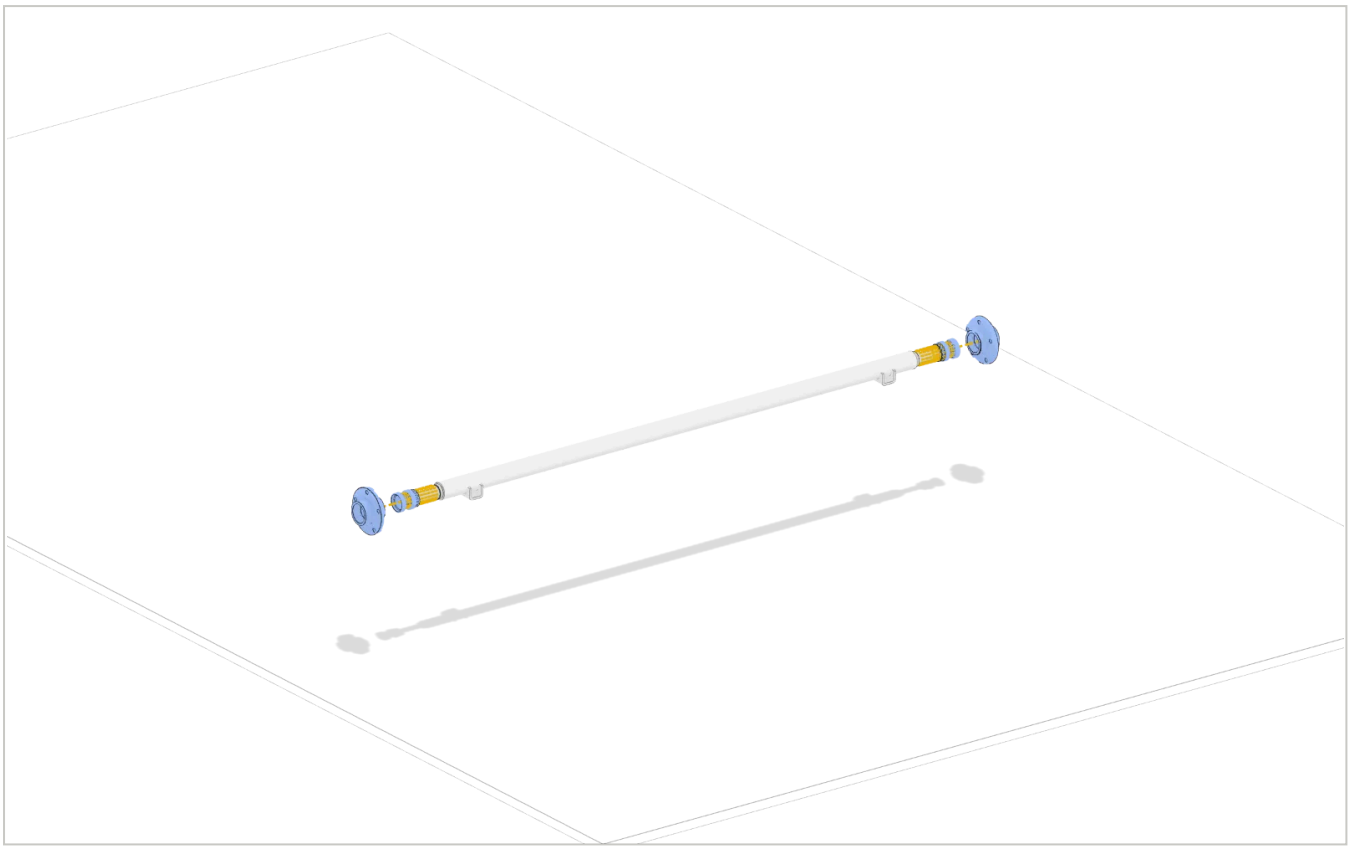


Fit an M12 lock nut on each hanger bolt, finger tight until the axle is on. Torque to 80 Nm once the trailer sits on its wheels.

Item	Part number	Description	Qty
445	Prevailing torque nut M12x1.75	Prevailing torque nut M12x1.75	4

Axle and hubs (bench)

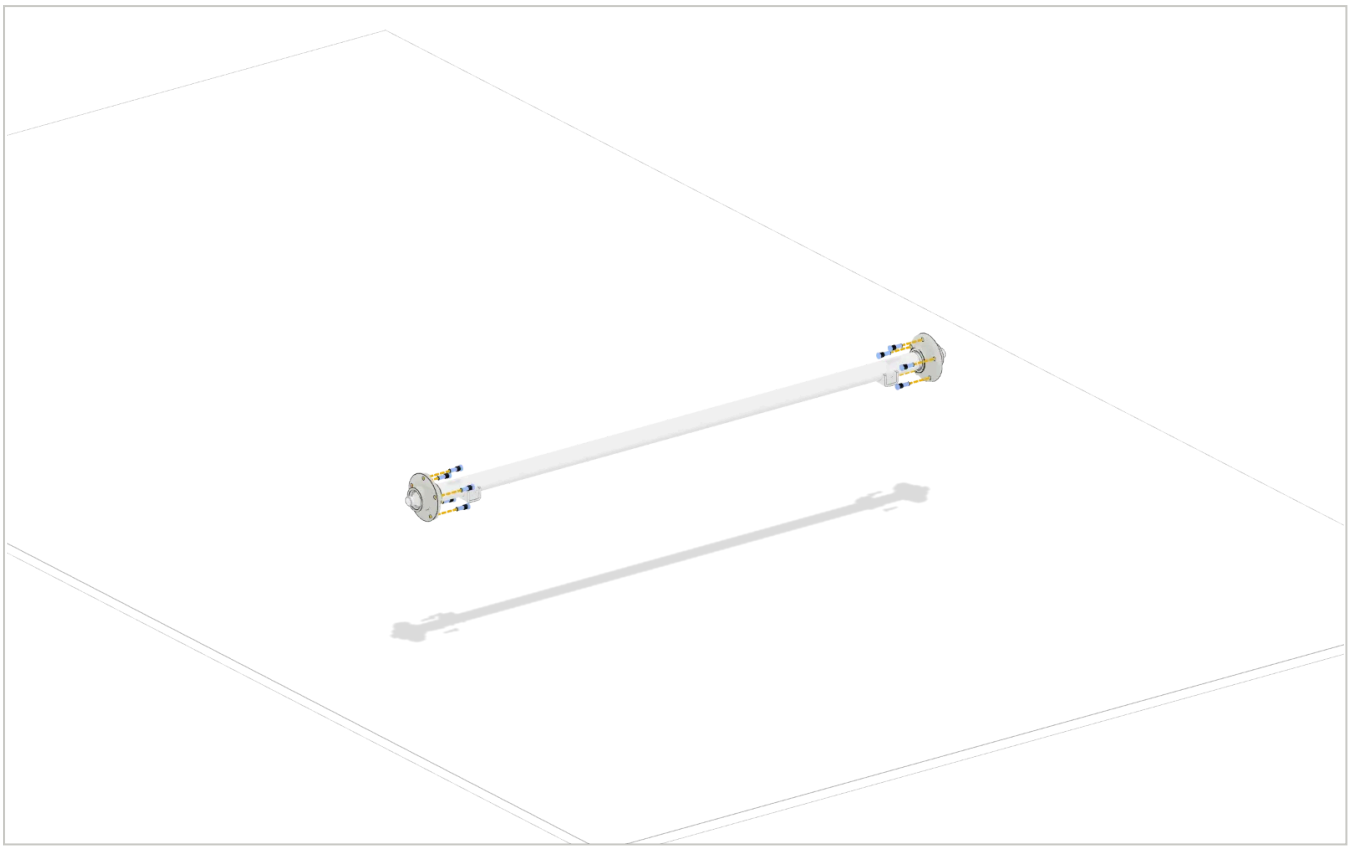
75 Slide the packed hubs onto the spindles



Press the two bearing cups into each hub, pack both tapered roller bearings with grease and set them in the hub with the seal, then slide each packed hub onto its spindle from the outside.

Item	Part number	Description	Qty
40	AXLE_HUB	Axle Hub_1	2
16	6677K91_TAPERED_ROLLER_BEARING_WITH_STEEL_RING	Bearing roller	52
23	6677K91_TAPERED_ROLLER_BEARING_WITH_STEEL_RING_8	Bearing cage	4
24	6677K91_TAPERED_ROLLER_BEARING_WITH_STEEL_RING_9	Bearing cone	4
25	6677K91_TAPERED_ROLLER_BEARING_WITH_STEEL_RING_10	Bearing cup	4

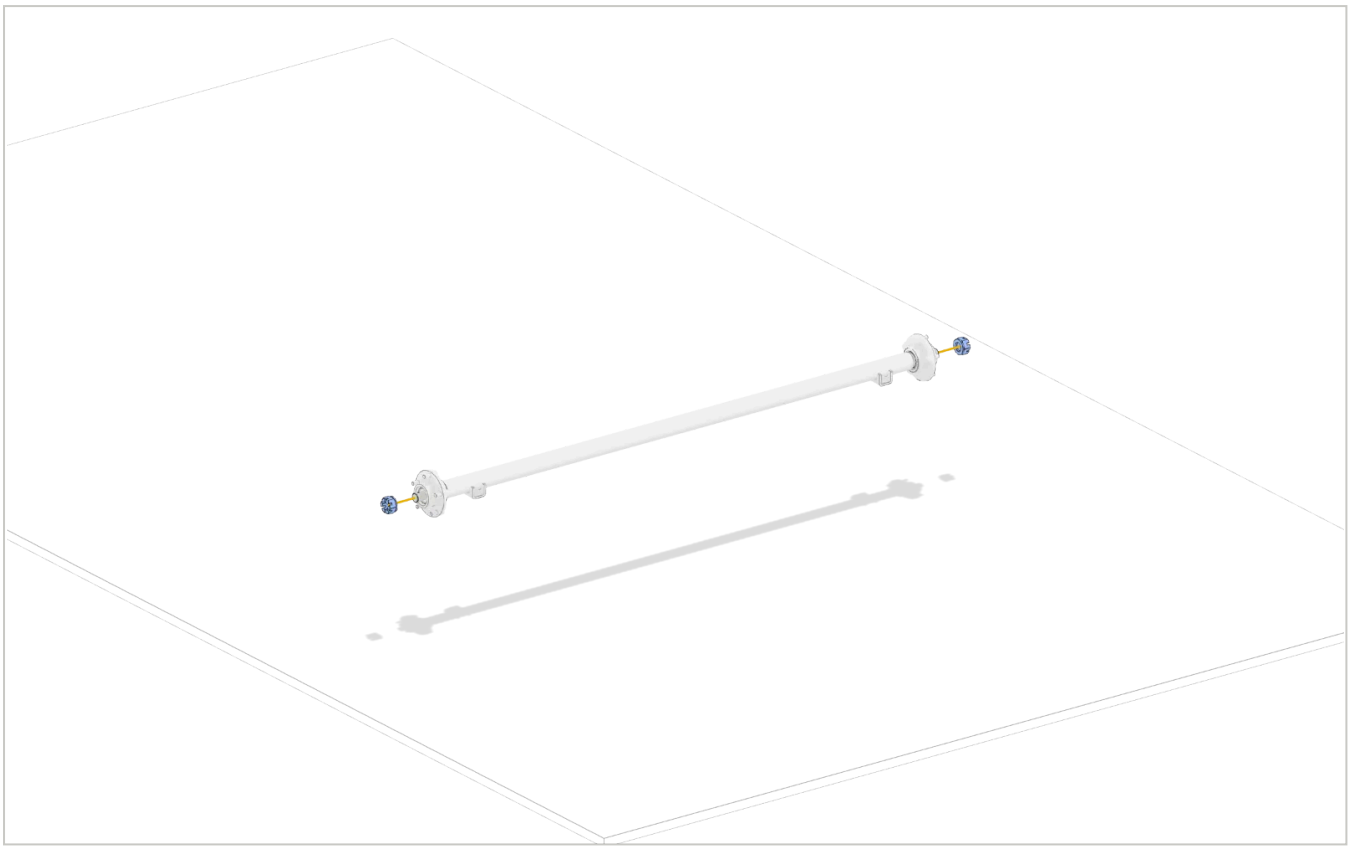
76 Press the wheel studs into the hubs



Press the five wheel studs into each hub flange from the back, splines home.

Item	Part number	Description	Qty
443	WHEEL_STUD	WHEEL_STUD fastener	10

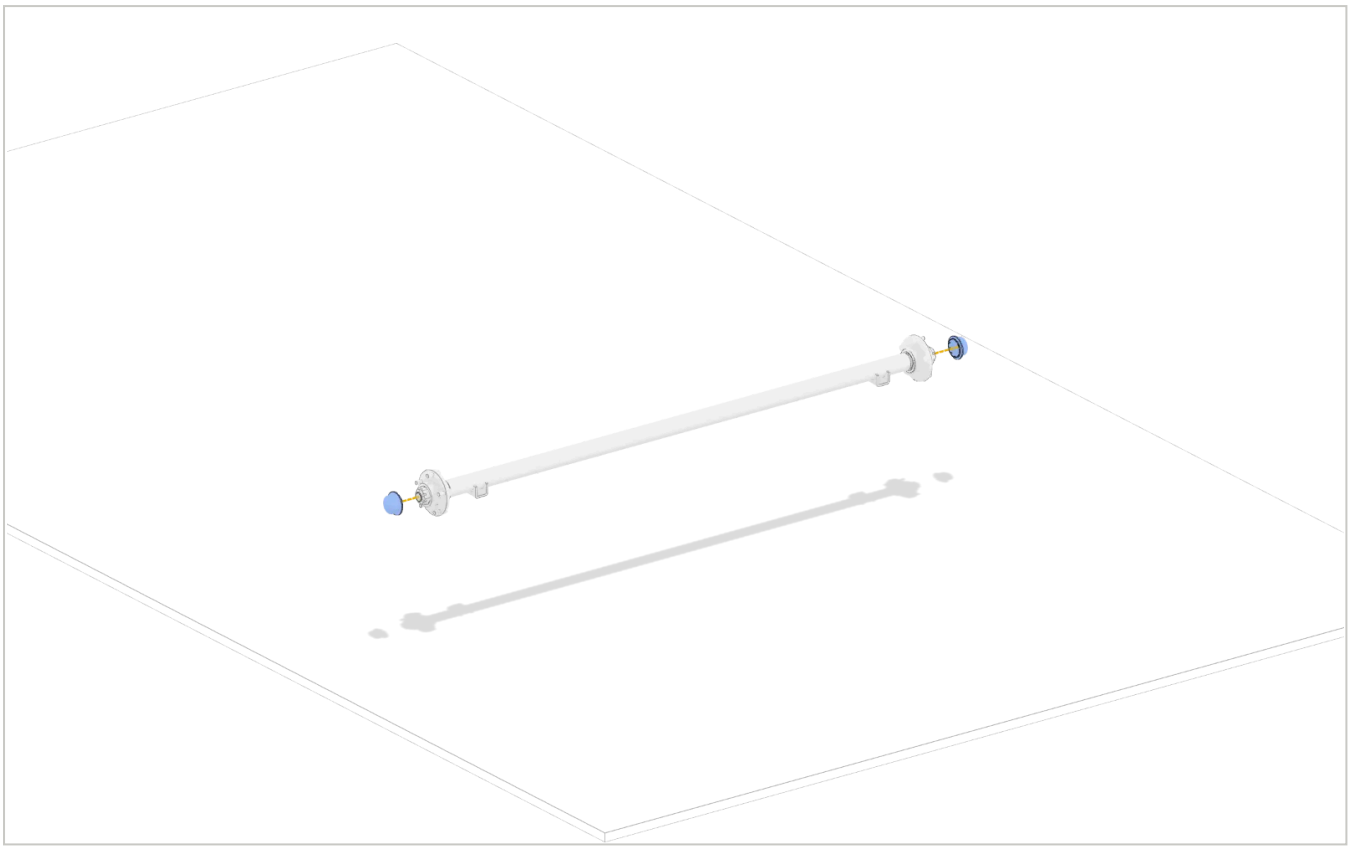
77 Fit the spindle washers and nuts



Fit the M30 washer and the spindle nut on each spindle. Tighten the nut while turning the hub to seat the bearings, back it off a quarter turn, then lock it.

Item	Part number	Description	Qty
314	PLAIN_WASHER_SMALL_GRADE_A_M30	Plain washer small grade A M30_1	2
339	SPINDLE_NUT	Spindle Nut_1	2

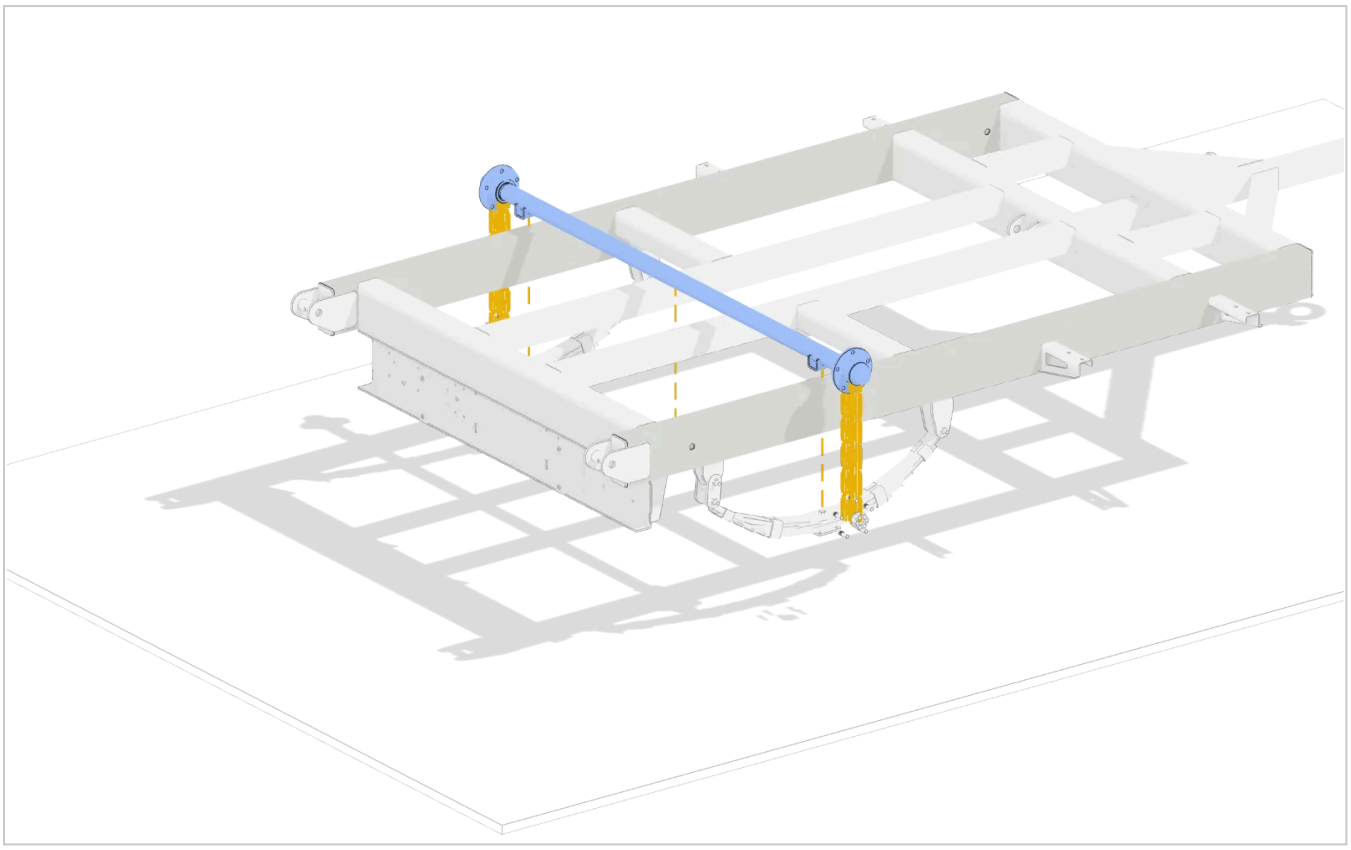
78 Fit the hub caps



Tap a hub cap onto each hub.

Item	Part number	Description	Qty
94	HUB_CAP	Hub Cap_1	2

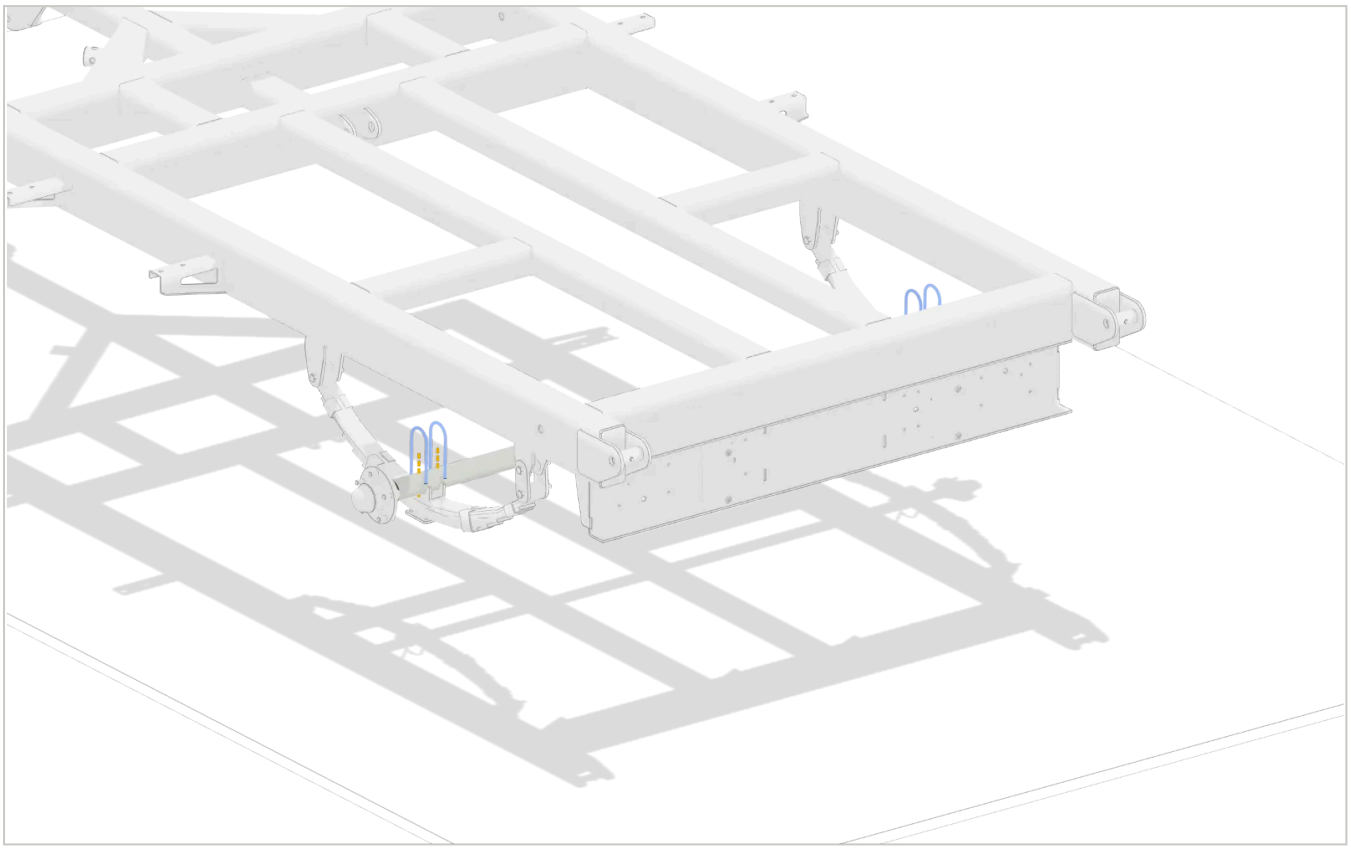
79 Set the axle on the springs



Lower the axle onto the spring packs, the centre bolt heads dropping into the holes in the spring seats.

Item	Part number	Description	Qty
39	AXLE	Axle	1
41	AXLE_SPINDLE	Axle Spindle_1	2
124	LEAF_SPRING_OFFSET_BRACKET	Spring seat, RH	2
16	6677K91_TAPERED_ROLLER_BEARING_WITH_STEEL_RING	Bearing roller	52
23	6677K91_TAPERED_ROLLER_BEARING_WITH_STEEL_RING_8	Bearing cage	4
24	6677K91_TAPERED_ROLLER_BEARING_WITH_STEEL_RING_9	Bearing cone	4
25	6677K91_TAPERED_ROLLER_BEARING_WITH_STEEL_RING_10	Bearing cup	4
94	HUB_CAP	Hub Cap_1	2
40	AXLE_HUB	Axle Hub_1	2

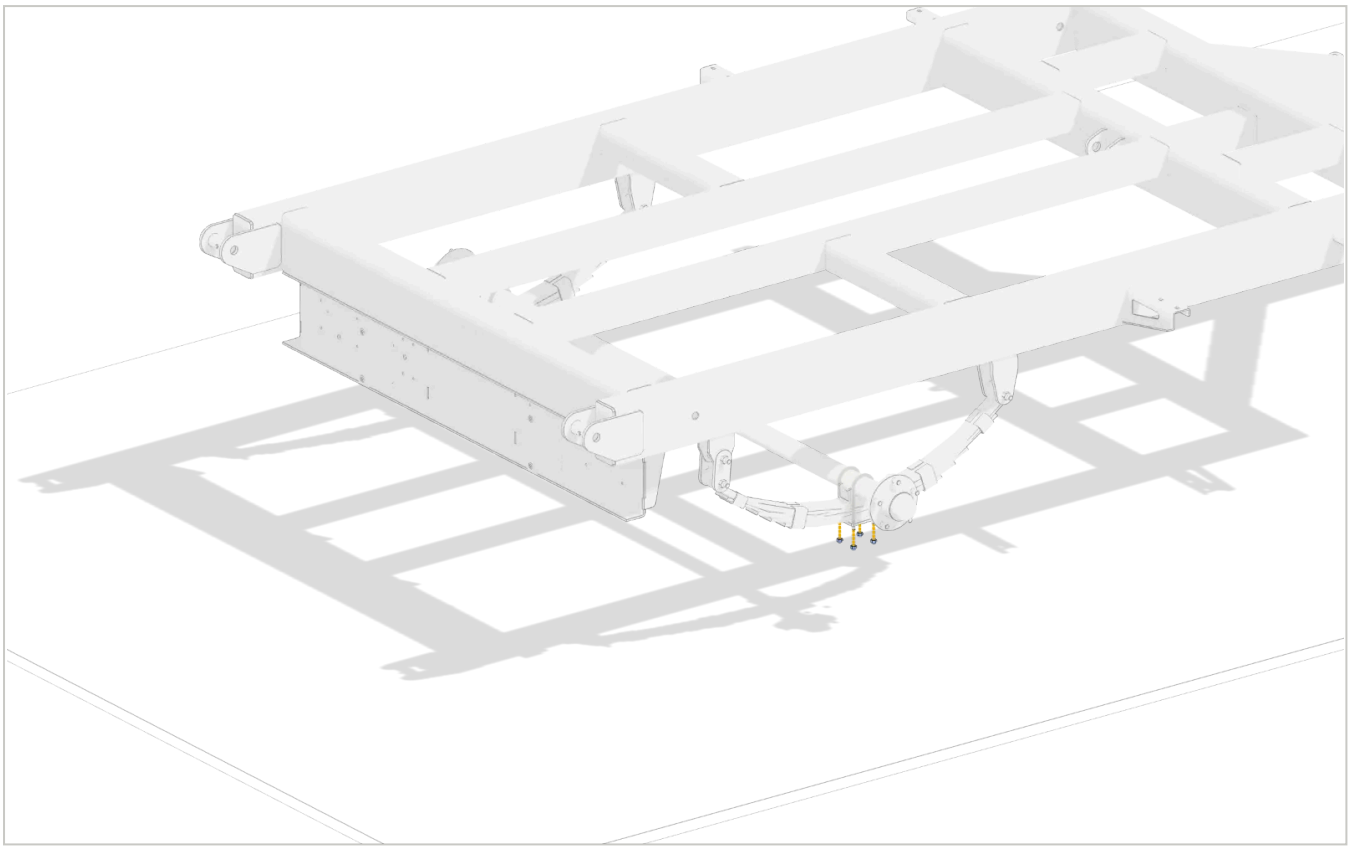
80 Fit the U-bolts



Drop a U-bolt over the axle each side of each spring seat, legs down through the U-bolt plate.

Item	Part number	Description	Qty
452	Leaf Spring U-Bolt	Leaf Spring U-Bolt	4

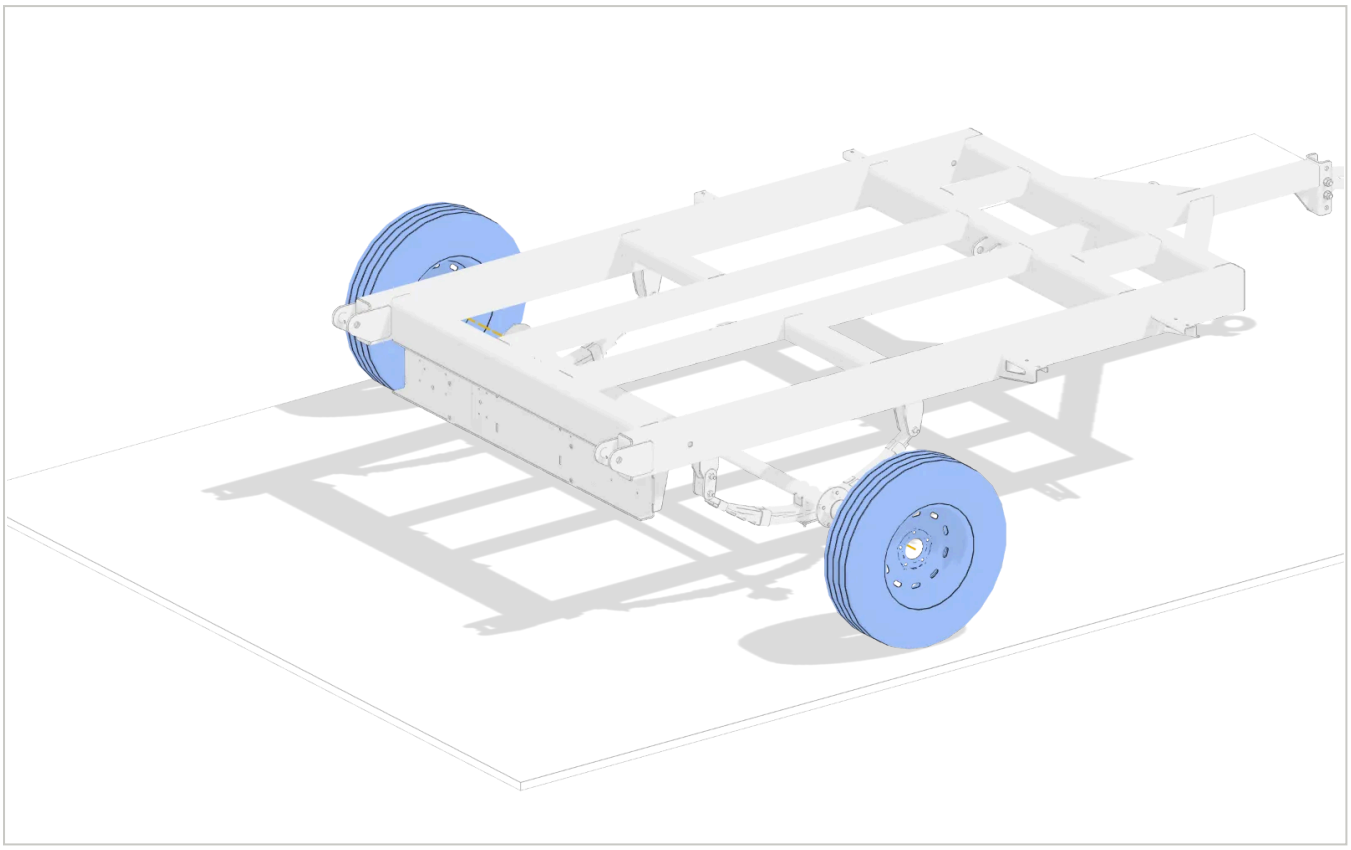
81 Fit the U-bolt nuts



Fit an M8 lock nut on each U-bolt leg from below and tighten evenly in a cross pattern to 25 Nm.

Item	Part number	Description	Qty
453	Prevailing torque nut M8x1.25	Prevailing torque nut M8x1.25	8

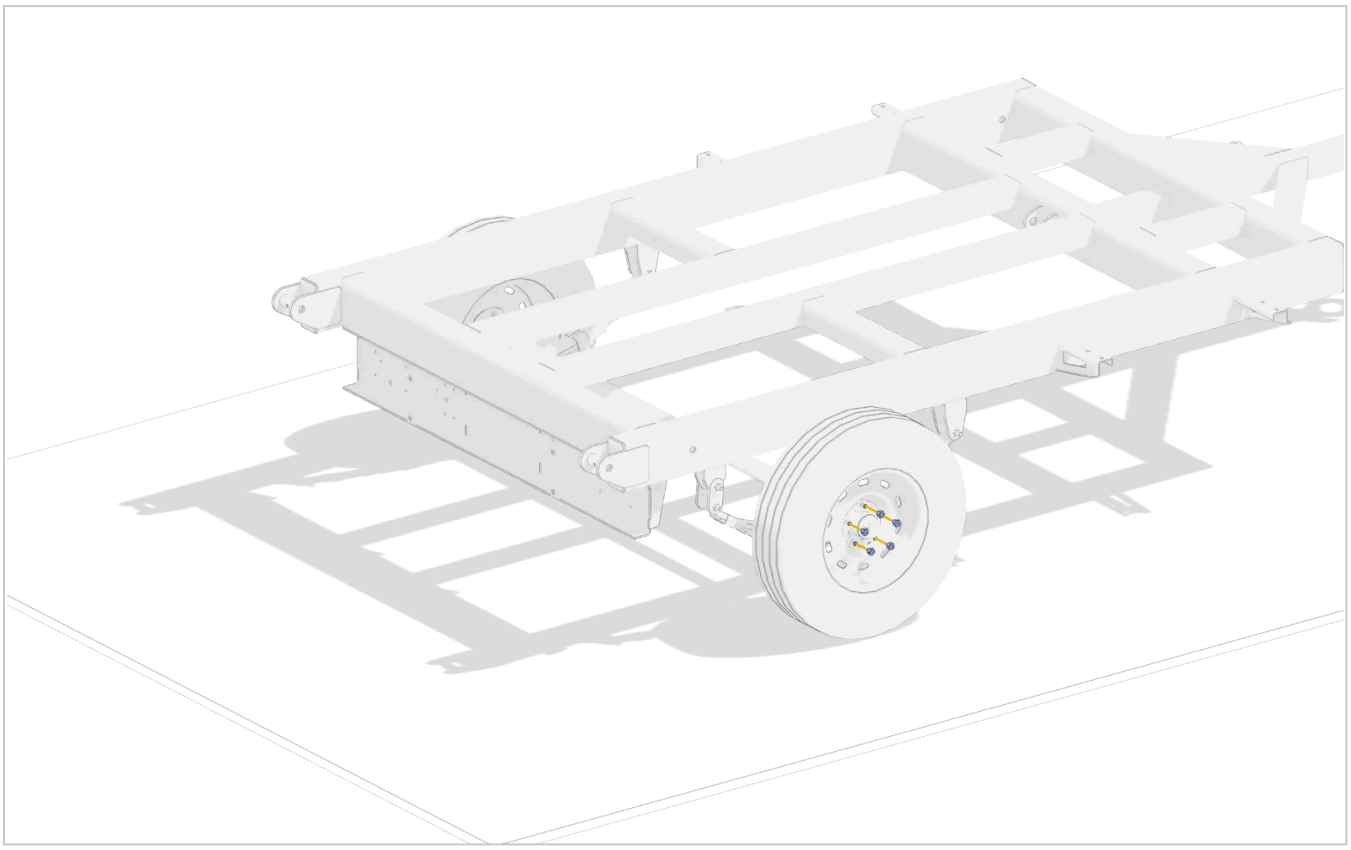
82 Fit the wheels



Lift each wheel onto its hub studs from the outside.

Item	Part number	Description	Qty
350	WHEEL_HUB	Wheel Hub_1	2
351	WHEEL_RIM	Wheel Rim_1	2
342	TIRE	Tire_1	2

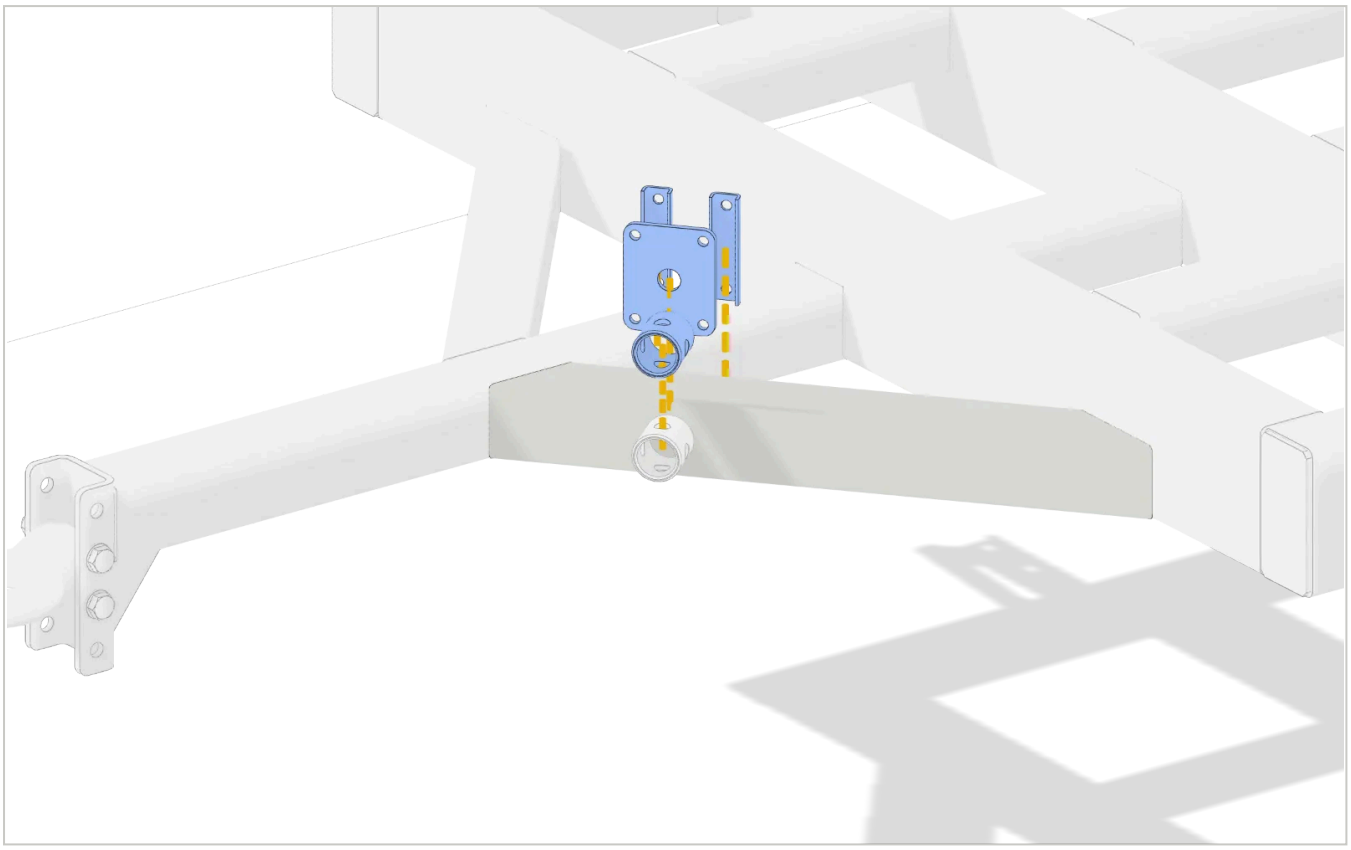
83 Fit the lug nuts



Fit the five lug nuts on each wheel and tighten in a star pattern to 110 Nm.

Item	Part number	Description	Qty
428	LUG_NUT	LUG_NUT fastener	10

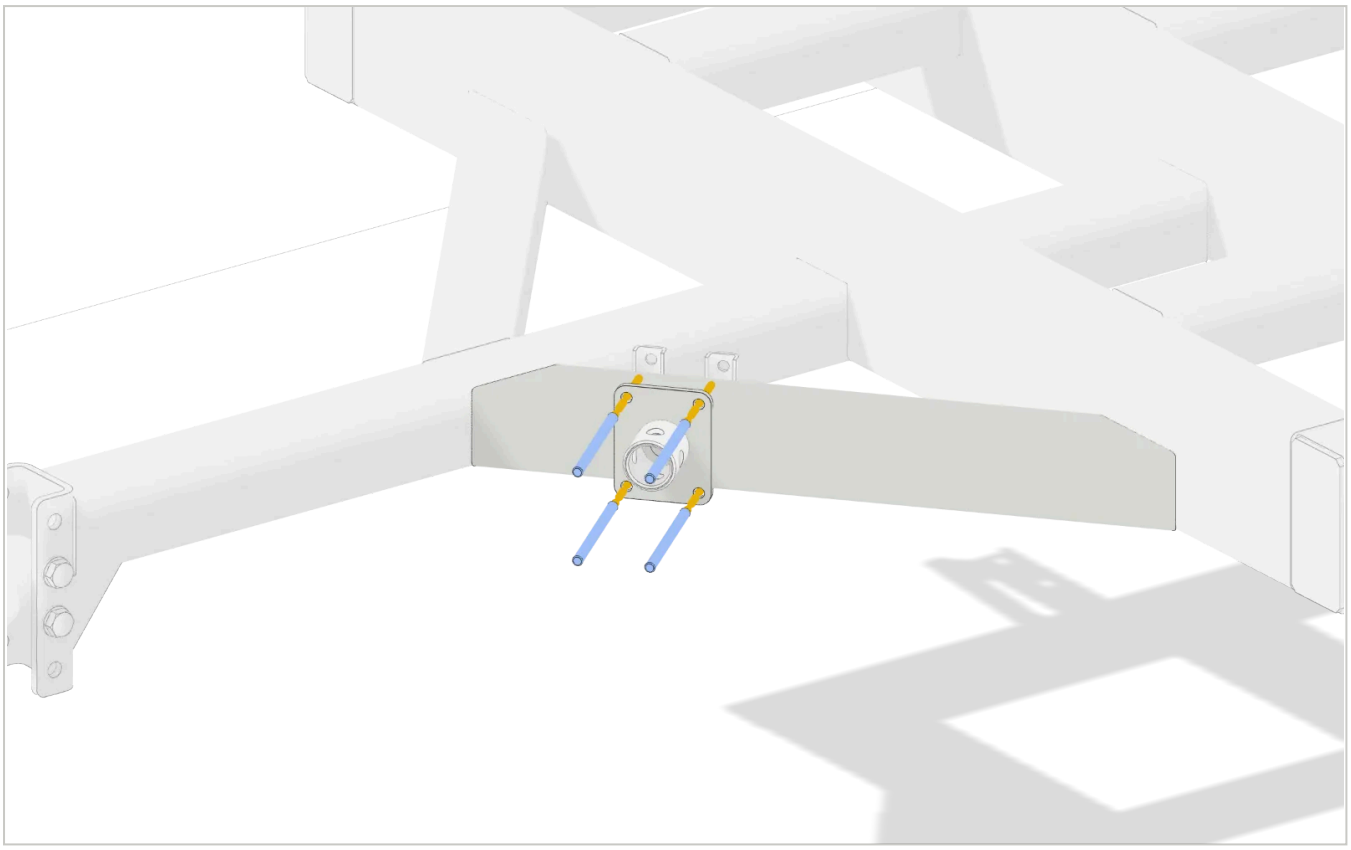
84 Fit the jack mounting plate and clamps



Set the mounting plate with its shaft against the side of the tongue beam and hook the two mount clamps over the beam opposite it.

Item	Part number	Description	Qty
105	JACK_MOUNTING_PLATE	Jack Mounting Plate	1
107	JACK_MOUNTING_SHAFT_2	Jack Mounting Shaft_1	1
102	JACK_MOUNT_CLAMP	Jack Mount Clamp_1	2

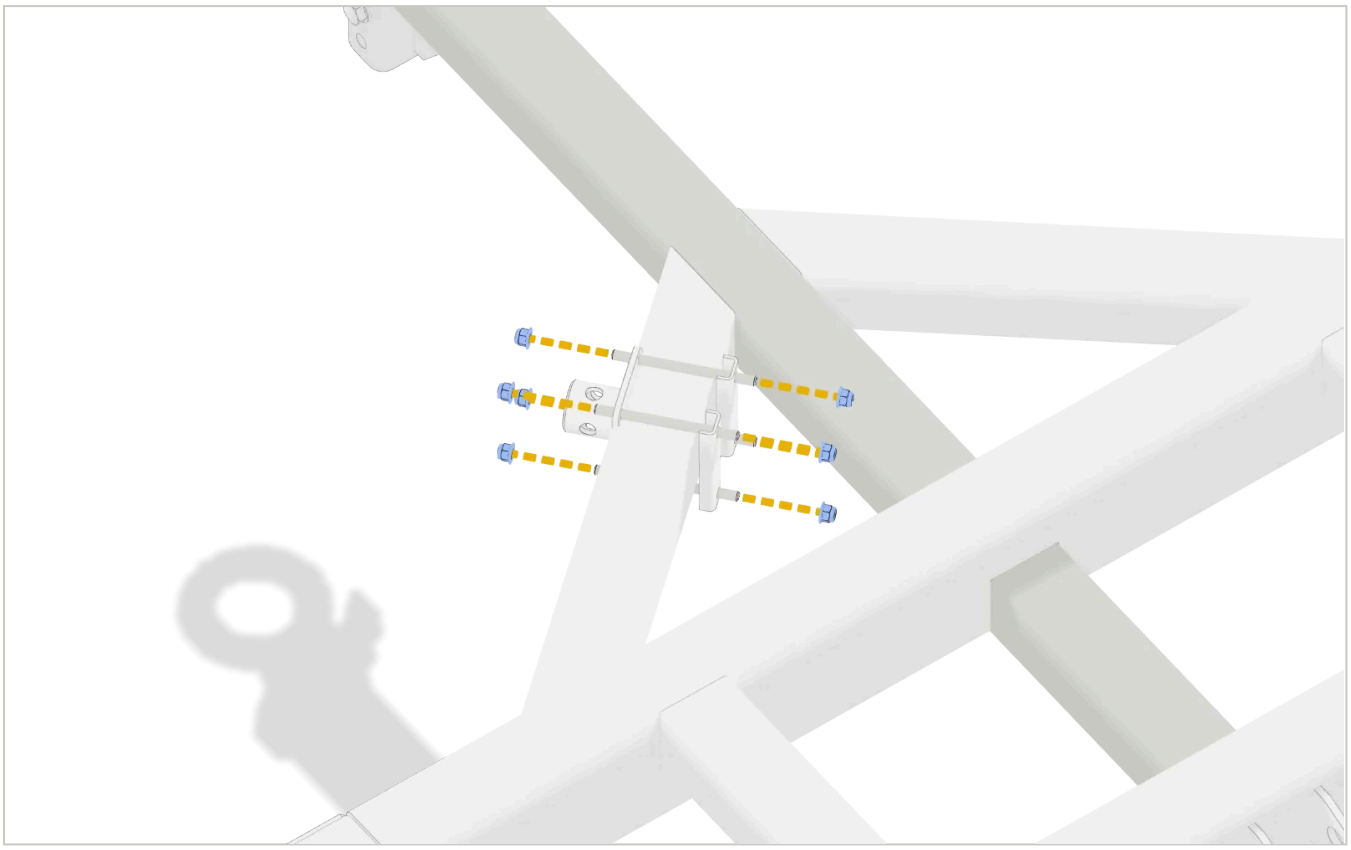
85 Fit the threaded rods



Push the four threaded rods through the clamps and the mounting plate.

Item	Part number	Description	Qty
341	THREADED_ROD	Threaded Rod_3	4

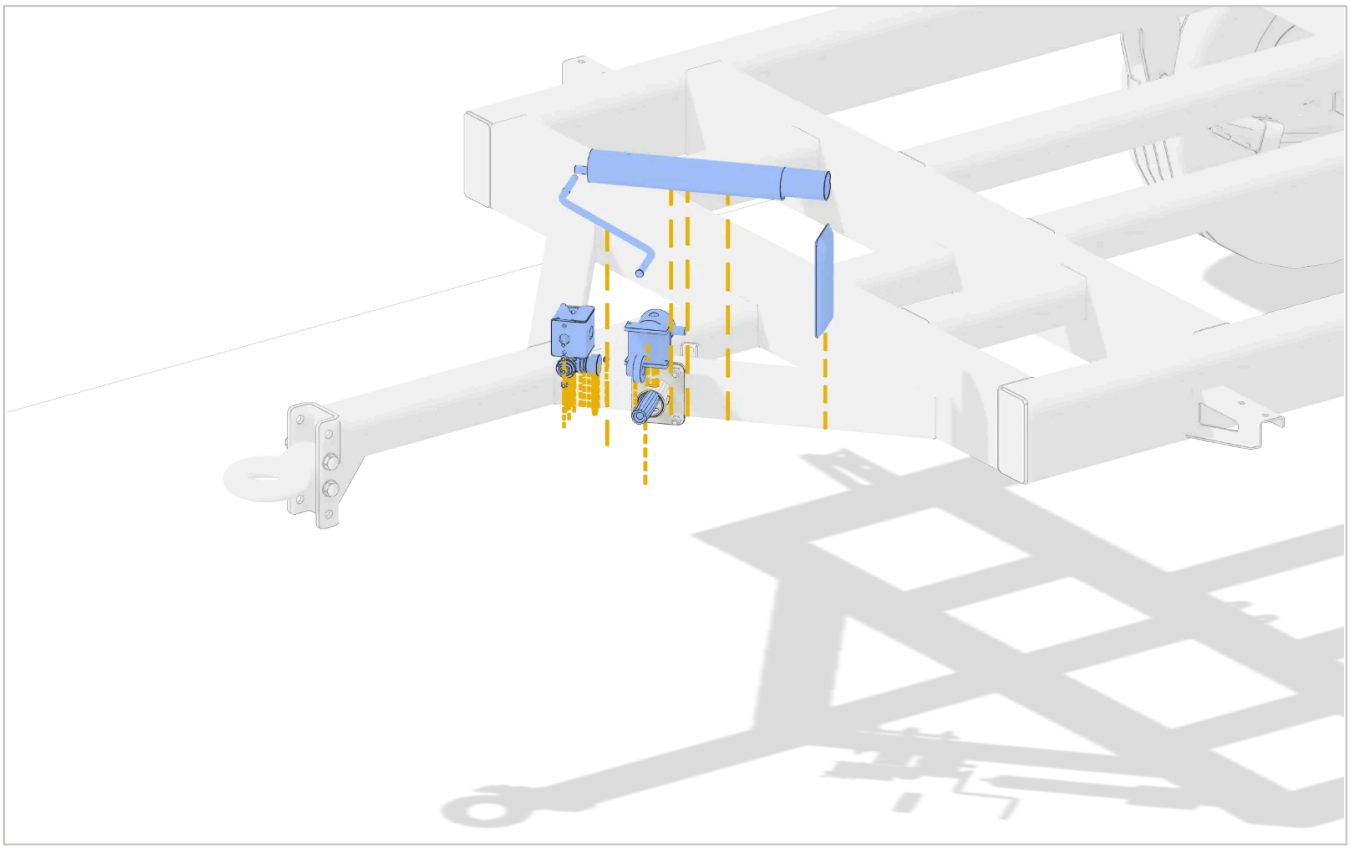
86 Fit the M10 flange nuts



Fit an M10 flange nut on each end of each rod and tighten evenly to 40 Nm, keeping the plate square to the beam.

Item	Part number	Description	Qty
454	Prevailing torque hex flange nut style 2 grade A & B M10x1.50	Prevailing torque hex flange nut style 2 grade A & B M10x1.50	8

87 Fit the tongue jack

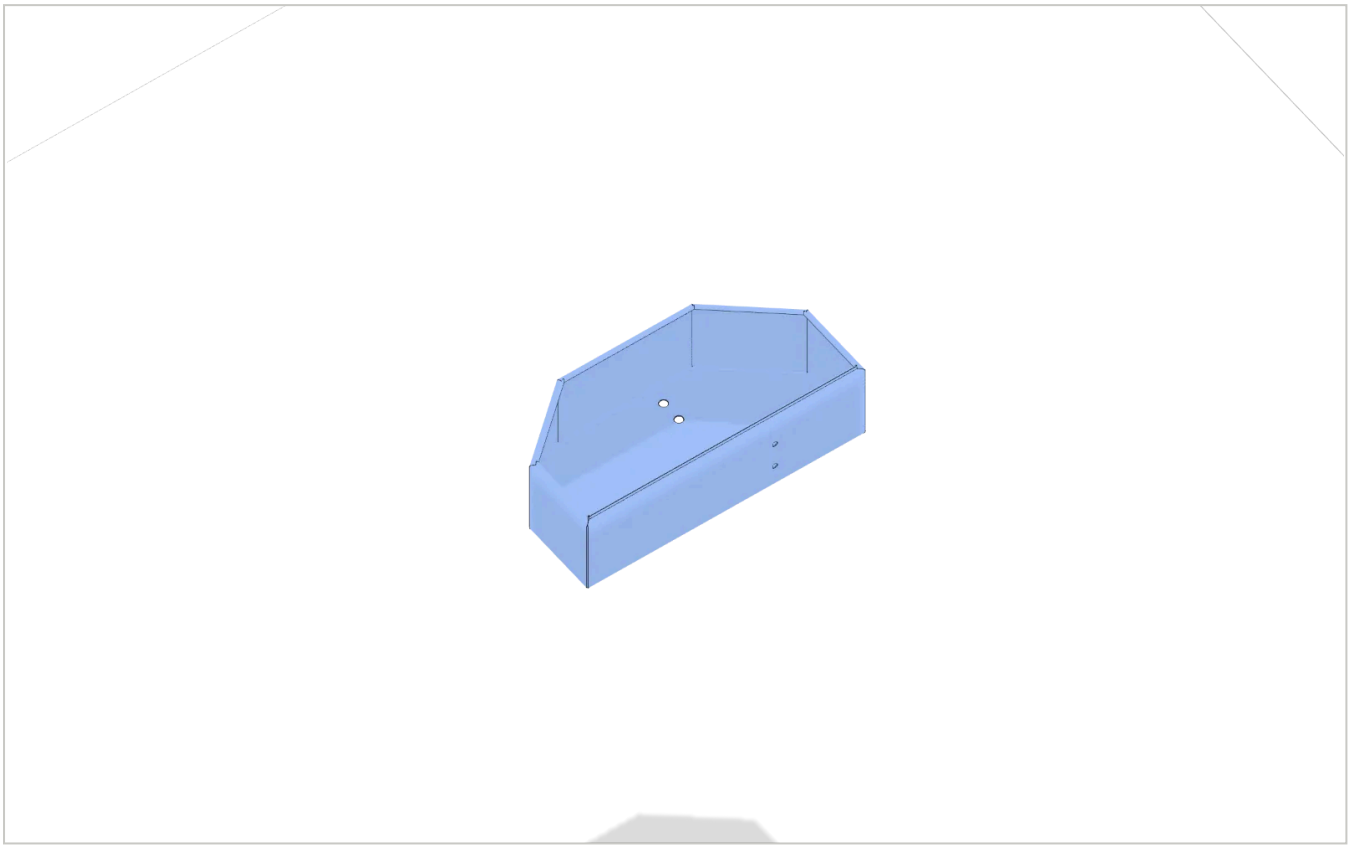


Drop the tongue jack (supplied assembled: outer tube, gearbox, screw, inner tube and foot, crank handle) onto the mounting shaft, foot down, and lock its pin.

Item	Part number	Description	Qty
99	JACK_GEAR	Jack Gear	1
368	ID2277	Gear ball	1
369	ID2282	Gear ball	1
370	ID2287	Gear ball	1
371	ID2292	Gear ball	1
372	ID2297	Gear ball	1
373	ID2302	Gear ball	1
374	ID2307	Gear ball	1
376	ID2312	Gearbox insert	1
377	ID2317	Gear ball	1
378	ID2322	Gear ball	1
379	ID2327	Gearbox insert	1
380	ID2332	Gear ball	1

Item	Part number	Description	Qty
381	ID2337	Gear ball	1
382	ID2342	Gearbox insert	1
383	ID2347	Gear ball	1
61	FLANGED_SLEEVE_BEARING	Flanged Sleeve Bearing	1
62	FLANGED_SLEEVE_BEARING_2	Flanged Sleeve Bearing_2	2
68	GEAR_HOUSING_COVER	Gear Housing Cover	1
71	GREASE_FITTING_3	Grease Fitting_4	1
384	ID2466	Gear housing	1
385	ID2471	Gearbox insert	1
67	GEAR_HOUSING_BRACKET	Gear Housing Bracket	1
103	JACK_MOUNT_SLEEVE	Jack Mount Sleeve	1
104	JACK_MOUNTING_BRACKET	Jack Mounting Bracket	1
114	JACK_TUBE_OUTER	Jack Tube, Outer	1
96	JACK_CRANK	Jack Crank	1
97	JACK_CRANK_HANDLE	Jack Crank Handle	1
101	JACK_HANDLE_SLEEVE	Jack Handle Sleeve	1
108	JACK_PINION	Jack Pinion	1
110	JACK_PINION_SPRING_CLIP	Jack Pinion Spring Clip	1
98	JACK_FOOT	Jack Foot	1
113	JACK_TUBE_INNER	Jack Tube, Inner	1
311	PLAIN_WASHER_NORMAL_GRADE_A_M6	Plain washer normal grade A M6_9	2
455	Prevailing torque nut M6x1.00	Prevailing torque nut M6x1.00	2
335	SOCKET_BUTTON_HEAD_SCREW_M6X1_X_80	Socket button head screw M6x1 x 80_1	2
424	JACK_GEAR_PIN	JACK_GEAR_PIN fastener	1
425	JACK_PINION_PIN	JACK_PINION_PIN fastener	1
111	JACK_RISER_NUT	Jack Riser Nut	1
426	JACK_SCREW_SHAFT	JACK_SCREW_SHAFT fastener	1

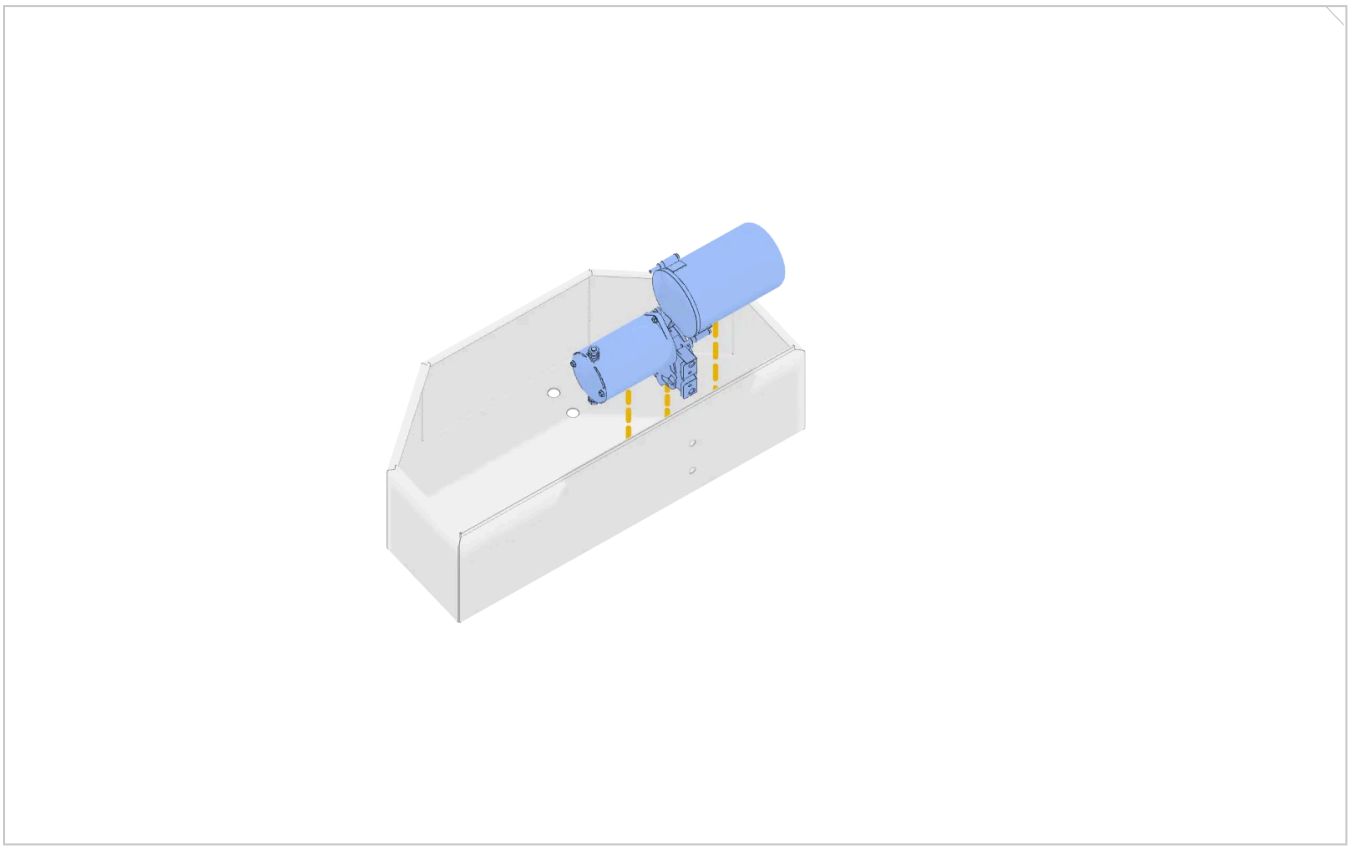
88 Set the enclosure on the bench



Set the enclosure on the bench, open side up.

Item	Part number	Description	Qty
55	ENCLOSURE	Enclosure	1

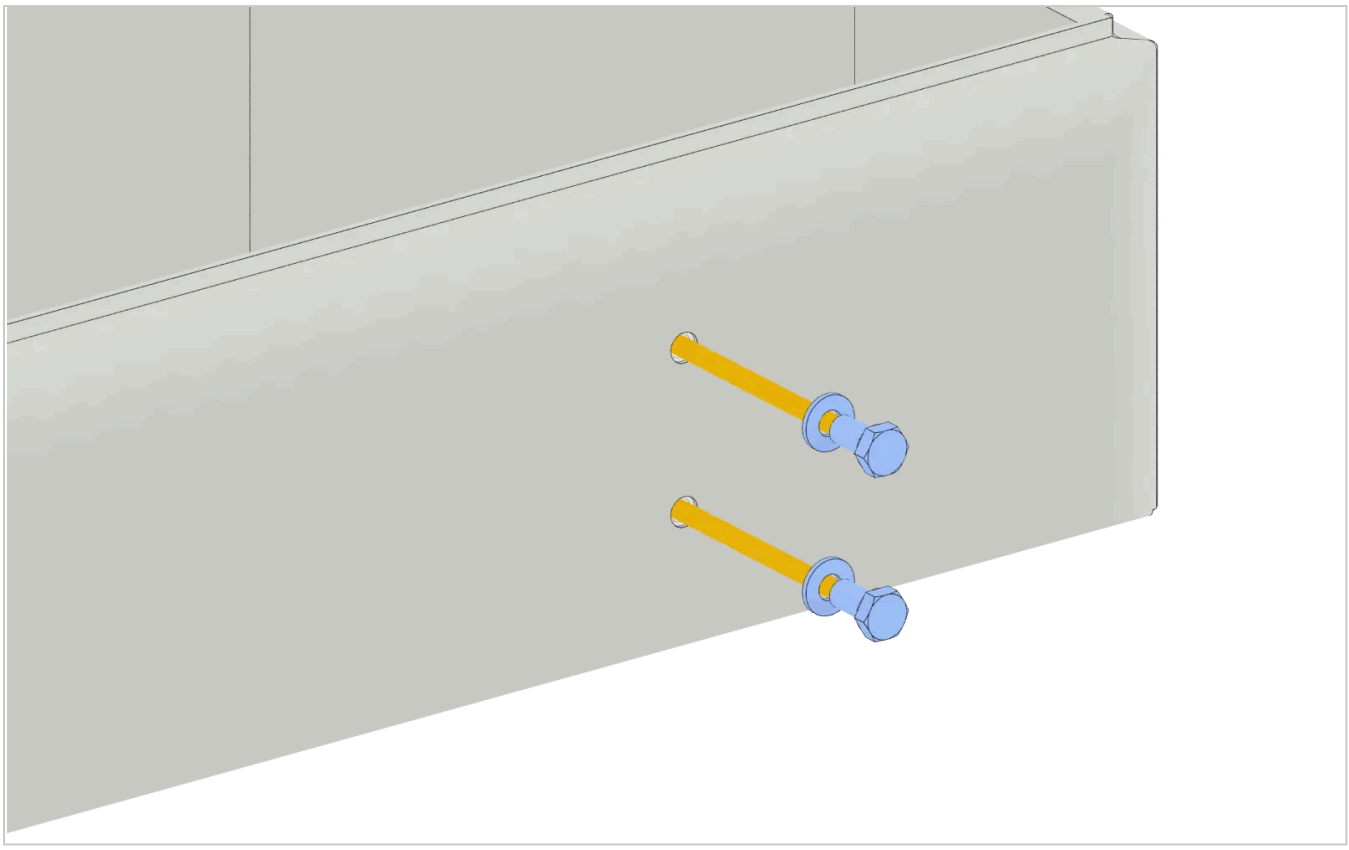
89 Mount the power unit



Lower the hydraulic power unit (motor, adapter and reservoir) into the enclosure onto its two mounting holes.

Item	Part number	Description	Qty
2	165RR1ADAPTER	165RR1adapter	1
3	165MOTOR	165motor	1
63	GVRESERVOIR	GVreservoir	1

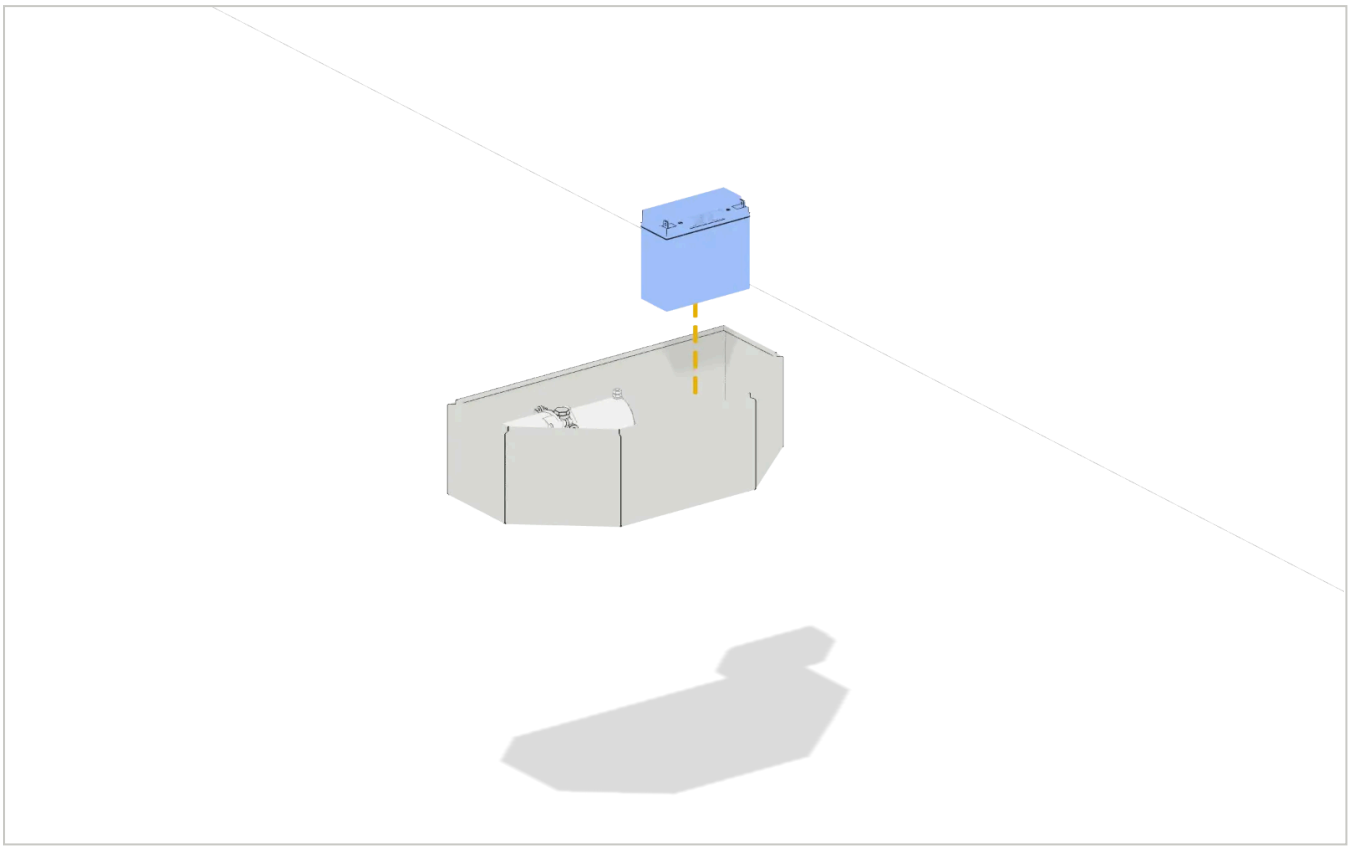
90 Fit the M10 screws and washers



Fit the two M10 x 20 screws with their washers through the enclosure into the adapter and torque to 45 Nm.

Item	Part number	Description	Qty
456	Hex head screw grade A & B M10x1.50 x 20	Hex head screw grade A & B M10x1.50 x 20	2
305	PLAIN_WASHER_NORMAL_GRADE_A_M10	Plain washer normal grade A M10_1	2

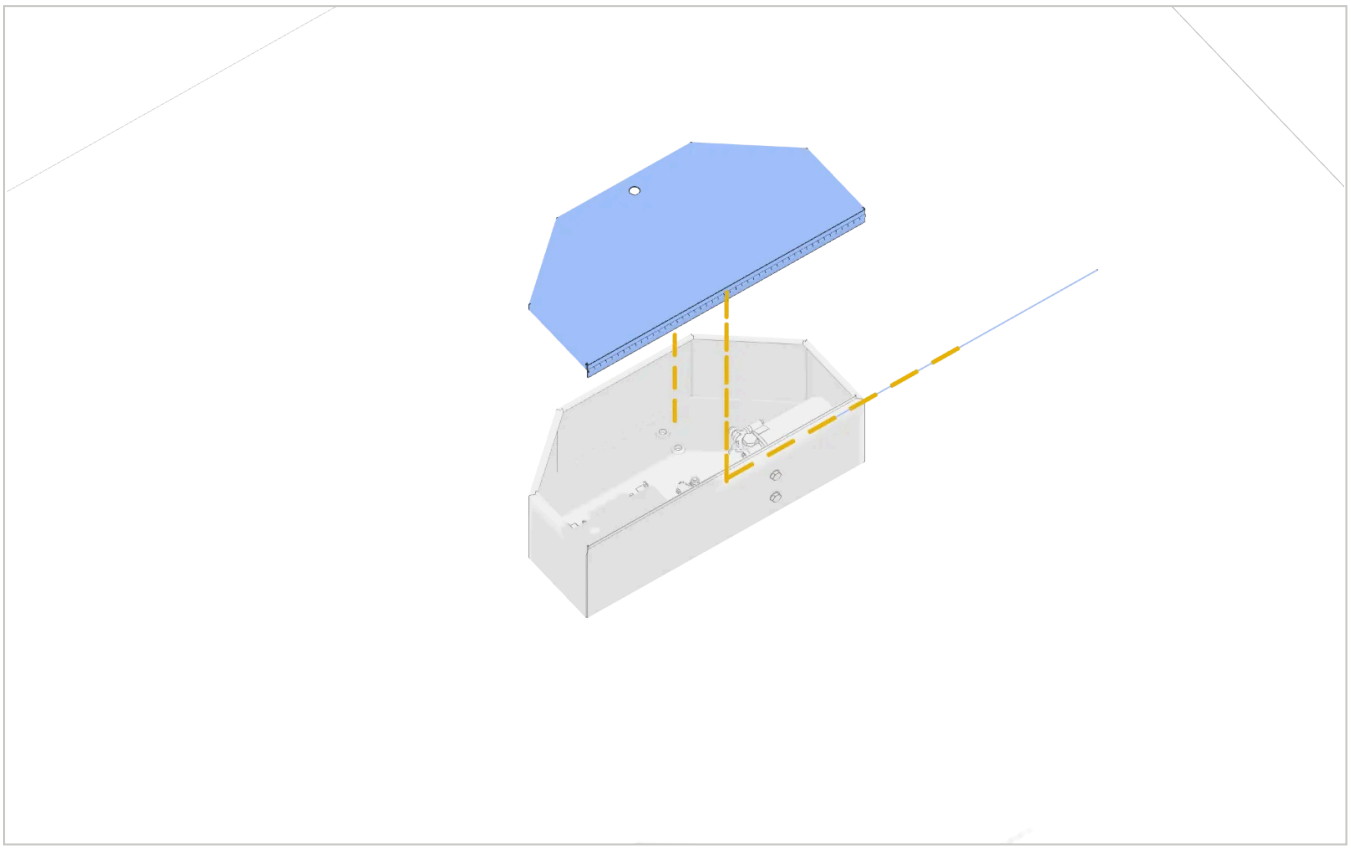
91 Fit the battery and the fittings



Set the 12 V battery beside the power unit, screw the two reducers into the pump ports and push the two rubber grommets into the enclosure floor.

Item	Part number	Description	Qty
1	12V_17AH_BATTERY	12v 17ah Battery	1
323	REDUCER_STRAIGHT_3_8_TUBE_X_1_4_TUBE	Reducer, Straight, Ø3/8" Tube x Ø1/4" Tube_1	2
73	GROMMET_RUBBER_1_2_ID_X_11_16_OD_X_1_16_THK	Grommet, Rubber, Ø1/2" ID x Ø11/16" OD x 1/16" THK_1	2

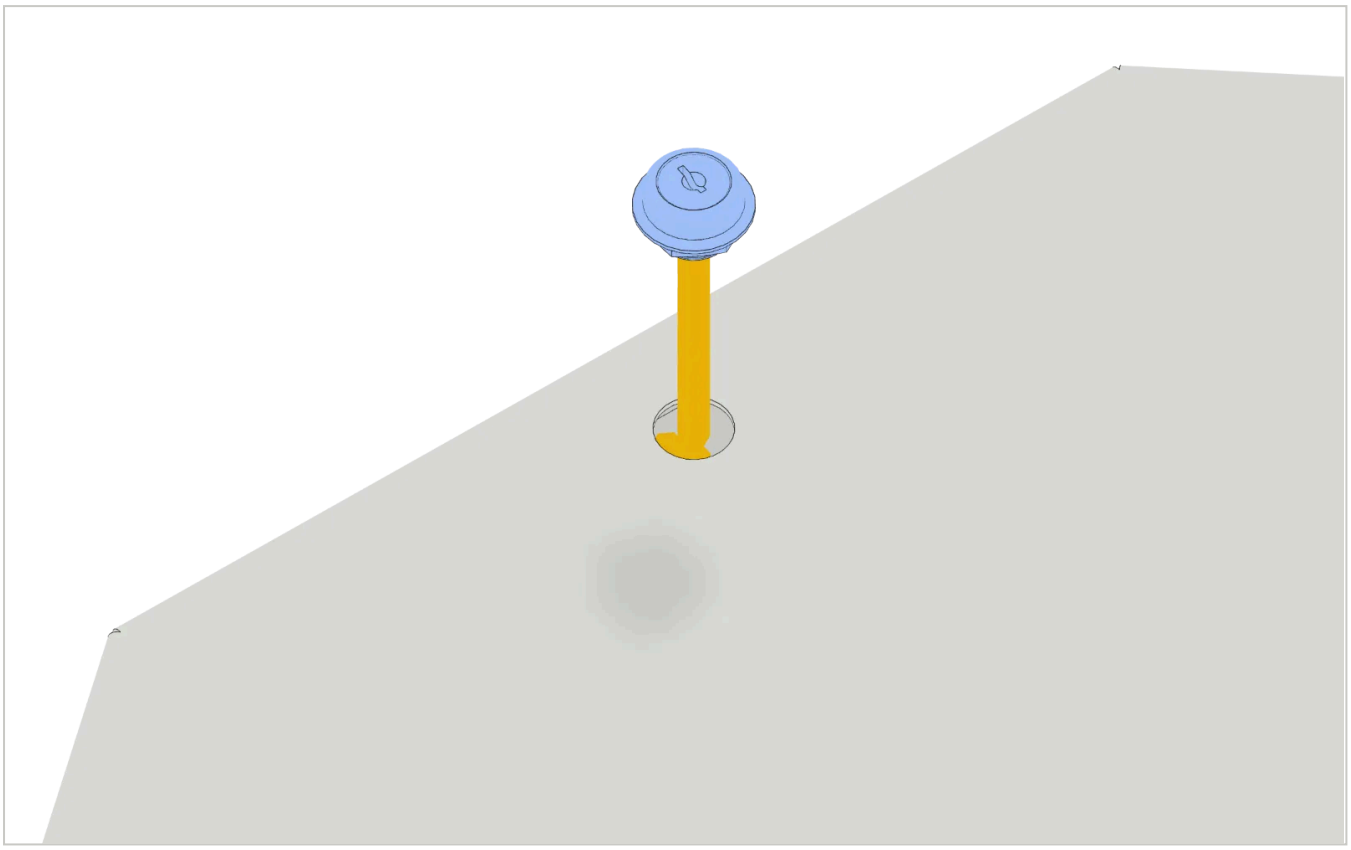
92 Fit the lid and the hinge



Rivet the piano hinge halves to the back edge of the enclosure and the lid, then drop in the hinge pin and close the lid.

Item	Part number	Description	Qty
56	ENCLOSURE_COVER	Enclosure Cover	1
301	PIANO_HINGE_WELD_ON	Piano Hinge, Weld On	1
302	PIANO_HINGE_WELD_ON_2	Piano Hinge, Weld On_1	1
457	Piano Hinge, Pin	Piano Hinge, Pin	1

93 Fit the cam lock



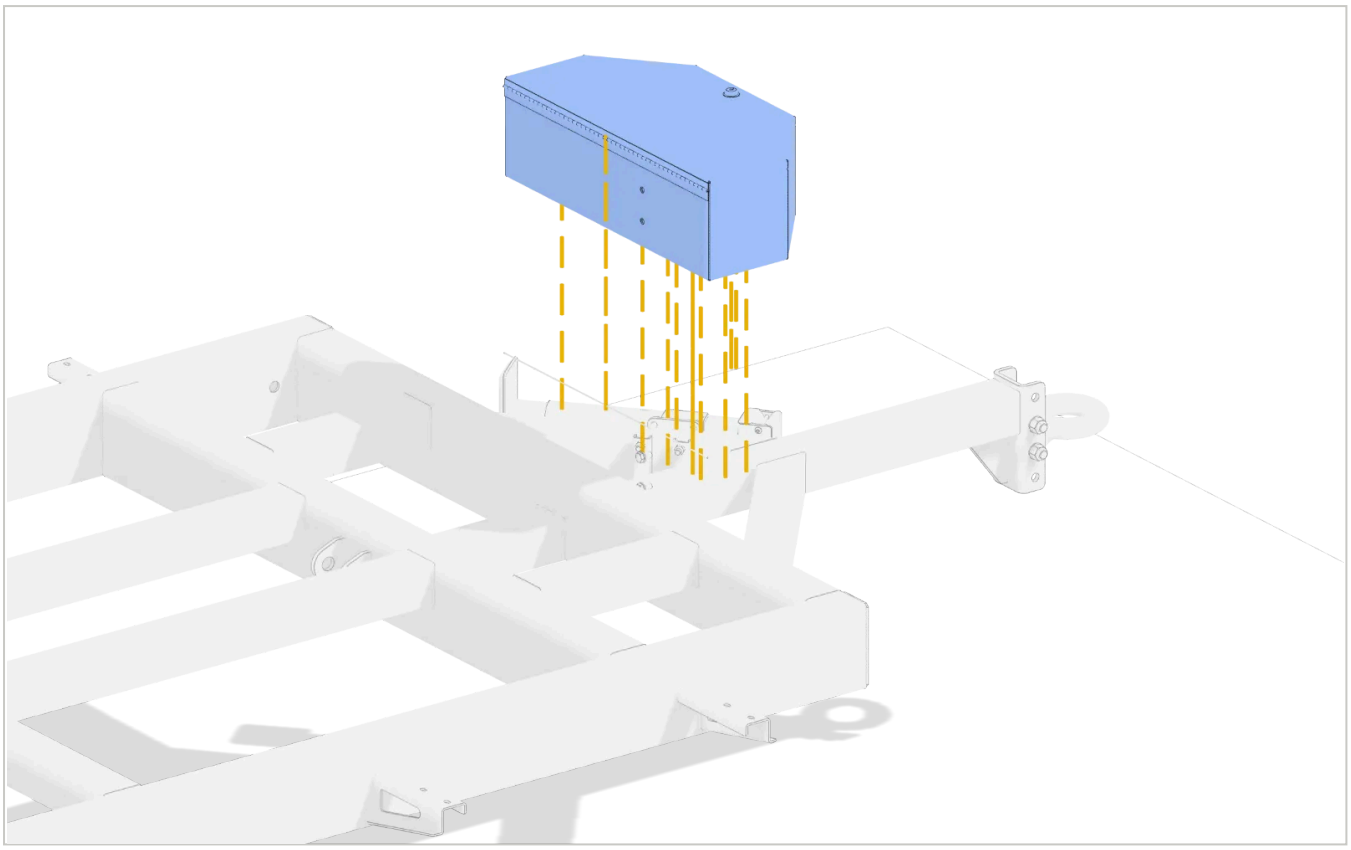
Fit the keyed cam lock through the front edge of the lid: body and trim ring from above, washer, nut and cam from inside.

Item	Part number	Description	Qty
4	1770A3_NO_THREADS_ZINC_KEYED_CAM_LOCK	1770A3_NO THREADS_Zinc Keyed Cam Lock	1
5	1770A3_NO_THREADS_ZINC_KEYED_CAM_LOCK_2	1770A3_NO THREADS_Zinc Keyed Cam Lock_1	1
6	1770A3_NO_THREADS_ZINC_KEYED_CAM_LOCK_3	1770A3_NO THREADS_Zinc Keyed Cam Lock_2	1
7	1770A3_NO_THREADS_ZINC_KEYED_CAM_LOCK_4	1770A3_NO THREADS_Zinc Keyed Cam Lock_3	1
8	1770A3_NO_THREADS_ZINC_KEYED_CAM_LOCK_5	1770A3_NO THREADS_Zinc Keyed Cam Lock_4	1
9	1770A3_NO_THREADS_ZINC_KEYED_CAM_LOCK_6	1770A3_NO THREADS_Zinc Keyed Cam Lock_5	1
10	1770A3_NO_THREADS_ZINC_KEYED_CAM_LOCK_7	1770A3_NO THREADS_Zinc Keyed Cam Lock_6	1
11	1770A3_NO_THREADS_ZINC_KEYED_CAM_LOCK_8	1770A3_NO THREADS_Zinc Keyed Cam Lock_7	1

Item	Part number	Description	Qty
12	1770A3_NO_THREADS_ZINC_KEYED_CAM_LOCK_9	1770A3_NO THREADS_Zinc Keyed Cam Lock_8	1

Hydraulics

94 Set the power pack on the tongue

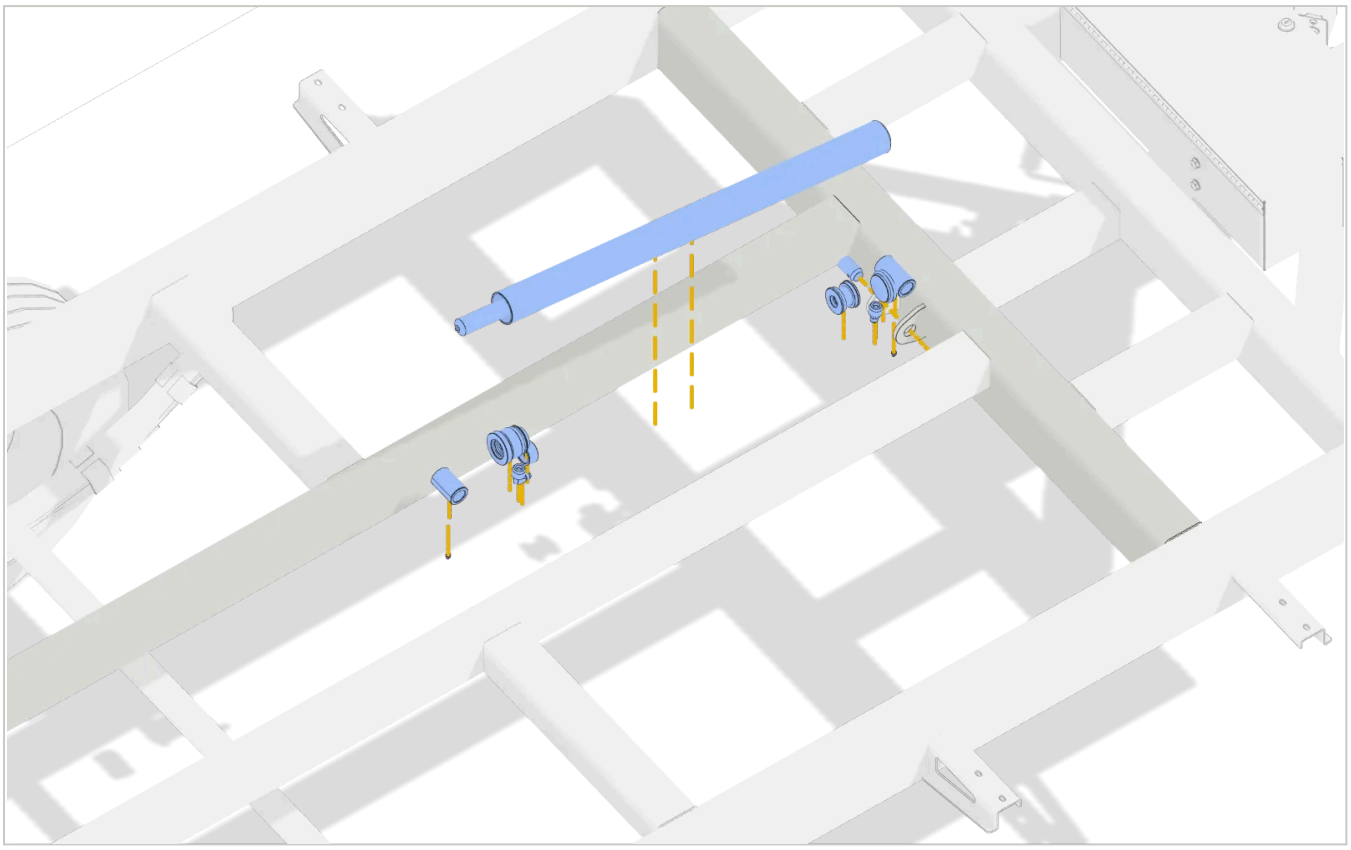


Lower the power pack onto the tongue gussets between the tongue braces and fix it down.

Item	Part number	Description	Qty
4	1770A3_NO_THREADS_ZINC_KEYED_CAM_LOCK	1770A3_NO THREADS_Zinc Keyed Cam Lock	1
5	1770A3_NO_THREADS_ZINC_KEYED_CAM_LOCK_2	1770A3_NO THREADS_Zinc Keyed Cam Lock_1	1
6	1770A3_NO_THREADS_ZINC_KEYED_CAM_LOCK_3	1770A3_NO THREADS_Zinc Keyed Cam Lock_2	1
7	1770A3_NO_THREADS_ZINC_KEYED_CAM_LOCK_4	1770A3_NO THREADS_Zinc Keyed Cam Lock_3	1
8	1770A3_NO_THREADS_ZINC_KEYED_CAM_LOCK_5	1770A3_NO THREADS_Zinc Keyed Cam Lock_4	1
9	1770A3_NO_THREADS_ZINC_KEYED_CAM_LOCK_6	1770A3_NO THREADS_Zinc Keyed Cam Lock_5	1
10	1770A3_NO_THREADS_ZINC_KEYED_CAM_LOCK_7	1770A3_NO THREADS_Zinc Keyed Cam Lock_6	1
11	1770A3_NO_THREADS_ZINC_KEYED_CAM_LOCK_8	1770A3_NO THREADS_Zinc Keyed Cam Lock_7	1
12	1770A3_NO_THREADS_ZINC_KEYED_CAM_LOCK_9	1770A3_NO THREADS_Zinc Keyed Cam Lock_8	1

Item	Part number	Description	Qty
55	ENCLOSURE	Enclosure	1
56	ENCLOSURE_COVER	Enclosure Cover	1
301	PIANO_HINGE_WELD_ON	Piano Hinge, Weld On	1
302	PIANO_HINGE_WELD_ON_2	Piano Hinge, Weld On_1	1
2	165RR1ADAPTER	165RR1adapter	1
3	165MOTOR	165motor	1
63	GVRESERVOIR	GVreservoir	1
1	12V_17AH_BATTERY	12v 17ah Battery	1
323	REDUCER_STRAIGHT_3_8_TUBE_X_1_4_TUBE	Reducer, Straight, Ø3/8" Tube x Ø1/4" Tube_1	2
73	GROMMET_RUBBER_1_2_ID_X_11_16_OD_X_1_16_THK	Grommet, Rubber, Ø1/2" ID x Ø11/16" OD x 1/16" THK_1	2

95 Fit the hydraulic cylinder

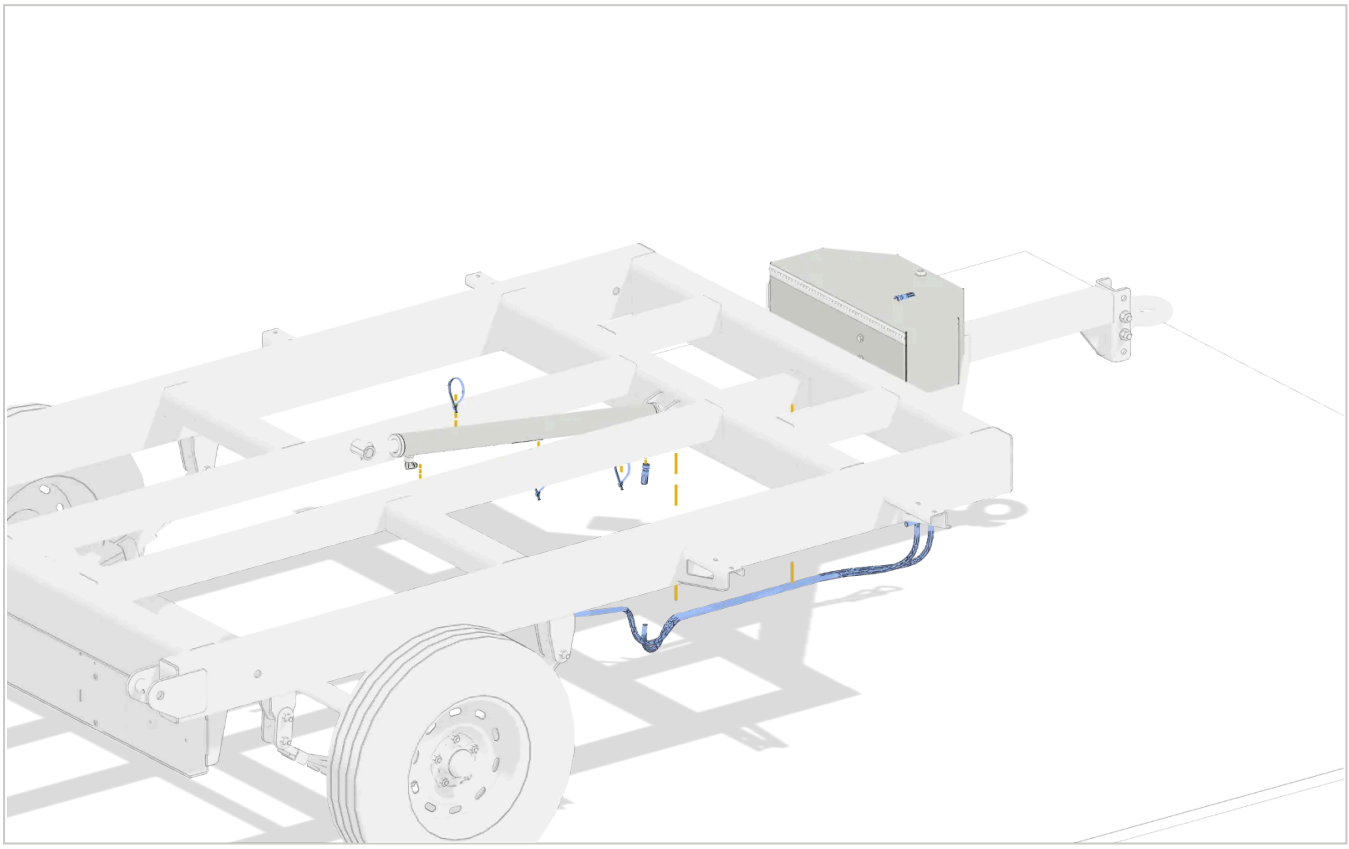


Set the cylinder (supplied assembled) on the frame, rod end towards the rear, and pin the cylinder-end clevis to the mount ears with the cylinder end pin and its washer. Screw a grease fitting into each clevis.

Item	Part number	Description	Qty
35	90_ELBOW_CONNECTOR_3_8_TUBE	90° Elbow Connector, Ø3/8" Tube	1
46	CLEVIS_CYLINDER_END	Clevis, Cylinder End	1
47	CLEVIS_ROD_END	Clevis, Rod End	1
48	CONNECTOR_STRAIGHT_3_8_TUBE	Connector, Straight, Ø3/8" Tube	1
53	CYLINDER	Cylinder	1
57	END_CAP_FRONT	End Cap, Front	1
58	END_CAP_REAR	End Cap, Rear	1
69	GREASE_FITTING	Grease Fitting_1	2
95	INNER_COLLAR	Inner Collar	1
303	PISTON	Piston	1
315	PORT_FITTING	Port Fitting_1	2
325	ROD	Rod	1
416	CYLINDER_END_PIN	CYLINDER_END_PIN fastener	1

Item	Part number	Description	Qty
442	TYPE_A_FLAT_WASHER_1	TYPE_A_FLAT_WASHER_1 fastener	1

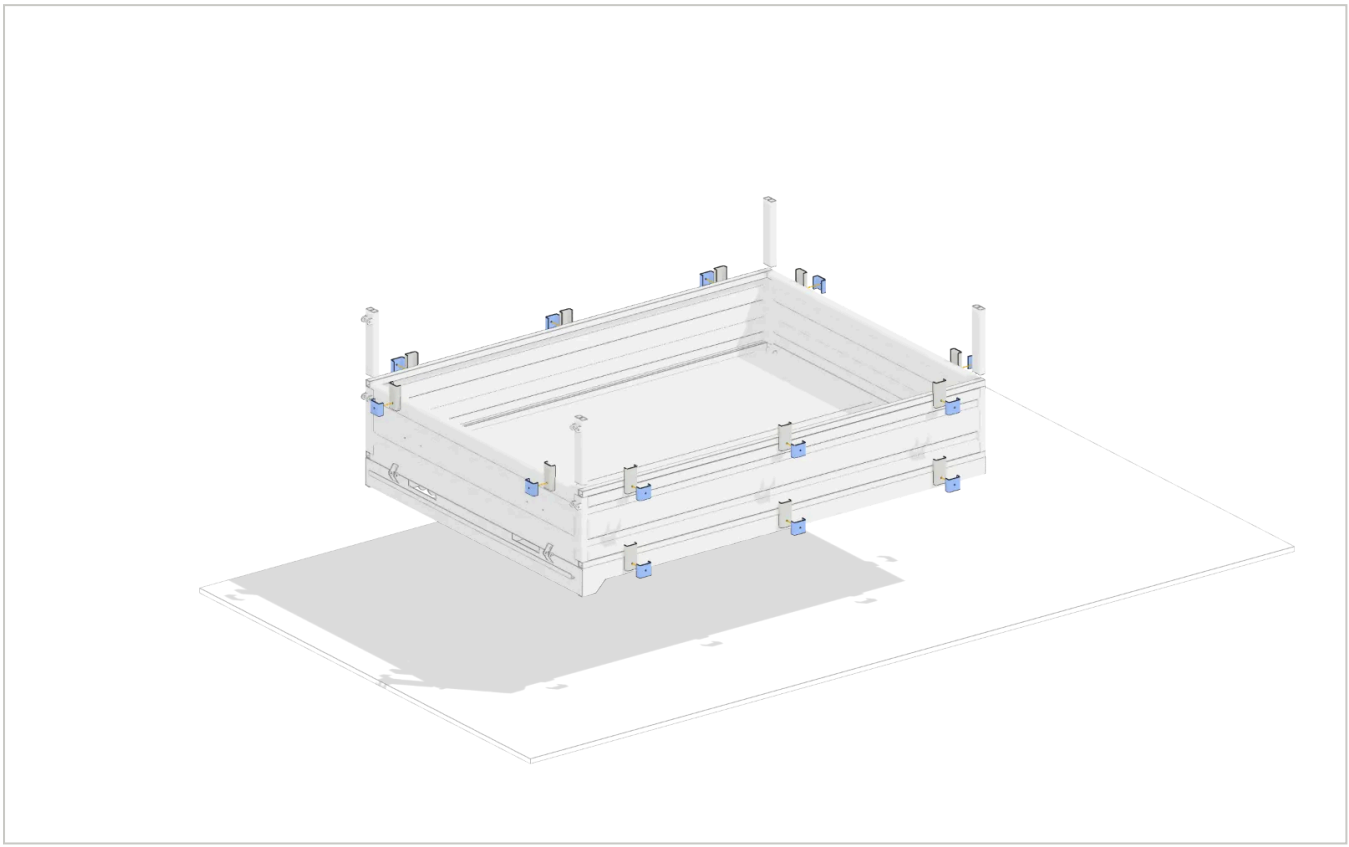
96 Route the hydraulic lines



Route the two hydraulic lines from the power pack along the tongue to the cylinder ports, fit the four hoses and the three line clamps.

Item	Part number	Description	Qty
357	ID1344	Hydraulic line	1
360	ID1399	Hydraulic line	1
13	5201K395_NO_THREADS_LIGHTWEIGHT_HYDRAULIC_HOSE	5201K395_NO THREADS_Lightweight Hydraulic Hose	1
14	5201K395_NO_THREADS_LIGHTWEIGHT_HYDRAULIC_HOSE_2	5201K395_NO THREADS_Lightweight Hydraulic Hose_3	2
15	5201K395_NO_THREADS_LIGHTWEIGHT_HYDRAULIC_HOSE_3	5201K395_NO THREADS_Lightweight Hydraulic Hose_2	1
359	ID1384	Line clamp	1
363	ID1582	Line clamp	1
364	ID1596	Line clamp	1

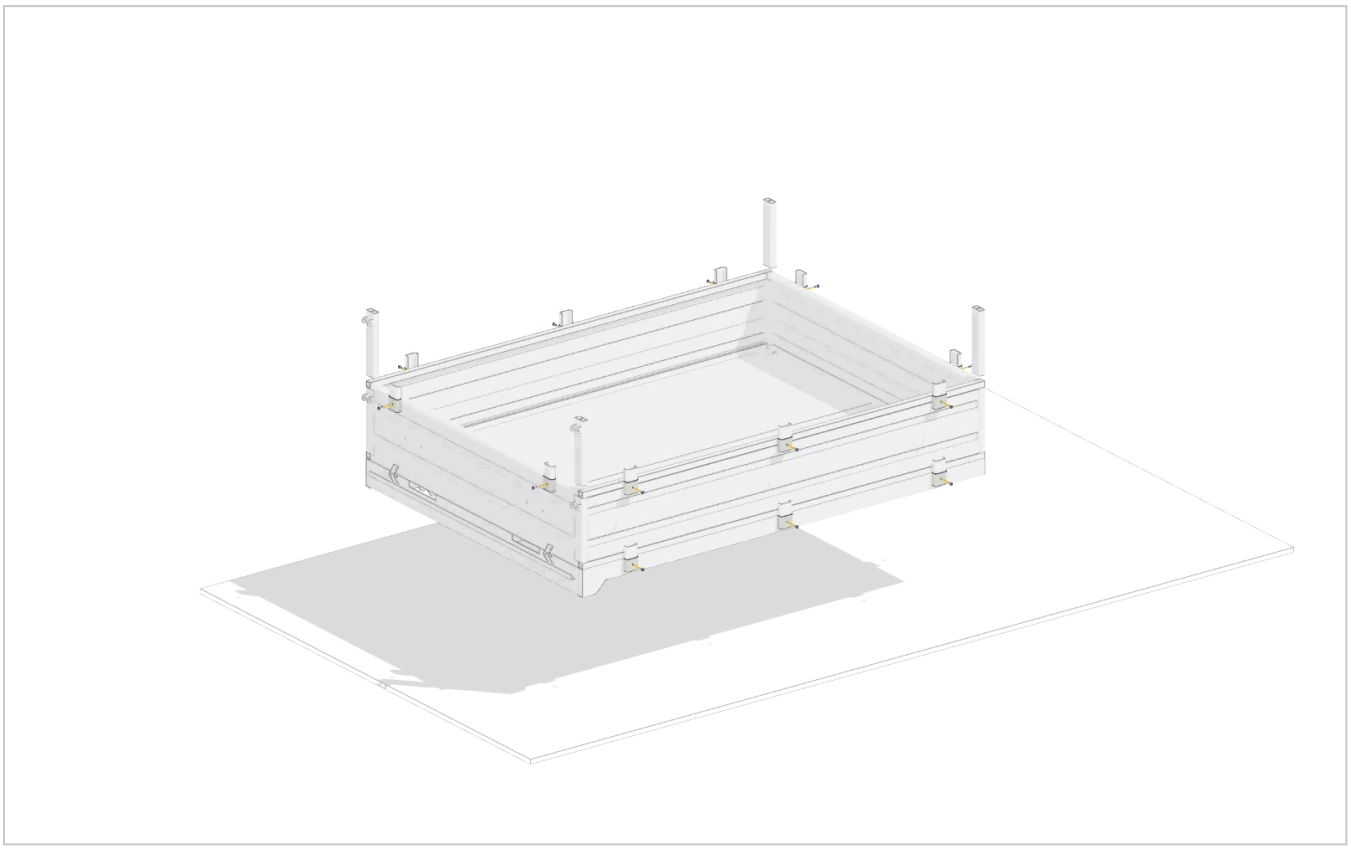
97 Fit the outer fence mounts



Fit an outer fence mount over each inner mount from the outside.

Item	Part number	Description	Qty
60	FENCE_MOUNT_OUTER	Fence Mount, Outer_9	18

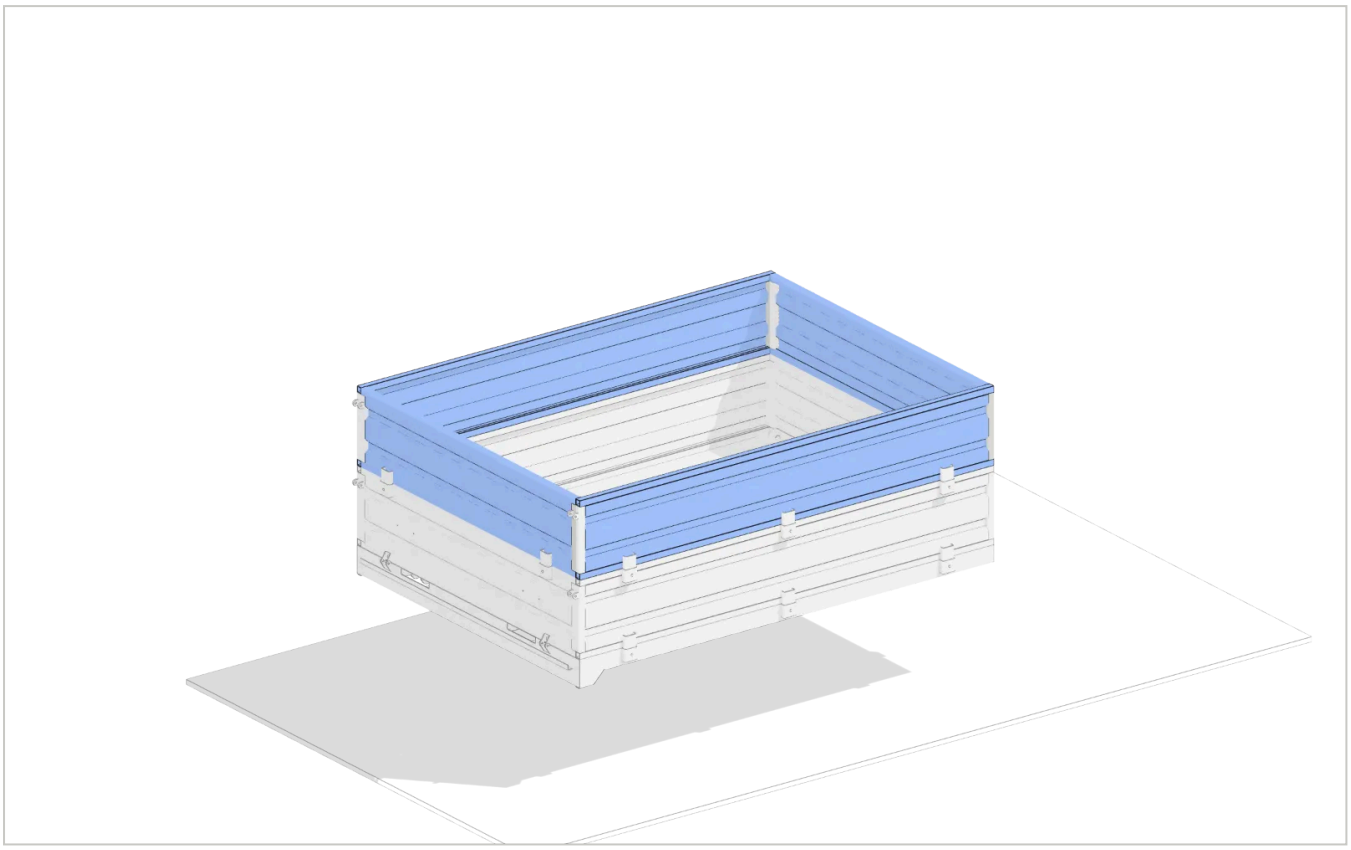
98 Fit the M8 fence mount screws



Fit an M8 x 20 screw through each outer mount into its weld nut and torque to 25 Nm.

Item	Part number	Description	Qty
458	Hex head screw grade C M8x1.25 x 20	Hex head screw grade C M8x1.25 x 20	18

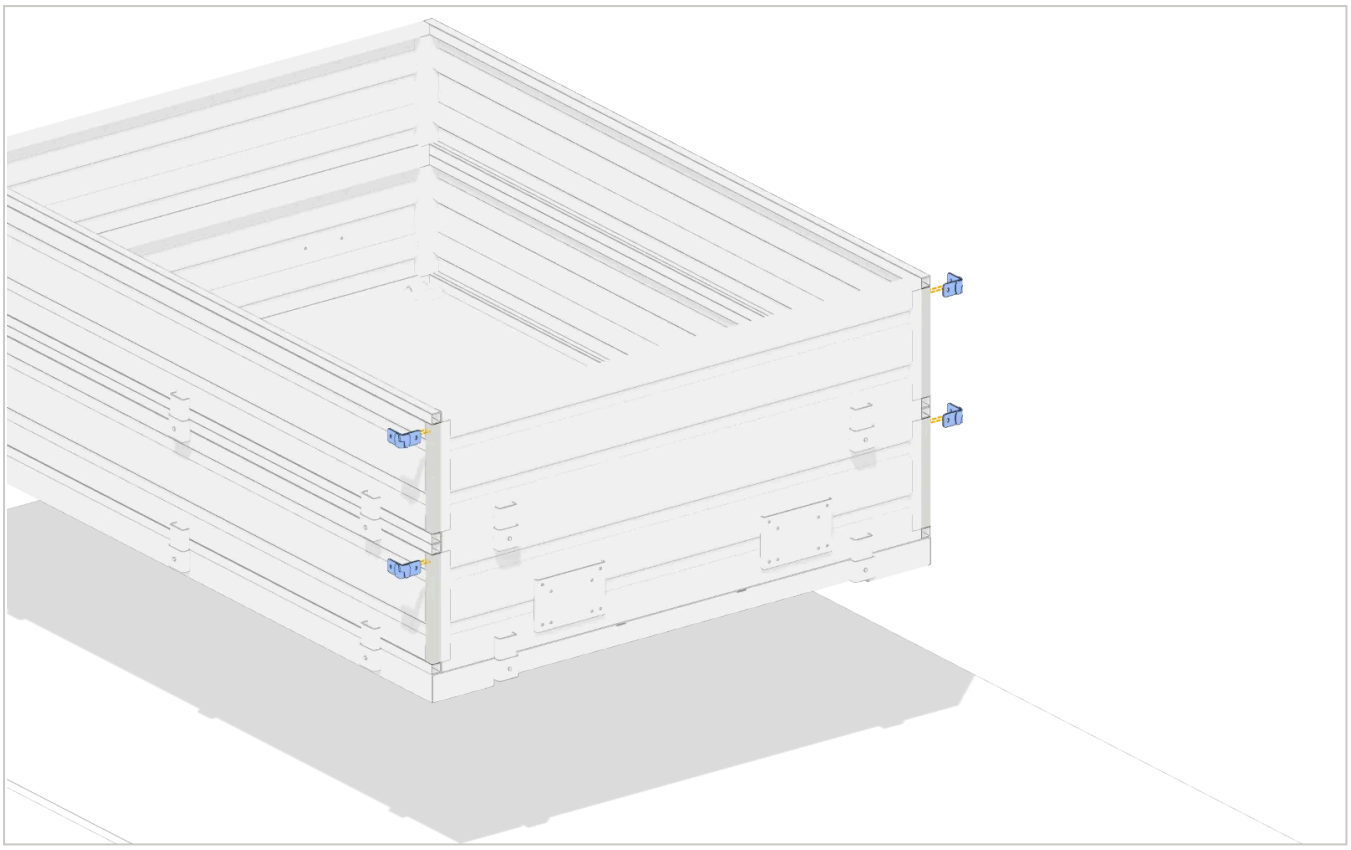
99 Fit the extension rails and panels



Fit the top side rails and the front and tailgate extension rails onto the posts, then the extension panels all round from the outside. Extension frames: MIG, 3 mm fillet at the tube joints, 2 mm stitches on the sheet.

Item	Part number	Description	Qty
207	PART_28	Side rail, mid, RH	1
214	PART_30	Side rail, top, RH	1
230	PART_37_2	Side rail, mid, LH	1
234	PART_39_2	Side rail, top, LH	1
248	PART_46_2	Front wall rail	1
252	PART_48_2	Front wall rail	1
279	PART	Tailgate rail	2
228	PART_36_2	Side extension panel, RH	1
245	PART_45	Side extension panel, LH	1
267	PART_54_2	Front extension panel	1
290	PART_71	Tailgate extension panel	1

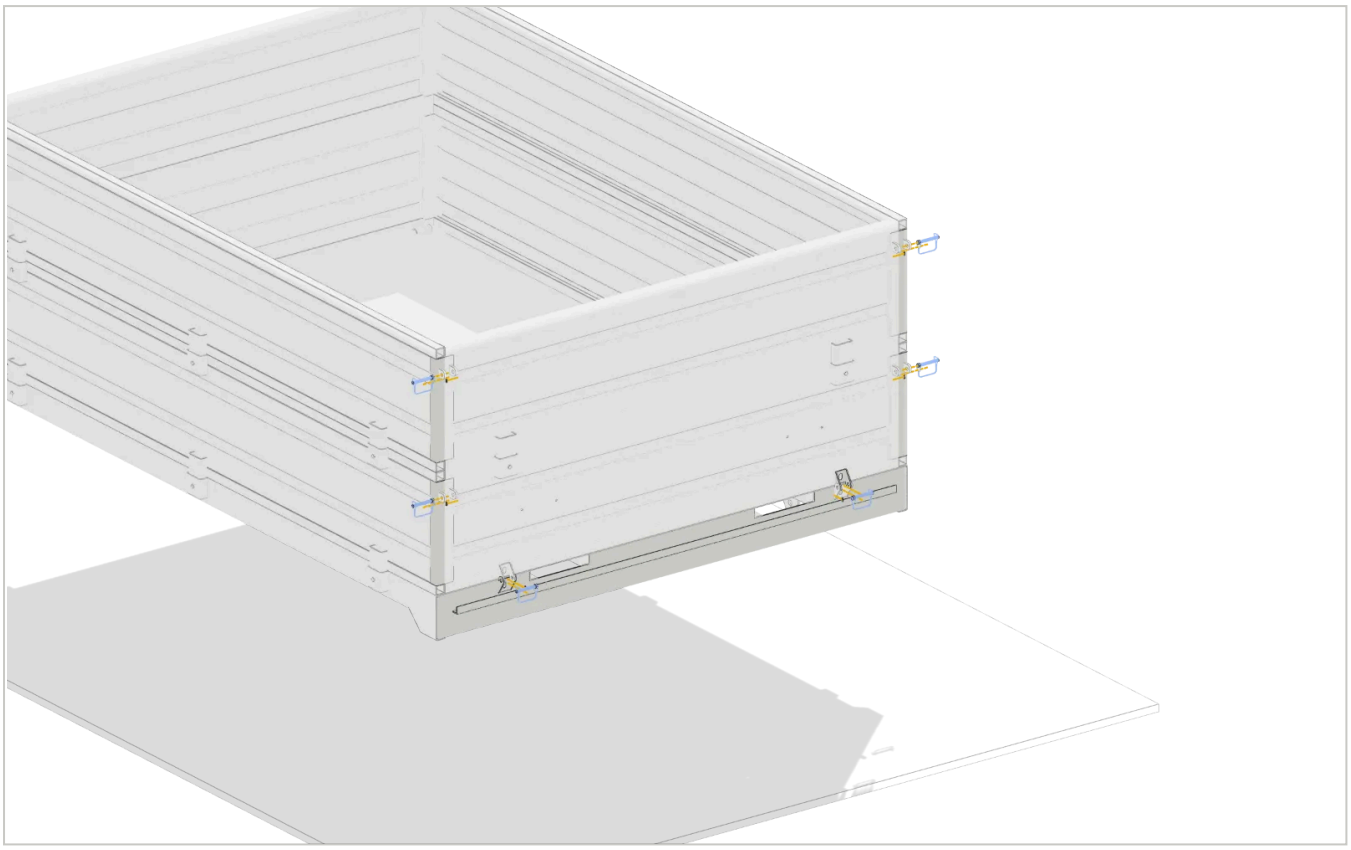
100 Fit the corner locks



Fit the eight corner locks over the corners of the extension frames from the outside.

Item	Part number	Description	Qty
49	CORNER_LOCK_LH	Corner Lock, LH_3	4
50	CORNER_LOCK_RH	Corner Lock, RH_3	4

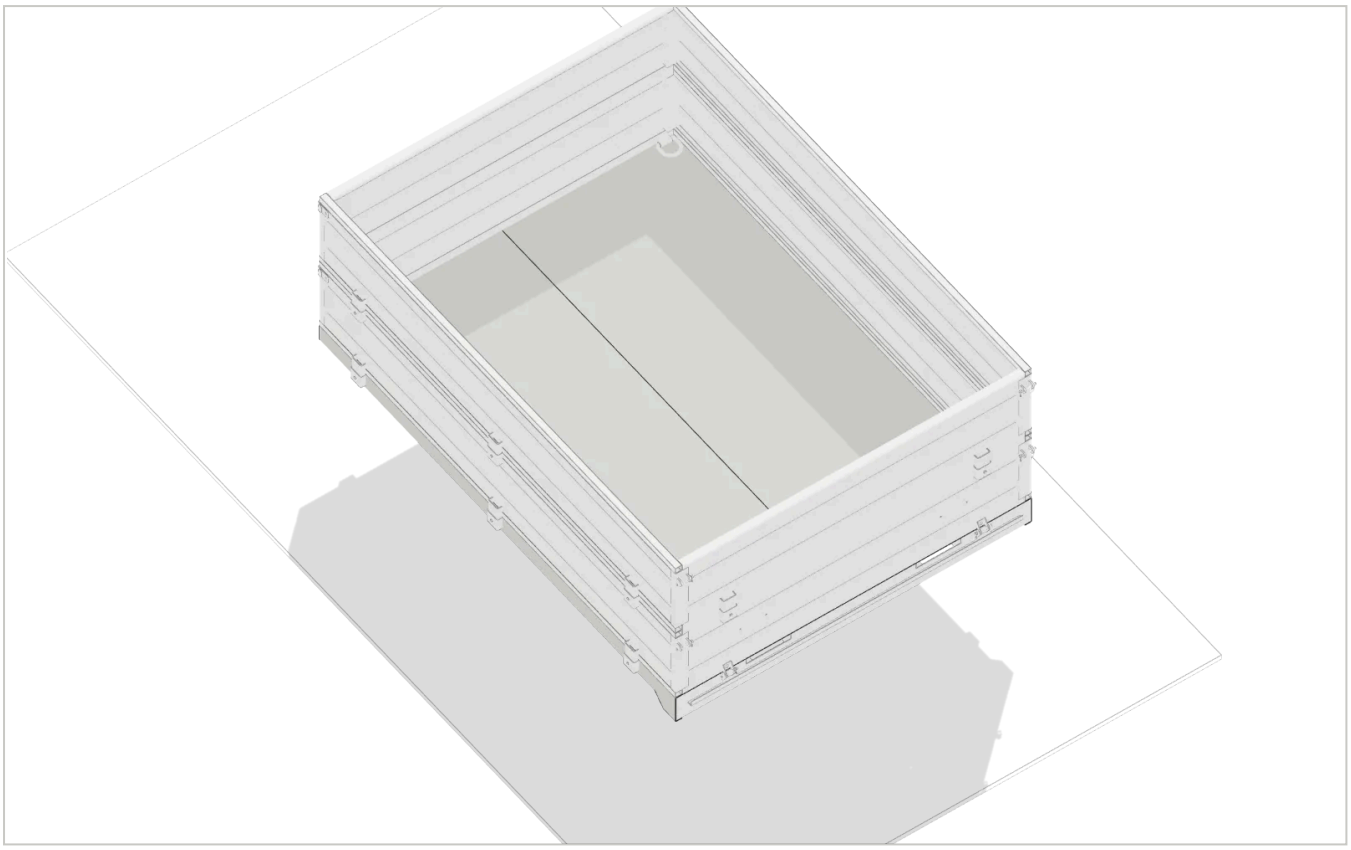
101 Fit the clevis pins



Push a wire-lock clevis pin through each fence mount and post from the outside and snap its wire over.

Item	Part number	Description	Qty
459	98480A562_18-8 Stainless Steel Wire-Lock Clevis Pin	98480A562_18-8 Stainless Steel Wire-Lock Clevis Pin	18

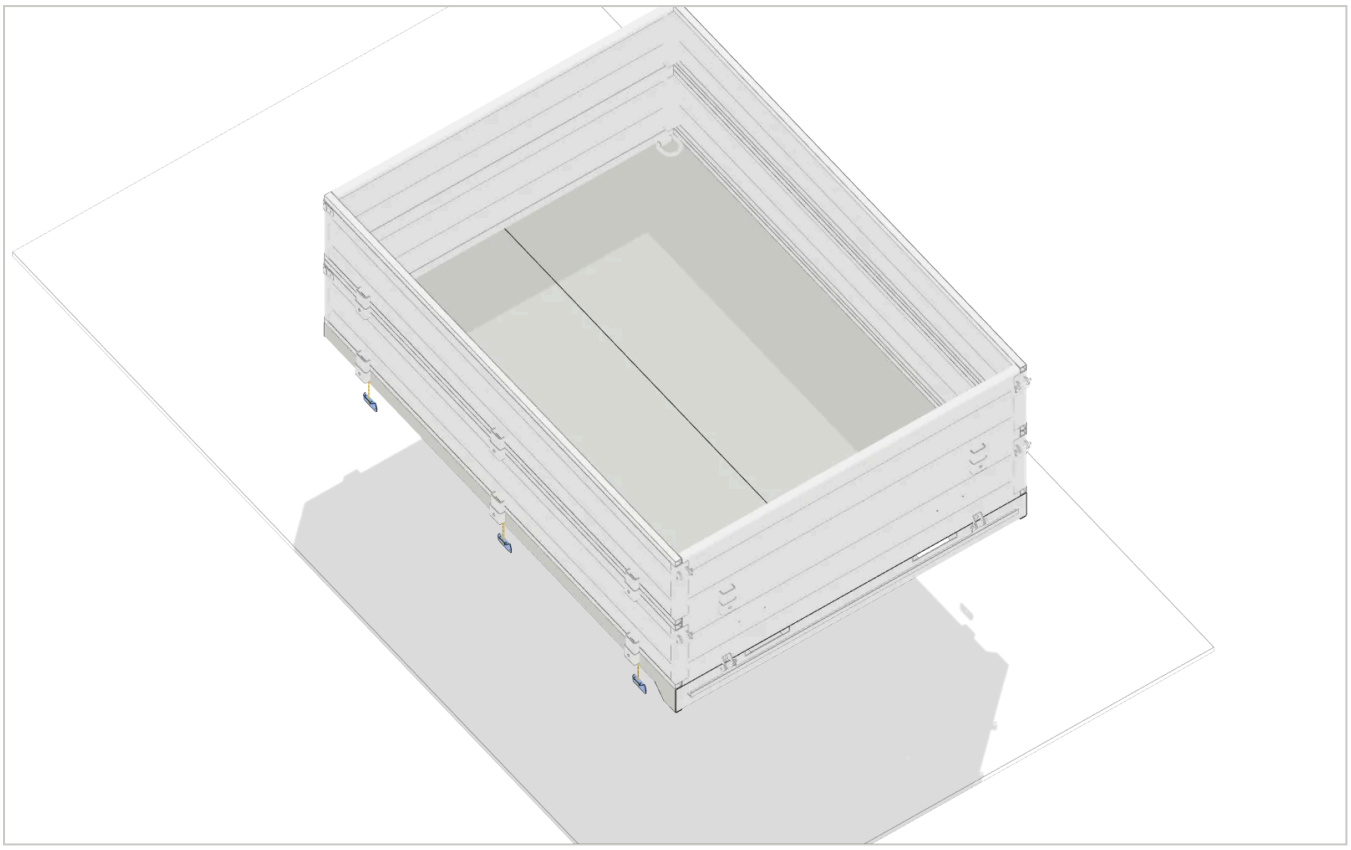
102 Press the PEM nuts into the bed rails



Press the twelve M4 PEM nuts into the underside of the bed rails at the marker light positions.

Item	Part number	Description	Qty
134	PEM_S_M4_0_ZI	PEM S-M4-0 ZI_9	12

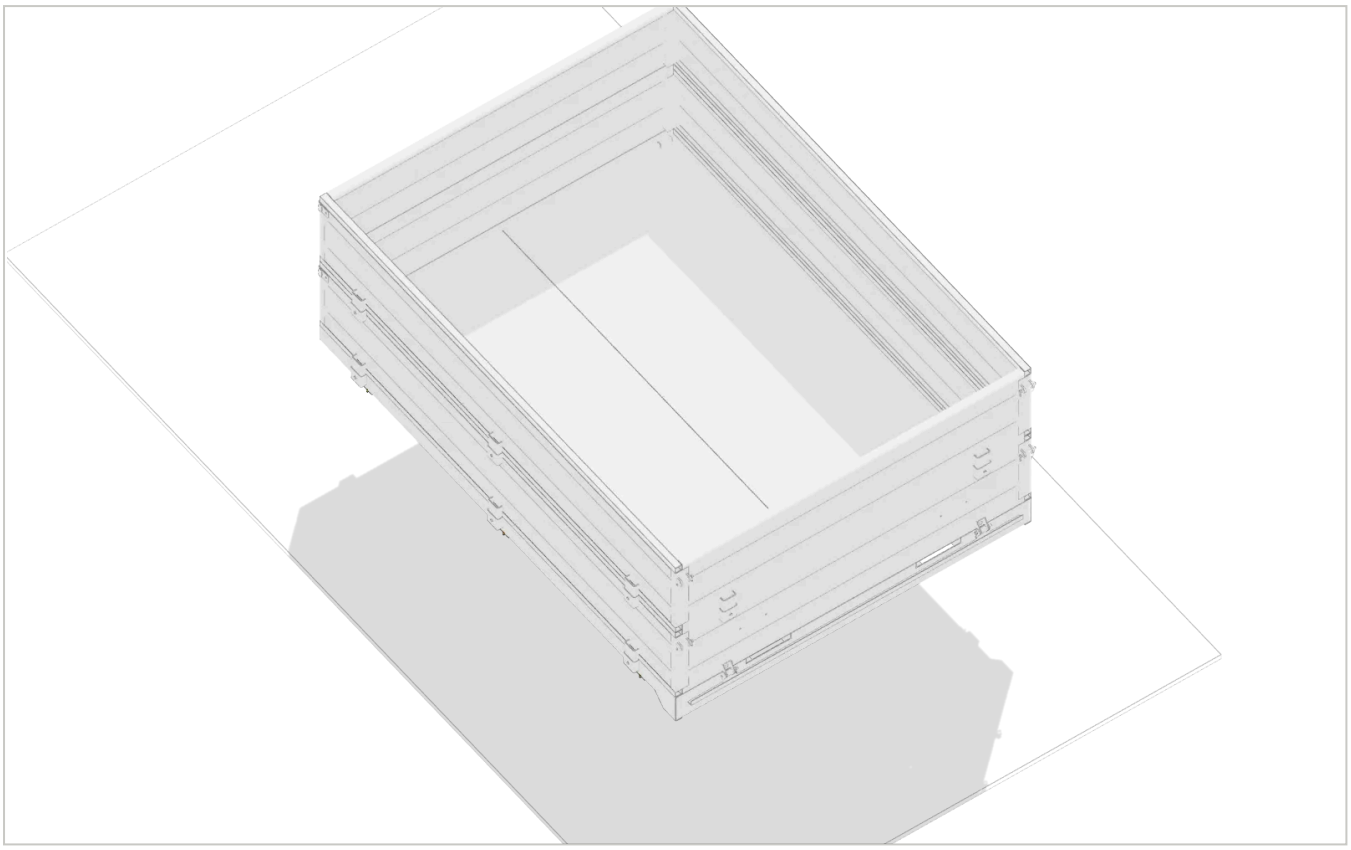
103 Fit the marker light brackets



Hold each marker light bracket up under the bed rail, its flange over the two PEM nuts.

Item	Part number	Description	Qty
42	BRACKET_MARKER_LIGHT	Bracket, Marker Light_5	6

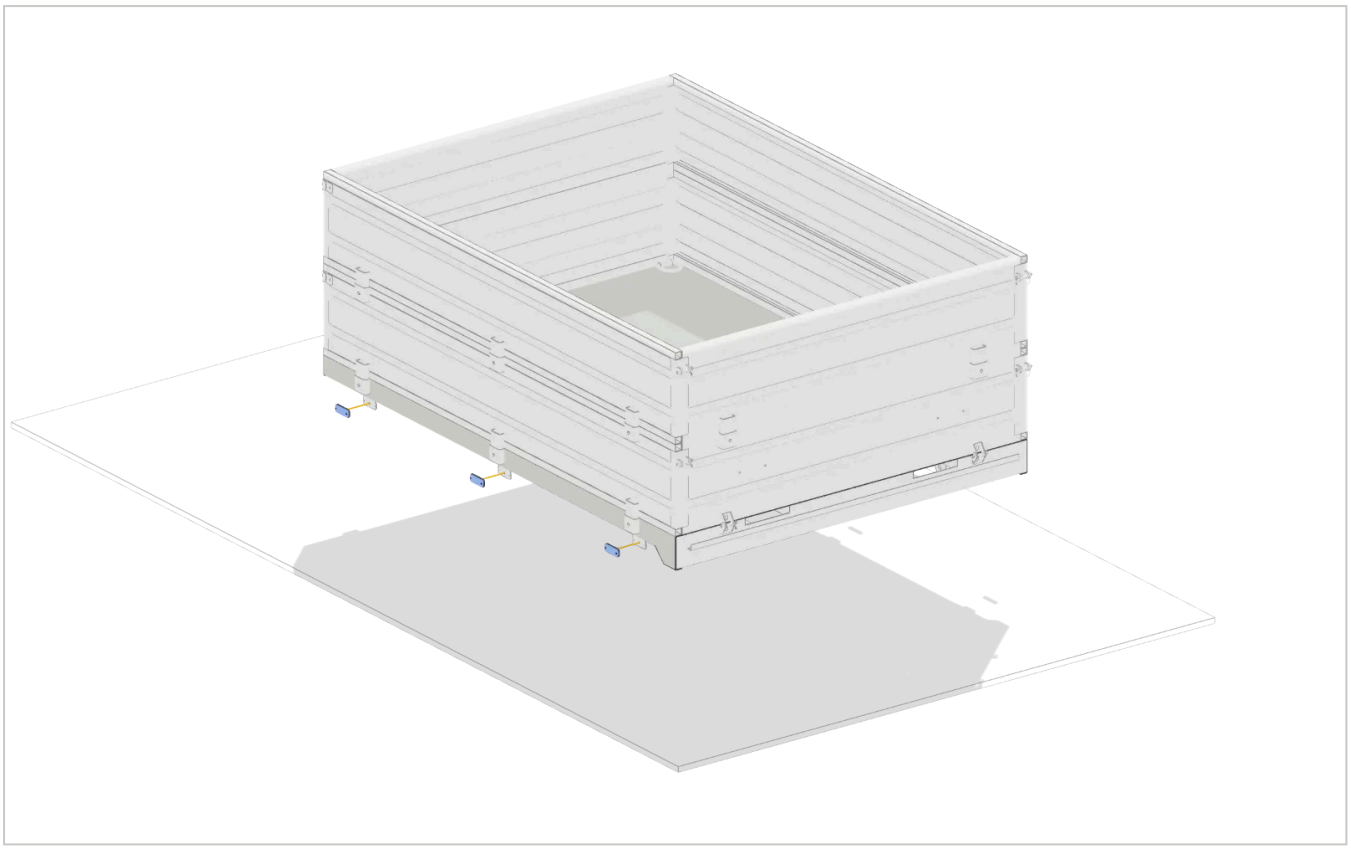
104 Fit the M4 pan head screws



Fit two M4 x 10 pan head screws with washers up through each bracket flange into the PEM nuts.

Item	Part number	Description	Qty
460	PH Pan head screw M4x0.70 x 10	PH Pan head screw M4x0.70 x 10	12
309	PLAIN_WASHER_NORMAL_GRADE_A_M4	Plain washer normal grade A M4_8	12

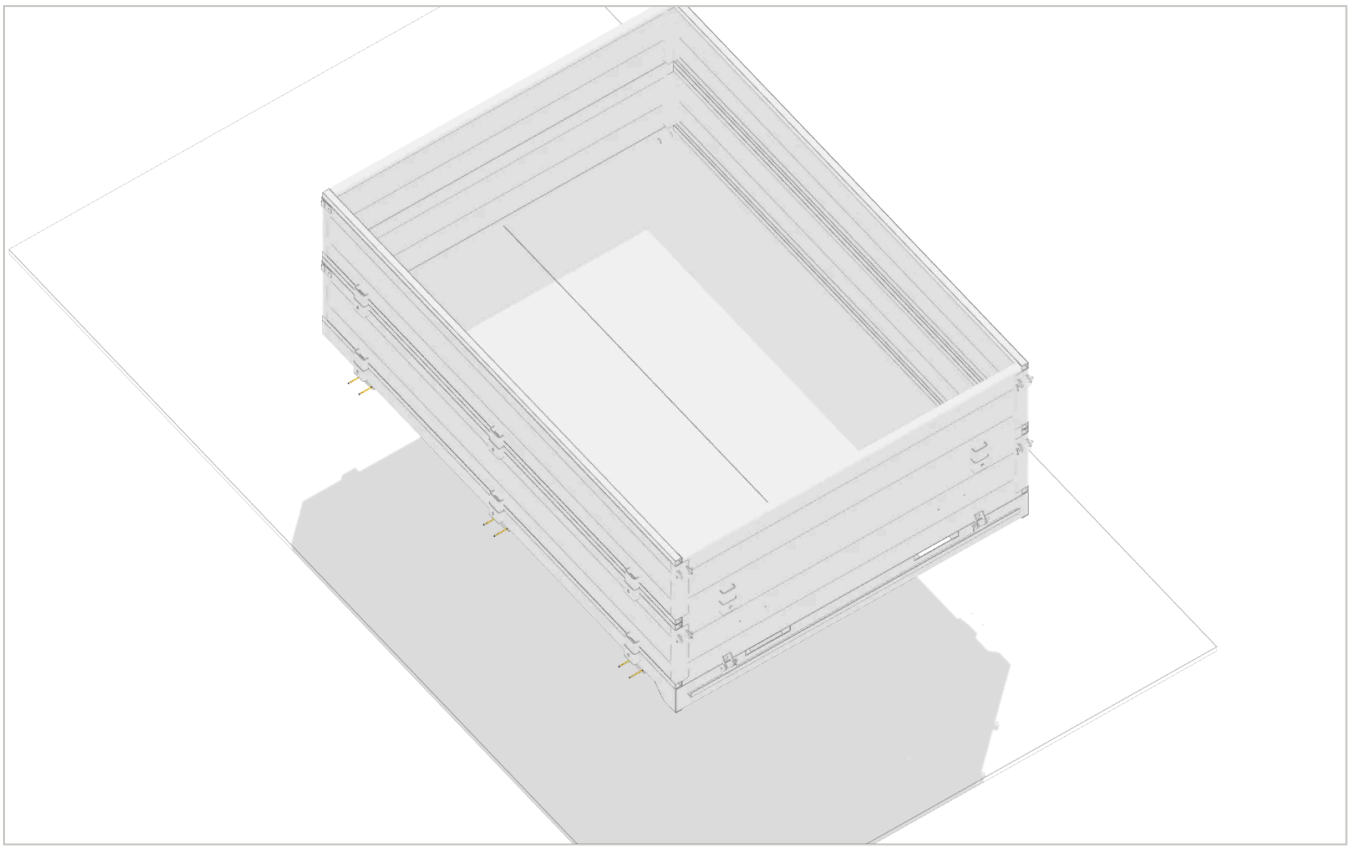
105 Fit the marker lights



Fit the gasket, housing and lens of each marker light against the outside of its bracket.

Item	Part number	Description	Qty
64	GASKET_MARKER_LIGHT	Gasket, Marker Light_5	6
91	HOUSING_MARKER_LIGHT	Housing, Marker Light_5	6
127	LENS_MARKER_LIGHT	Lens, Marker Light_5	6

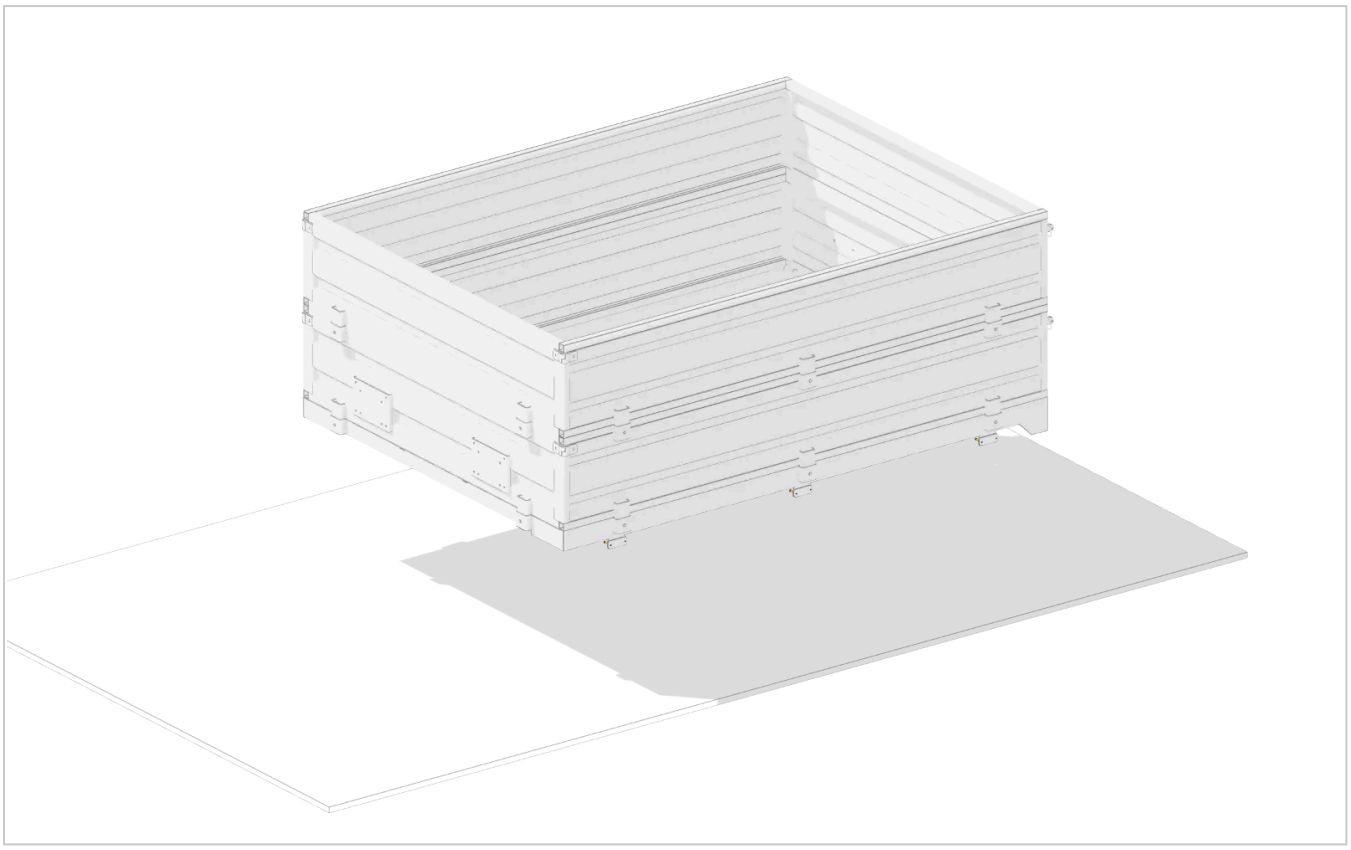
106 Fit the marker light screws



Push two M4 x 18 button head screws through each lens, housing, gasket and bracket from the outside.

Item	Part number	Description	Qty
461	Socket button head screw M4x0.7 x 18	Socket button head screw M4x0.7 x 18	12

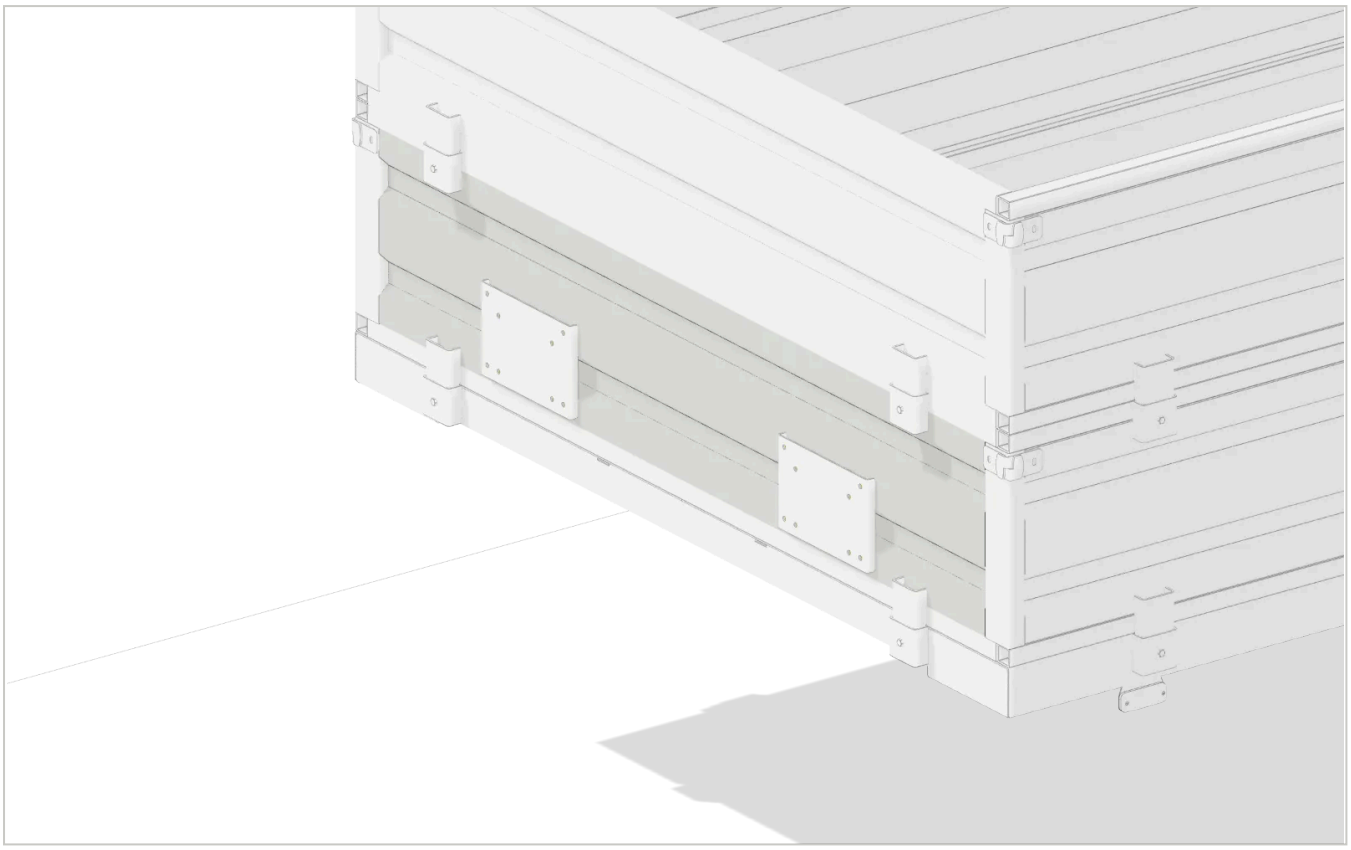
107 Fit the M4 washers and nuts



Fit a washer and an M4 nut on each screw behind the bracket and tighten by hand plus a quarter turn.

Item	Part number	Description	Qty
462	Hex nut grade A & B M4x0.7	Hex nut grade A & B M4x0.7	12
309	PLAIN_WASHER_NORMAL_GRADE_A_M4	Plain washer normal grade A M4_8	12

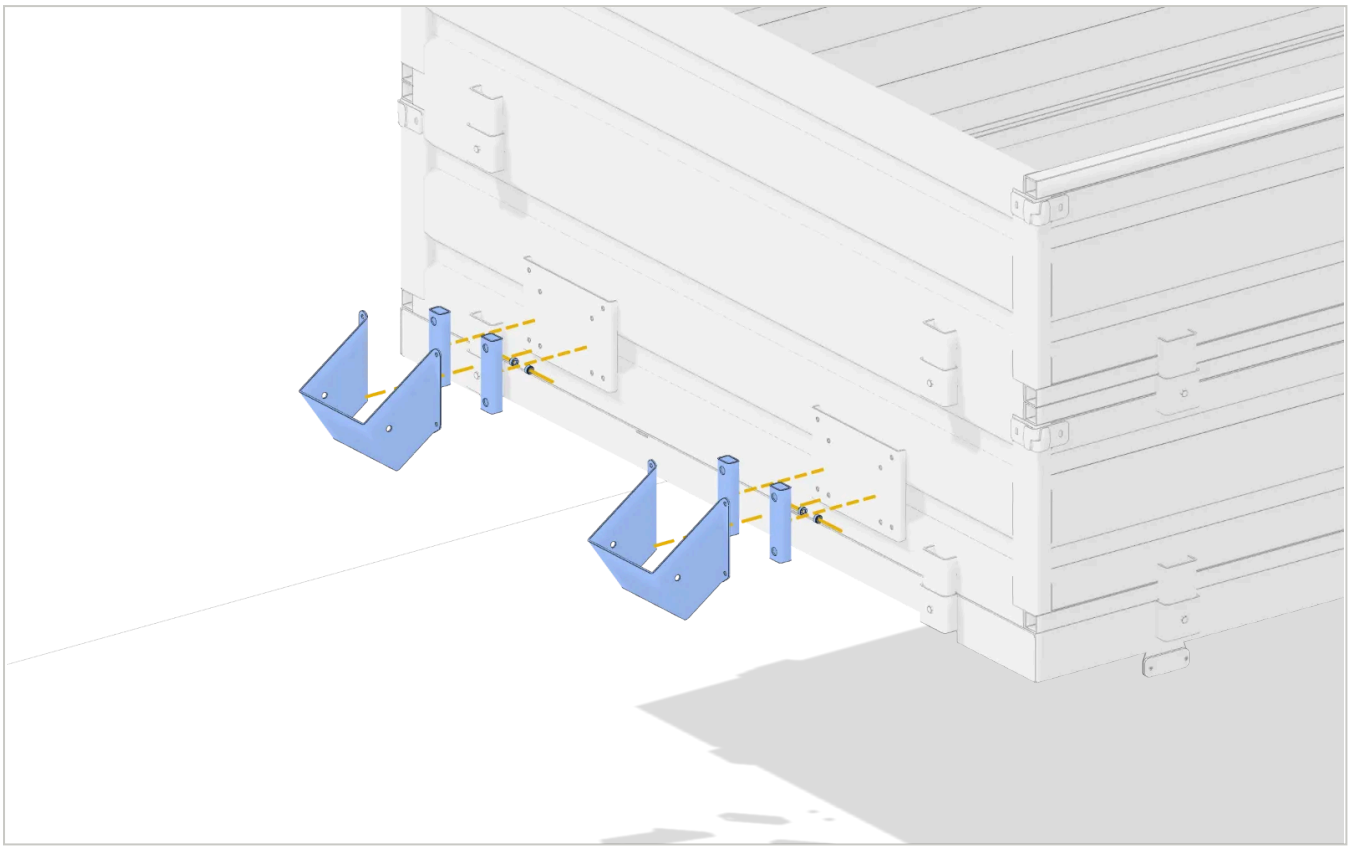
108 Press the PEM nuts into the chock plates



Press the eight M8 PEM nuts into each chock plate from the back.

Item	Part number	Description	Qty
136	PEM_S_M8_2_ZI	PEM S-M8-2 ZI_9	16

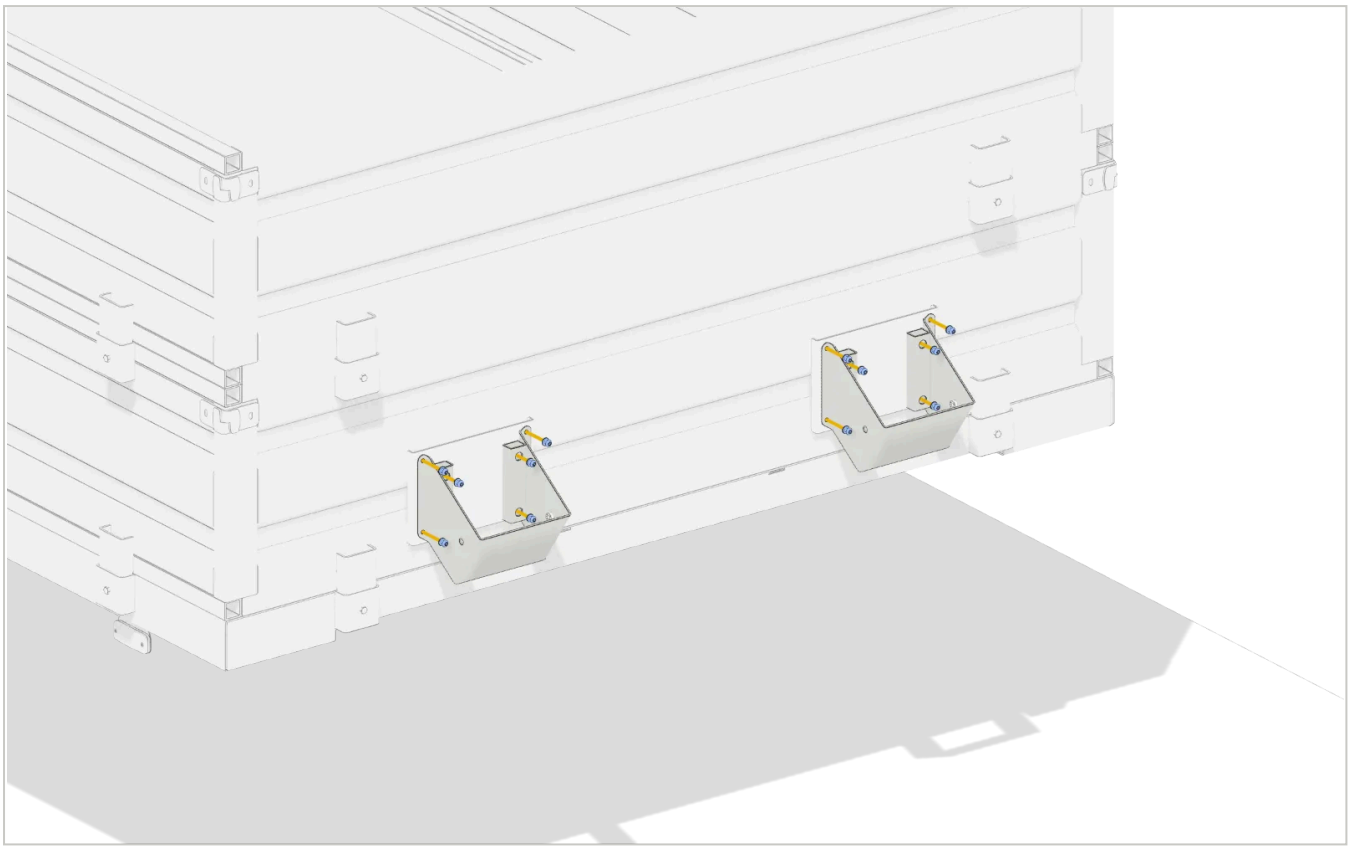
109 Fit the chock mounts and guides



Fit a chock mount and two guides over the PEM nuts on each plate, and press the two M10 PEM nuts into each mount.

Item	Part number	Description	Qty
348	WHEEL_CHOCK_MOUNT	Wheel Chock Mount_1	2
346	WHEEL_CHOCK_GUIDE	Wheel Chock Guide_3	4
138	PEM_SH_M10_1_X	PEM SH-M10-1 X_3	4

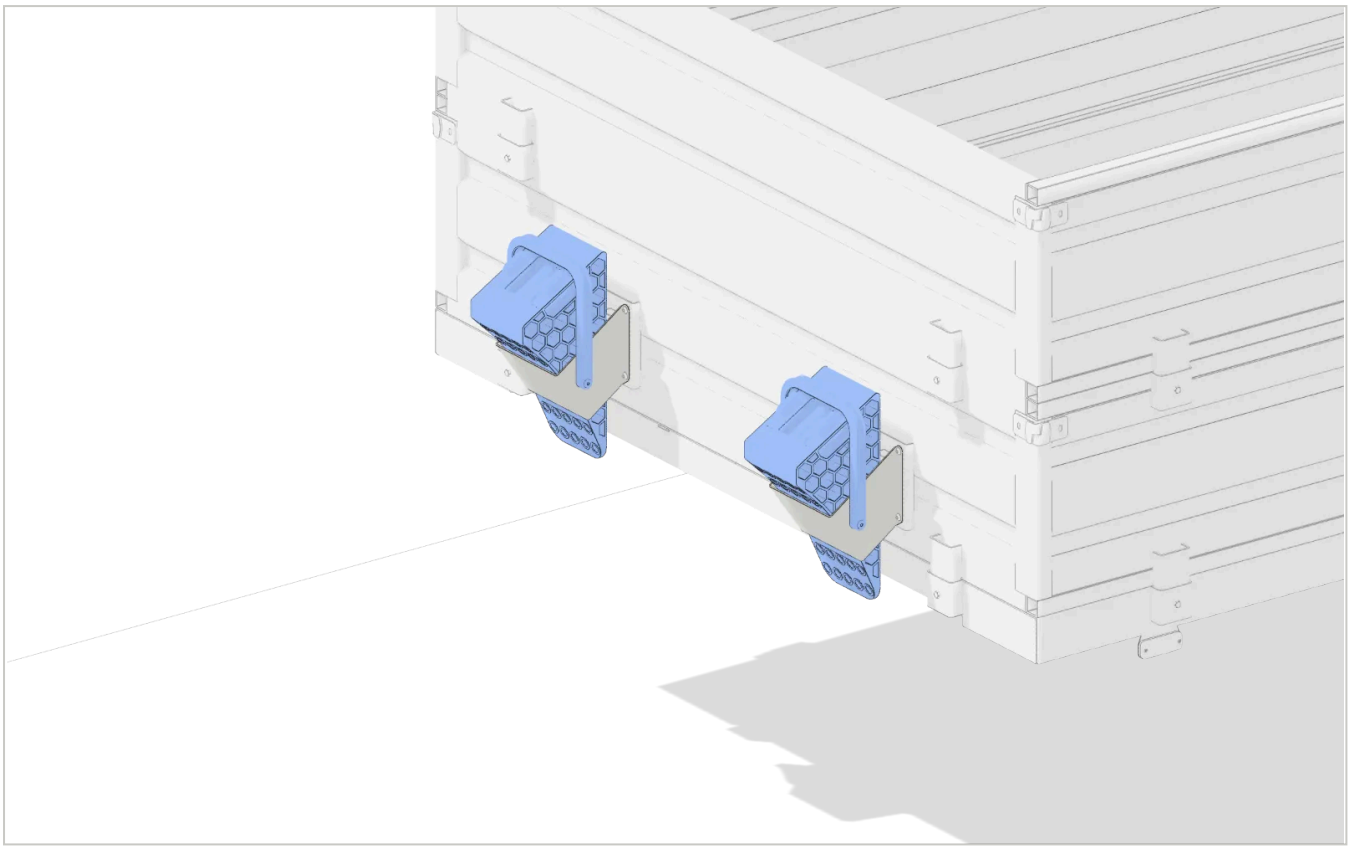
110 Fit the M8 button head screws



Fit eight M8 x 14 button head screws with washers through each mount and its guides into the PEM nuts and torque to 20 Nm.

Item	Part number	Description	Qty
313	PLAIN_WASHER_NORMAL_GRADE_A_M8	Plain washer normal grade A M8_9	16
463	Socket button head screw M8x1.25 x 14	Socket button head screw M8x1.25 x 14	16

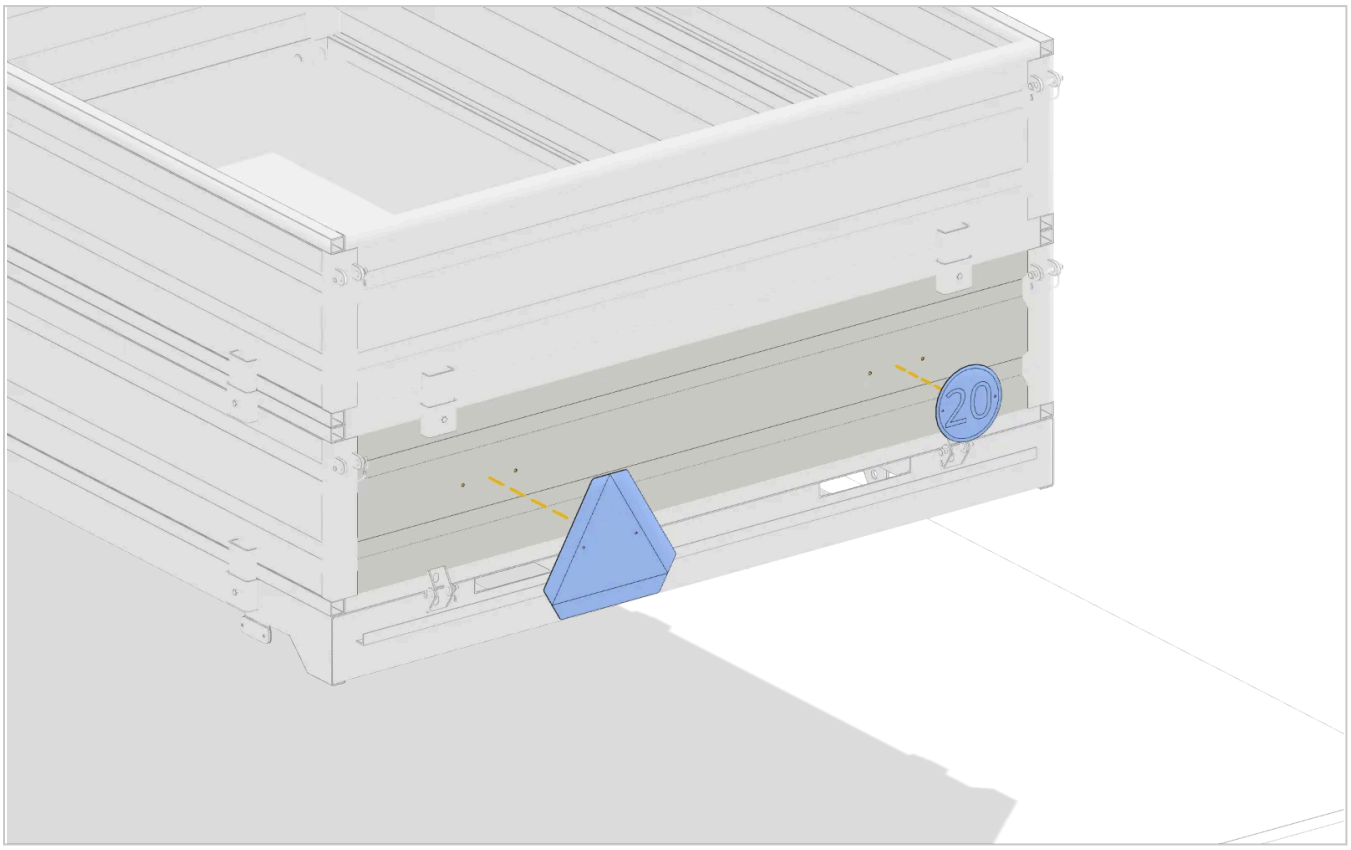
111 Fit the wheel chocks and lock handles



Drop a chock into each mount between its guides, fit the lock handle over it and secure the handle with the two M10 shoulder screws and their washers.

Item	Part number	Description	Qty
345	WHEEL_CHOCK	Wheel Chock_1	2
347	WHEEL_CHOCK_LOCK_HANDLE	Wheel Chock Lock Handle_1	2
305	PLAIN_WASHER_NORMAL_GRADE_A_M10	Plain washer normal grade A M10_1	4
464	Socket head shoulder screw 13 x 16 x M10x1.5	Socket head shoulder screw 13 x 16 x M10x1.5	4

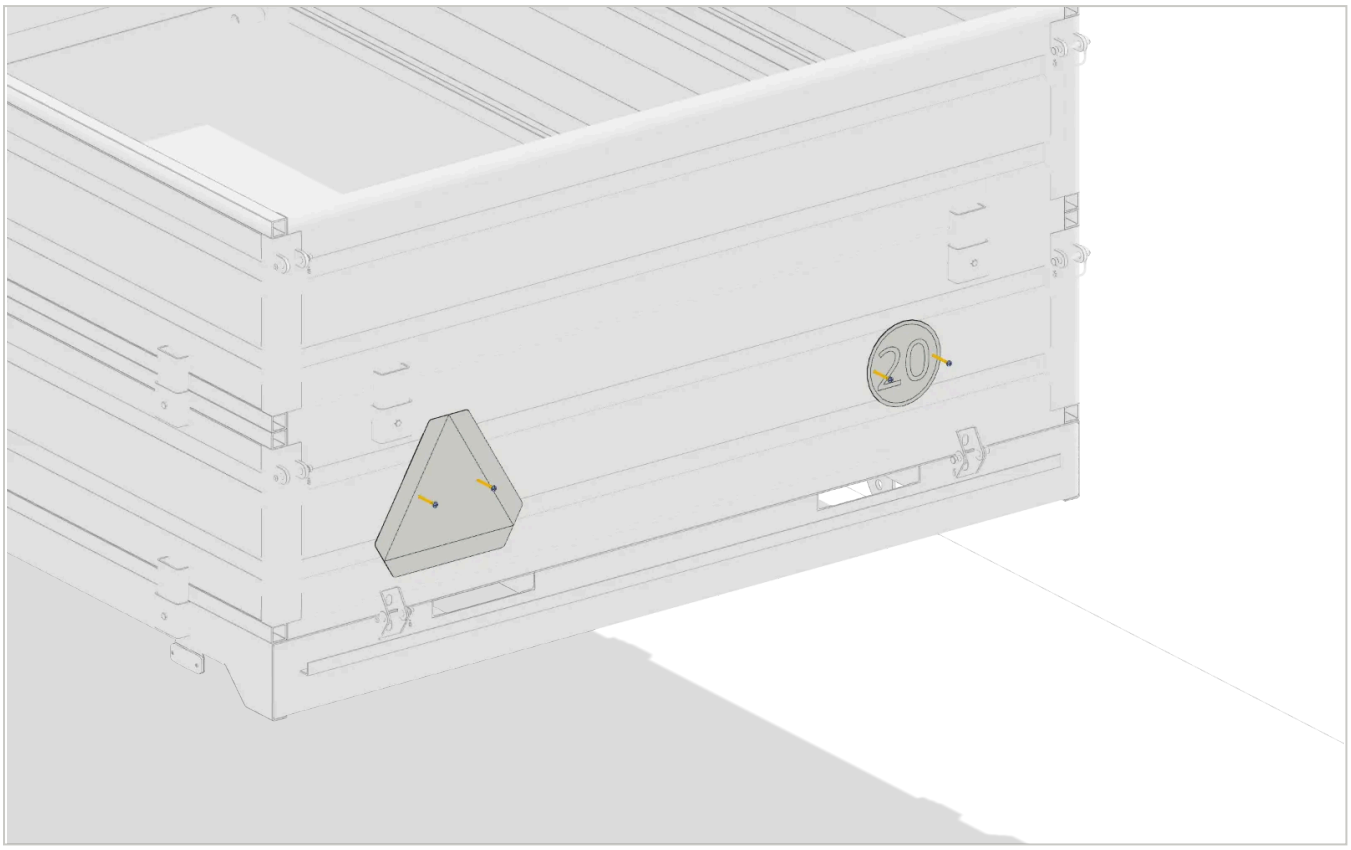
112 Fit the speed plate and the reflector



Press the four M6 PEM nuts into the tailgate panel from the front, then hold the speed plate and the yield reflector against the back of the tailgate over them.

Item	Part number	Description	Qty
338	SPEED_PLATE	Speed Plate	1
353	YIELD_REFLECTOR	Yield Reflector	1
135	PEM_S_M6_2_ZI	PEM S-M6-2 ZI_3	4

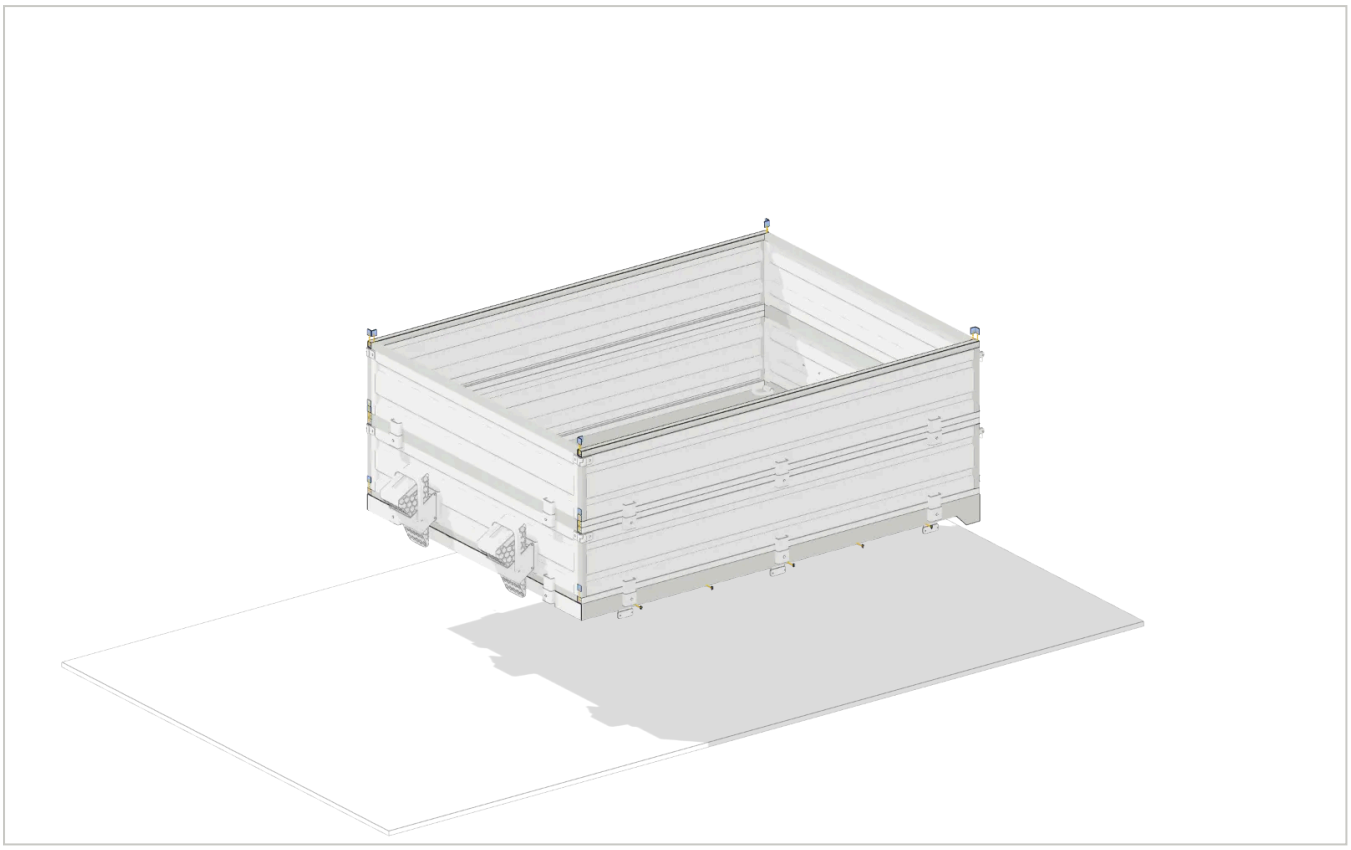
113 Fit the M6 pan head screws



Fit an M6 x 10 pan head screw through each corner of the plates into the PEM nuts.

Item	Part number	Description	Qty
465	PH Pan head screw M6x1.00 x 10	PH Pan head screw M6x1.00 x 10	4

114 Fit the tube end caps and the cable holders

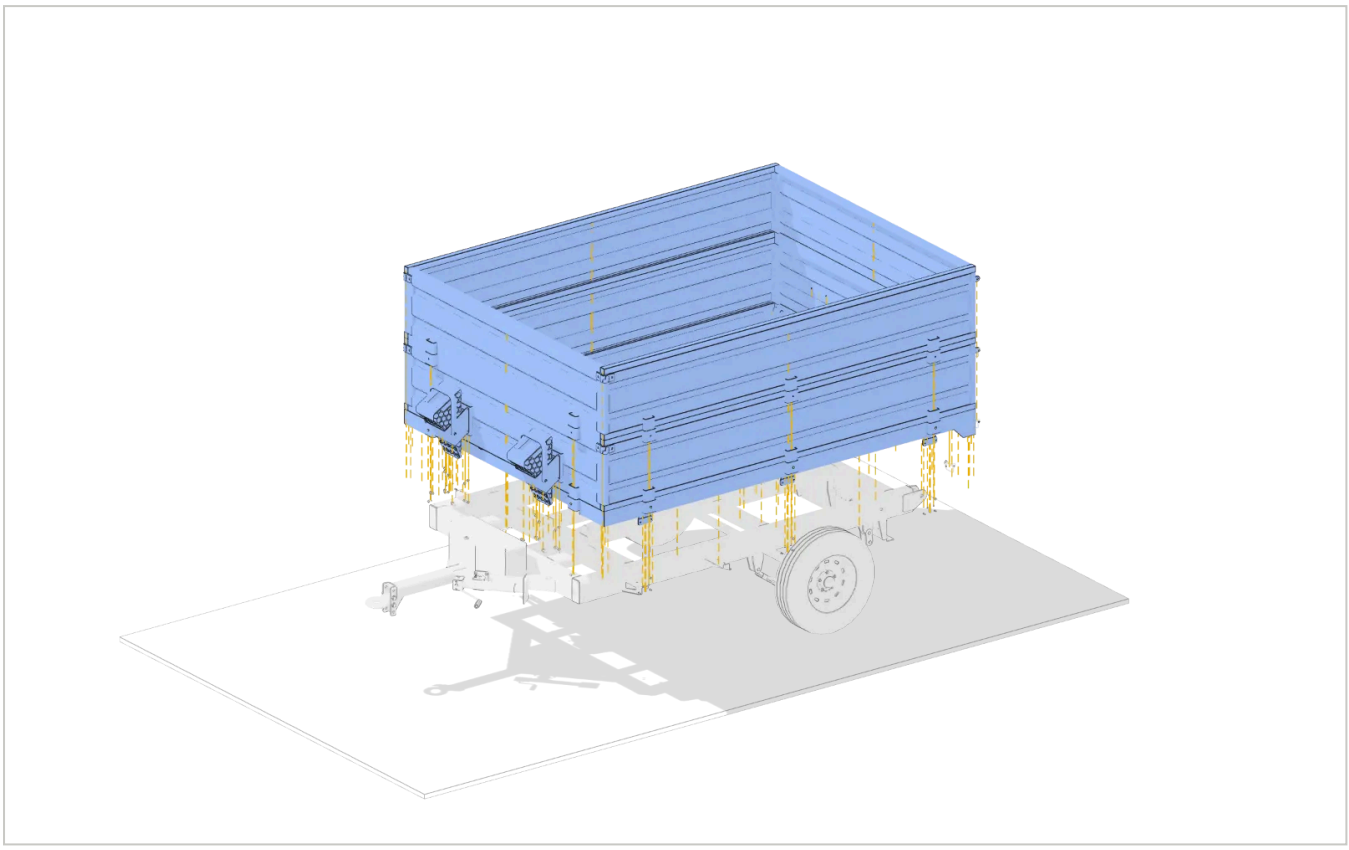


Push the plastic end caps into every open tube end and press the ten cable holders into the bed rails from the outside.

Item	Part number	Description	Qty
166	PART_14_3	Part 14_2	1
169	PART_15_3	Part 15_2	1
172	PART_16_3	Part 16_2	1
175	PART_17_3	Part 17_2	1
195	PART_23_2	Part 23_1	1
198	PART_24_2	Part 24_1	1
201	PART_25_2	Part 25_1	1
203	PART_26	Part 26	1
206	PART_27_2	Part 27_1	1
208	PART_28_2	Part 28_1	1
210	PART_29_2	Part 29_1	1
215	PART_30_2	Part 30_1	1
217	PART_31_2	Part 31_1	1

Item	Part number	Description	Qty
218	PART_32	Part 32	1
219	PART_32_2	Part 32_1	1
220	PART_33	Part 33	1
223	PART_34_2	Part 34_1	1
226	PART_35_2	Part 35_1	1
241	PART_41_2	Part 41_1	1
242	PART_42	Part 42	1
243	PART_43	Part 43	1
244	PART_44	Part 44	1
259	PART_50_2	Part 50_1	1
261	PART_51_2	Part 51_1	1
263	PART_52_2	Part 52_1	1
265	PART_53_2	Part 53_1	1
272	PART_59	Part 59	1
273	PART_5_2	Part 5_1	1
276	PART_60	Part 60	1
277	PART_61	Part 61	1
278	PART_62	Part 62	1
283	PART_67	Part 67	1
284	PART_68	Part 68	1
285	PART_69	Part 69	1
286	PART_6_2	Part 6_1	1
289	PART_70	Part 70	1
292	PART_7_2	Part 7_1	1
295	PART_8_2	Part 8_1	1
45	CABLE_HOLDER_PUSH_IN_7_16_ID	Cable Holder, Push In, Ø7/16" ID_9	10

115 Lower the bed onto the frame



Lift the bed over the frame, tailgate to the rear, and lower it until the pivot lugs sit between the pivot brackets and the cylinder rod-end clevis sits in its lug.

Item	Part number	Description	Qty
45	CABLE_HOLDER_PUSH_IN_7_16_ID	Cable Holder, Push In, Ø7/16" ID_9	10
49	CORNER_LOCK_LH	Corner Lock, LH_3	4
50	CORNER_LOCK_RH	Corner Lock, RH_3	4
59	FENCE_MOUNT_INNER	Fence Mount, Inner_9	18
60	FENCE_MOUNT_OUTER	Fence Mount, Outer_9	18
89	HINGE_INNER	Hinge, Inner_1	2
90	HINGE_OUTER	Hinge, Outer_1	2
134	PEM_S_M4_0_ZI	PEM S-M4-0 ZI_9	12
135	PEM_S_M6_2_ZI	PEM S-M6-2 ZI_3	4
145	PART_10_2	Outrigger stub	1
146	PART_10_3	Side rail, bottom, LH	1
148	PART_11_2	Outrigger stub	1
149	PART_11_3	Corner post	1

Item	Part number	Description	Qty
151	PART_125	Part 125	1
152	PART_126	Part 126	1
153	PART_127	Part 127	1
154	PART_128	Part 128	1
155	PART_12_2	Outrigger stub	1
156	PART_12_3	Side rail, mid, LH	1
158	PART_133	Part 133	1
159	PART_134	Part 134	1
160	PART_135	Part 135	1
161	PART_136	Part 136	1
162	PART_13_2	Bed cross stub	1
163	PART_13_3	Corner post	1
165	PART_14_2	Outrigger stub	1
166	PART_14_3	Part 14_2	1
168	PART_15_2	Outrigger stub	1
169	PART_15_3	Part 15_2	1
171	PART_16_2	Outrigger stub	1
172	PART_16_3	Part 16_2	1
174	PART_17_2	Bed cross stub	1
175	PART_17_3	Part 17_2	1
177	PART_18_2	Floor stringer	1
178	PART_18_3	Side panel, LH	1
180	PART_19_2	Front wall rail	1
181	PART_19_3	Floor stringer	1
182	PART_1_2	Side rail, bottom, RH	1
183	PART_1_3	Floor panel, RH	1
186	PART_20_2	Corner post	1
187	PART_20_3	Floor stringer	1
189	PART_21_2	Front wall rail	1
190	PART_21_3	Floor stringer	1

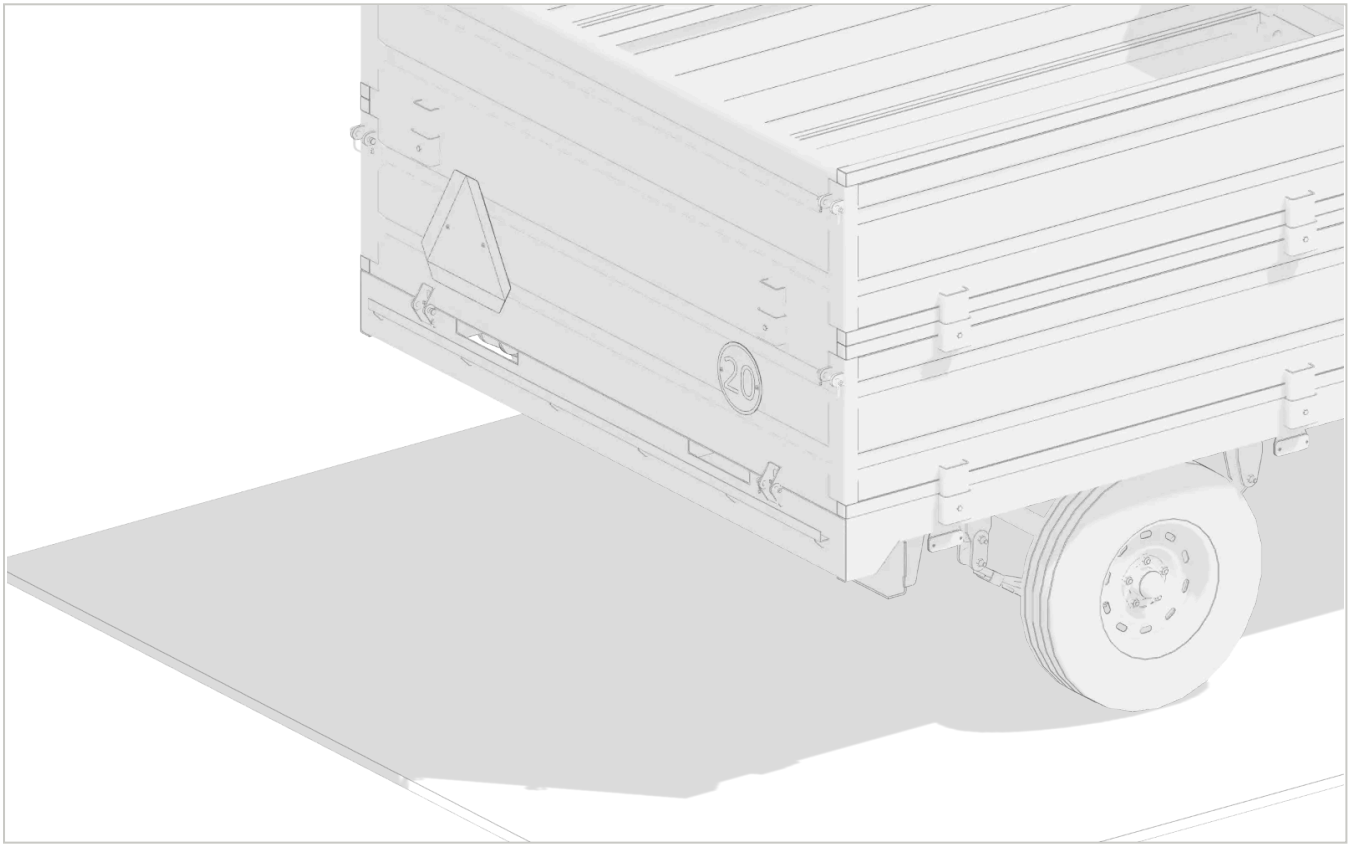
Item	Part number	Description	Qty
192	PART_22_2	Corner post	1
193	PART_22_3	Part 22_2	1
195	PART_23_2	Part 23_1	1
196	PART_23_3	Part 23_2	1
198	PART_24_2	Part 24_1	1
199	PART_24_3	Part 24_2	1
201	PART_25_2	Part 25_1	1
202	PART_25_3	Part 25_2	1
203	PART_26	Part 26	1
204	PART_26_2	Tailgate stop bar	1
205	PART_27	Front panel	1
206	PART_27_2	Part 27_1	1
207	PART_28	Side rail, mid, RH	1
208	PART_28_2	Part 28_1	1
209	PART	Extension post	4
210	PART_29_2	Part 29_1	1
211	PART_2_2	Corner post	1
212	PART_2_3	Floor panel, LH	1
214	PART_30	Side rail, top, RH	1
215	PART_30_2	Part 30_1	1
217	PART_31_2	Part 31_1	1
218	PART_32	Part 32	1
219	PART_32_2	Part 32_1	1
220	PART_33	Part 33	1
221	PART_33_2	Bed pivot lug, LH	1
223	PART_34_2	Part 34_1	1
224	PART_34_3	Bed pivot lug, RH	1
226	PART_35_2	Part 35_1	1
228	PART_36_2	Side extension panel, RH	1
230	PART_37_2	Side rail, mid, LH	1

Item	Part number	Description	Qty
232	PART_38_2	Extension post	1
234	PART_39_2	Side rail, top, LH	1
235	PART_3_2	Side rail, mid, RH	1
236	PART_3_3	Front sill	1
239	PART_40_2	Extension post	1
241	PART_41_2	Part 41_1	1
242	PART_42	Part 42	1
243	PART_43	Part 43	1
244	PART_44	Part 44	1
245	PART_45	Side extension panel, LH	1
246	PART_45_2	Part 45_1	1
247	PART_46	Part 46	1
248	PART_46_2	Front wall rail	1
249	PART_47	Part 47	1
250	PART_47_2	Extension post	1
251	PART_48	Part 48	1
252	PART_48_2	Front wall rail	1
253	PART_49	Part 49	1
254	PART_49_2	Extension post	1
255	PART_4_2	Corner post	1
256	PART_4_3	Rear sill	1
258	PART_50	Part 50	1
259	PART_50_2	Part 50_1	1
260	PART_51	Part 51	1
261	PART_51_2	Part 51_1	1
262	PART_52	Part 52	1
263	PART_52_2	Part 52_1	1
264	PART_53	Part 53	1
265	PART_53_2	Part 53_1	1
266	PART_54	Part 54	1

Item	Part number	Description	Qty
267	PART_54_2	Front extension panel	1
268	PART	Tailgate rail	4
269	PART	Corner post	2
272	PART_59	Part 59	1
273	PART_5_2	Part 5_1	1
274	PART_5_3	Bed rail, LH	1
276	PART_60	Part 60	1
277	PART_61	Part 61	1
278	PART_62	Part 62	1
283	PART_67	Part 67	1
284	PART_68	Part 68	1
285	PART_69	Part 69	1
286	PART_6_2	Part 6_1	1
287	PART_6_3	Bed rail, RH	1
289	PART_70	Part 70	1
290	PART_71	Tailgate extension panel	1
291	PART_72	Tailgate panel	1
292	PART_7_2	Part 7_1	1
293	PART_7_3	Bed cross member	1
295	PART_8_2	Part 8_1	1
296	PART_8_3	Bed cross member	1
298	PART_9_2	Side panel, RH	1
299	PART_9_3	Bed cross member	1
338	SPEED_PLATE	Speed Plate	1
344	WELD_NUT_SQUARE_M8X1_25MM	Weld Nut, Square, M8x1.25mm_9	18
349	WHEEL_CHOCK_WELD_PLATE	Wheel Chock Weld Plate_1	2
353	YIELD_REFLECTOR	Yield Reflector	1
42	BRACKET_MARKER_LIGHT	Bracket, Marker Light_5	6
64	GASKET_MARKER_LIGHT	Gasket, Marker Light_5	6
91	HOUSING_MARKER_LIGHT	Housing, Marker Light_5	6

Item	Part number	Description	Qty
127	LENS_MARKER_LIGHT	Lens, Marker Light_5	6
136	PEM_S_M8_2_ZI	PEM S-M8-2 ZI_9	16
138	PEM_SH_M10_1_X	PEM SH-M10-1 X_3	4
345	WHEEL_CHOCK	Wheel Chock_1	2
346	WHEEL_CHOCK_GUIDE	Wheel Chock Guide_3	4
347	WHEEL_CHOCK_LOCK_HANDLE	Wheel Chock Lock Handle_1	2
348	WHEEL_CHOCK_MOUNT	Wheel Chock Mount_1	2

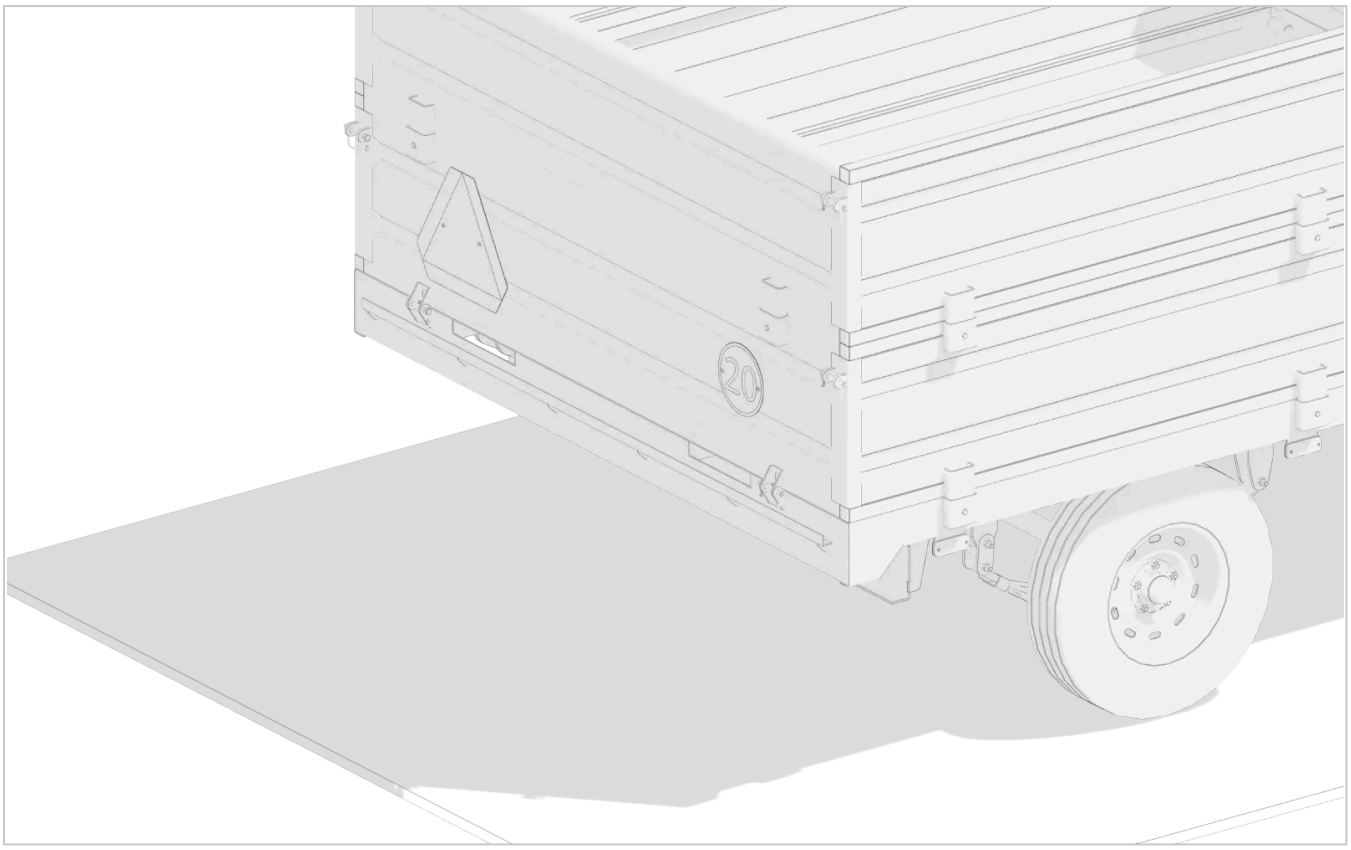
116 Fit the hinge pins



Push a hinge pin through each pivot bracket pair and lug from the inside.

Item	Part number	Description	Qty
423	HINGE_PIN	HINGE_PIN fastener	2

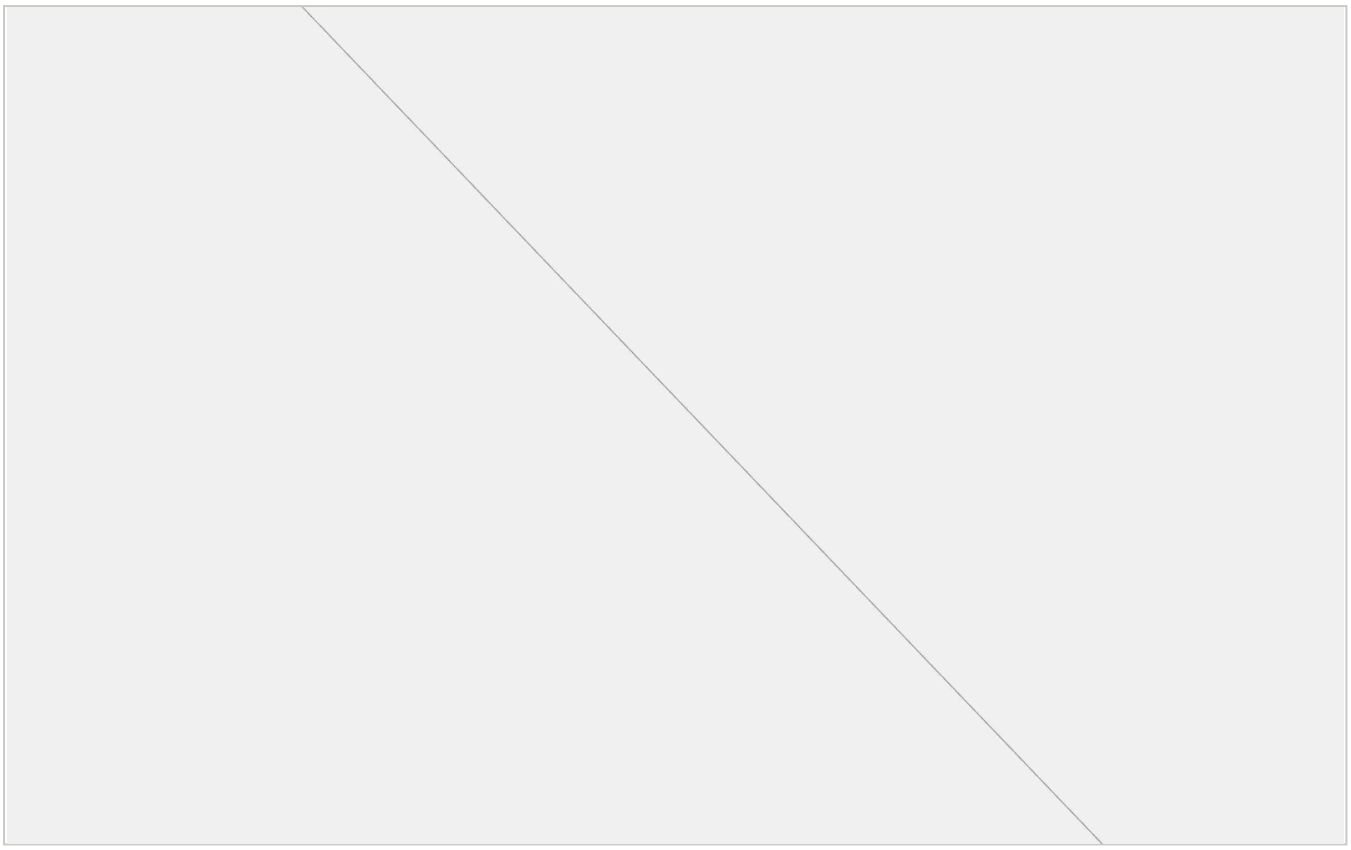
117 Fit the M24 washers



Fit an M24 washer on the outer end of each hinge pin and secure the pin.

Item	Part number	Description	Qty
308	PLAIN_WASHER_NORMAL_GRADE_A_M24	Plain washer normal grade A M24_1	2

118 Pin the cylinder rod to the bed

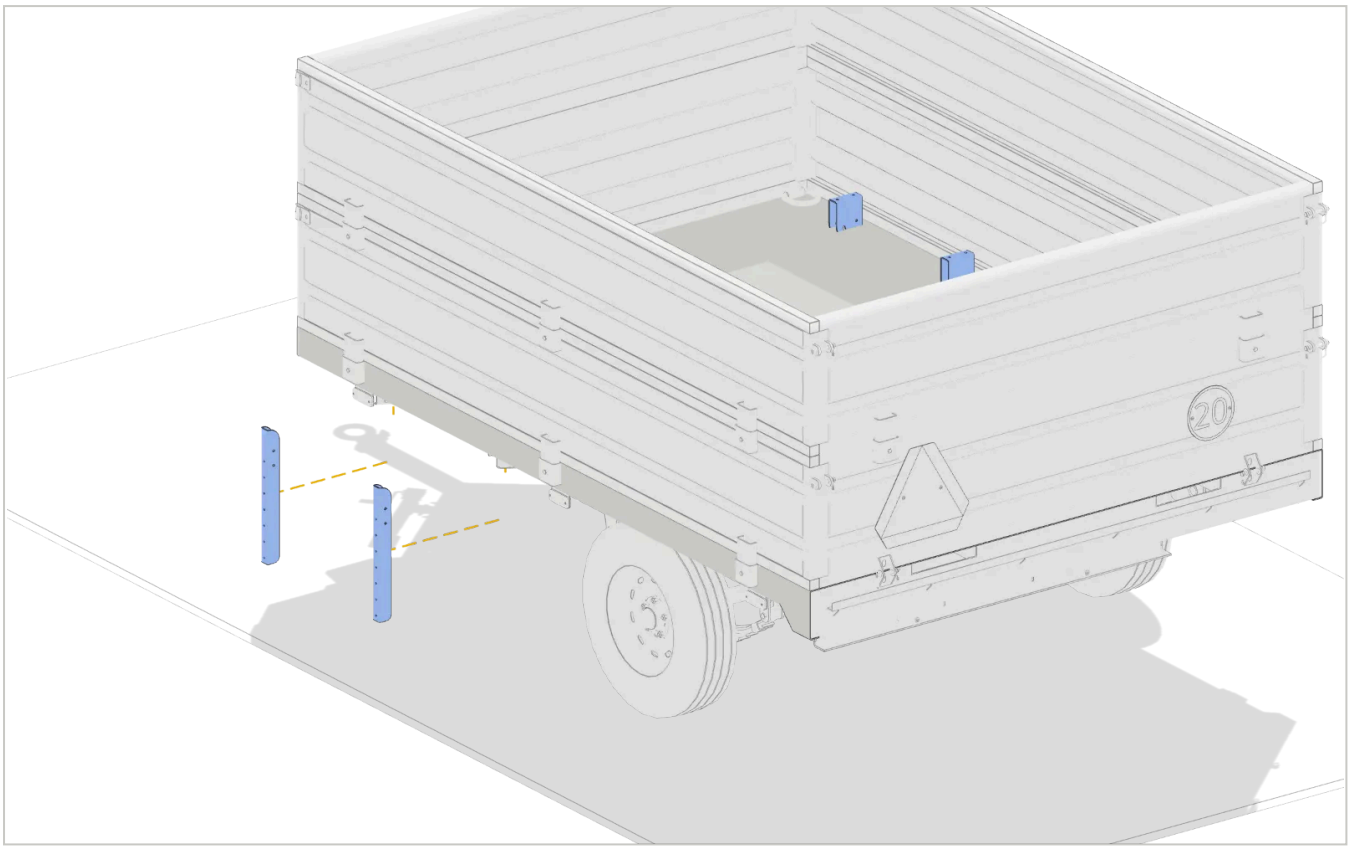


Extend the cylinder, push the rod pin through the rod-end clevis and the bed lug, fit its washer on the far end and secure it.

Item	Part number	Description	Qty
417	CYLINDER_ROD_PIN	CYLINDER_ROD_PIN fastener	1
442	TYPE_A_FLAT_WASHER_1	TYPE_A_FLAT_WASHER_1 fastener	1

Side steps

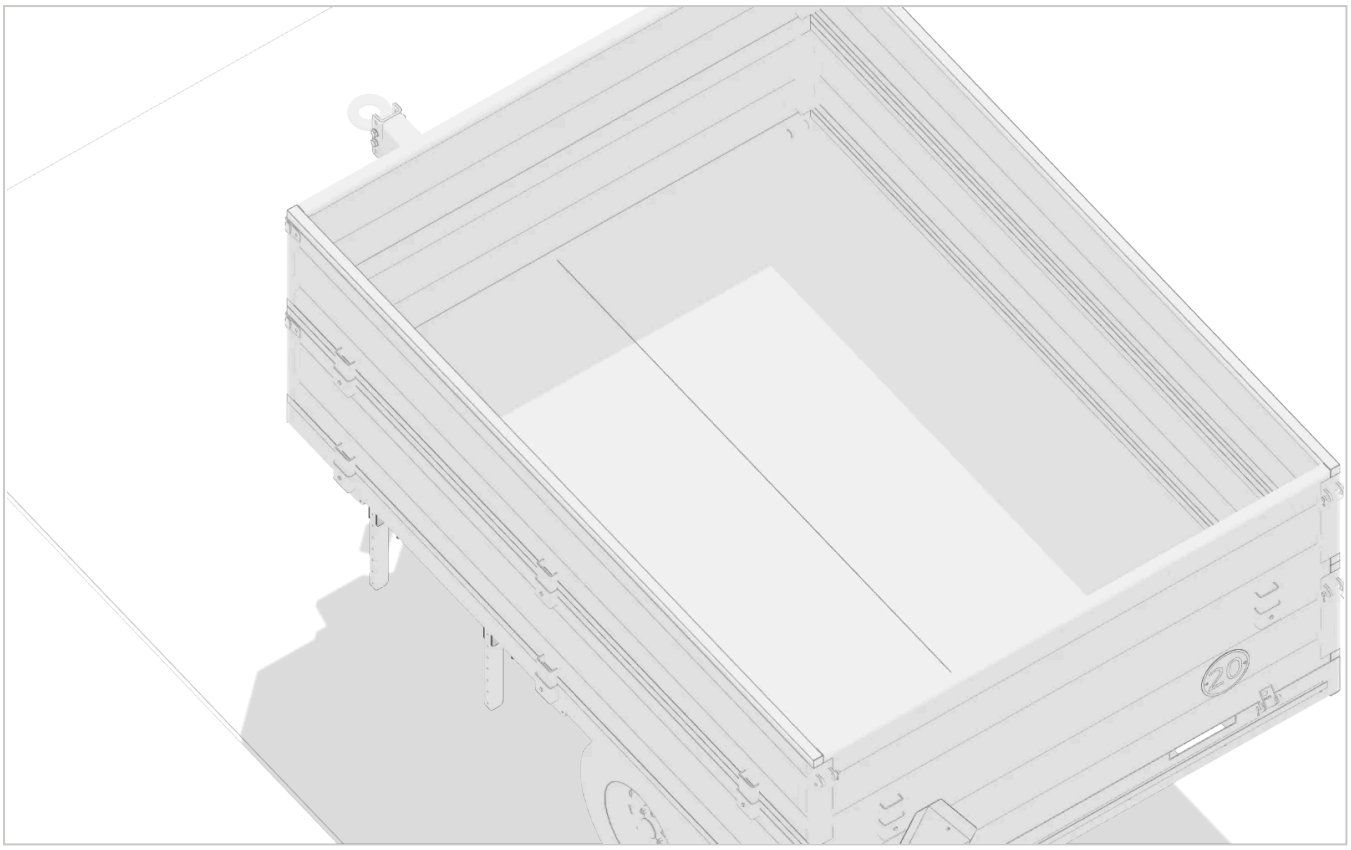
119 Fit the step mounts and reinforcements



Hold a step mount against the outside of each side step arm and set a reinforcement on top of the arm behind it.

Item	Part number	Description	Qty
331	SIDE_STEP_MOUNT	Side Step Mount_3	4
332	SIDE_STEP_REINFORCEMENT	Side Step Reinforcement_3	4

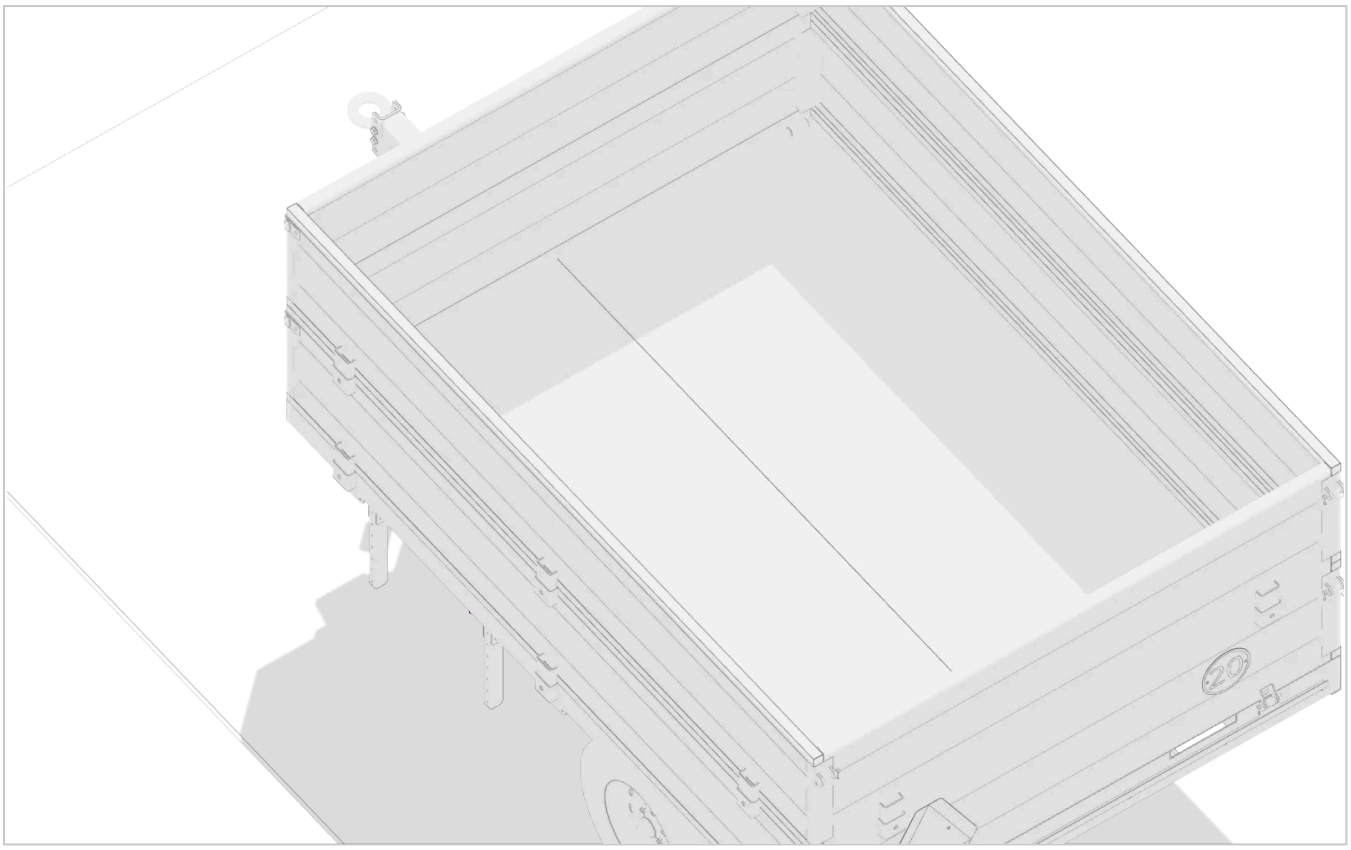
120 Fit the M8 flange bolts



Push the four M8 x 60 flange bolts through the reinforcements and mounts from the rear, and the four M8 x 20 flange bolts down through the arms, a large washer under each head.

Item	Part number	Description	Qty
304	PLAIN_WASHER_LARGE_GRADE_A_M8	Plain washer large grade A M8_9	16
466	Hex flange bolt small M8x1.25 x 20	Hex flange bolt small M8x1.25 x 20	16

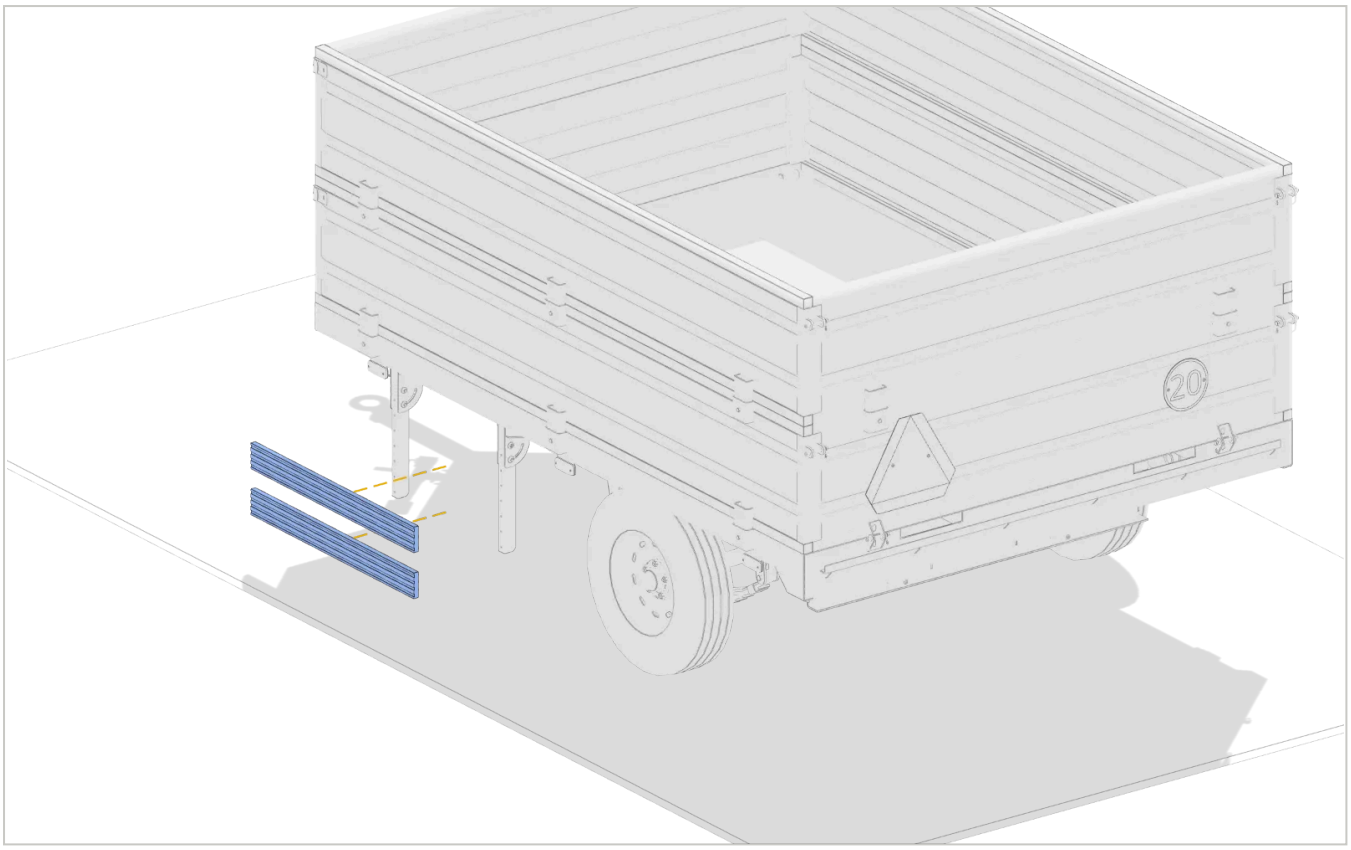
121 Fit the M8 flange nuts



Fit a large washer and an M8 flange nut on each bolt and torque to 25 Nm.

Item	Part number	Description	Qty
467	Hex flange nut M8x1.25	Hex flange nut M8x1.25	16
304	PLAIN_WASHER_LARGE_GRADE_A_M8	Plain washer large grade A M8_9	16

122 Fit the side steps



Hold each step against the outside of its two mounts, flush with the ends.

Item	Part number	Description	Qty
326	SIDE_STEP	Side Step_3	4

123 Fit the self-tapping screws

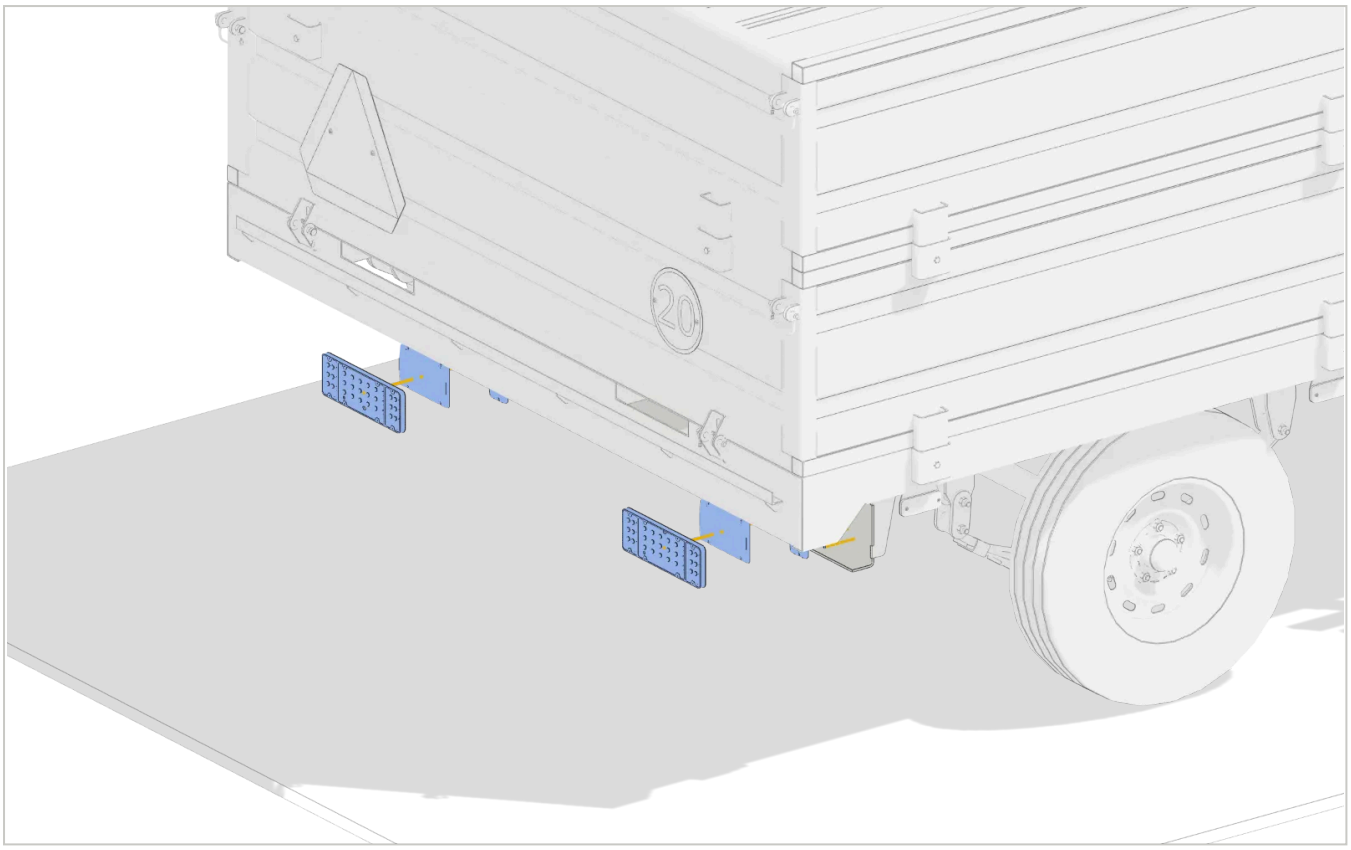


Drive the sixteen ST6.3 self-tapping screws through the steps into the mounts from the outside.

Item	Part number	Description	Qty
468	Hexalobular socket pan head self-tapping screw ST6.3 x 16	Hexalobular socket pan head self-tapping screw ST6.3 x 16	16

Rear lights

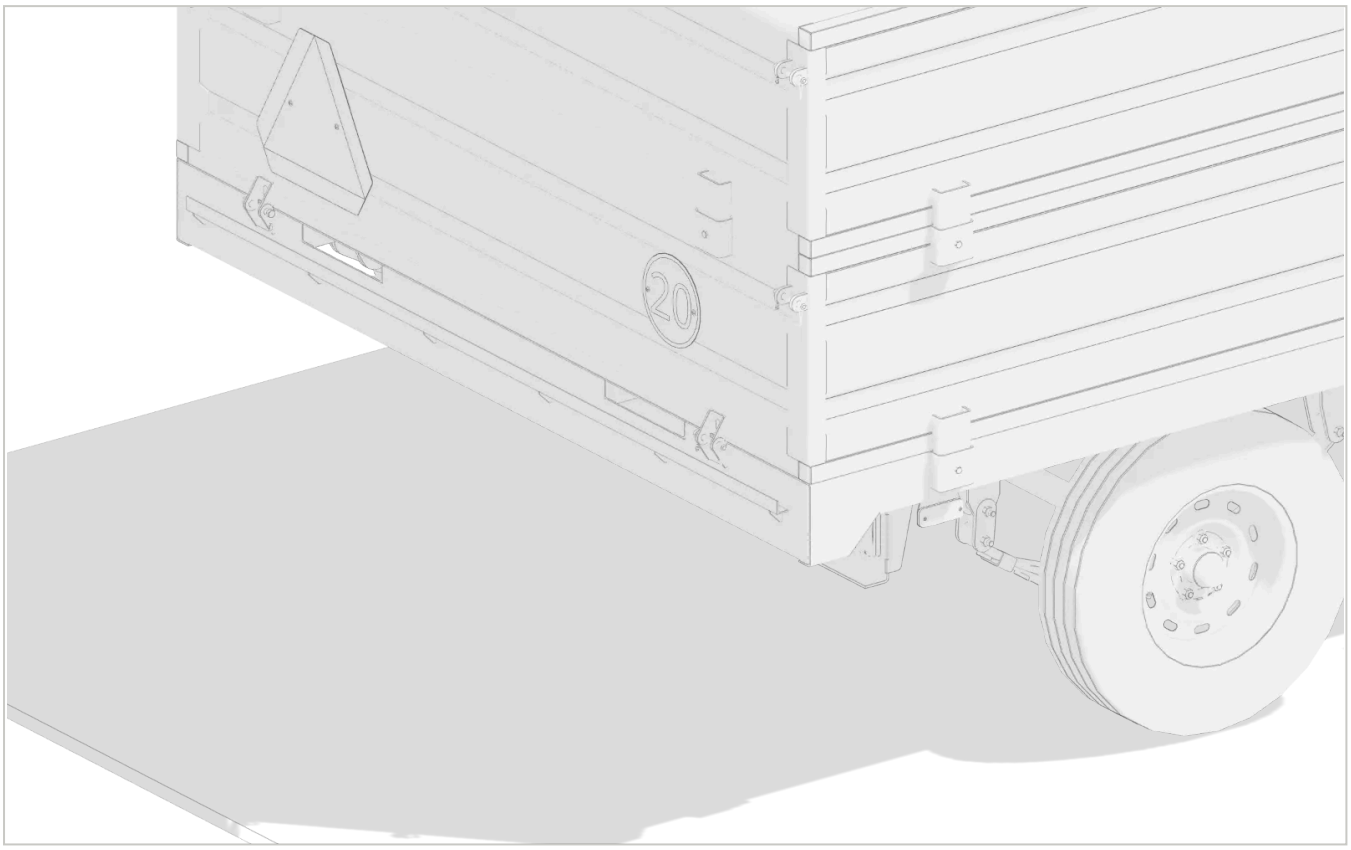
124 Fit the tail light units



Push each tail light unit (supplied assembled) onto the rear face of the bumper bar, its four M6 studs through the bar.

Item	Part number	Description	Qty
43	BRAKE_LENS_TRAILER_LIGHT	Brake Lens, Trailer Light_1	2
66	GASKET_TRAILER_LIGHT	Gasket, Trailer Light_1	2
93	HOUSING_TRAILER_LIGHT	Housing, Trailer Light_1	2
133	MARKER_LENS_TRAILER_LIGHT	Marker Lens, Trailer Light_1	2
137	PEM_SGPC_M6_18	PEM SGPC-M6-18 _7	8
324	REVERSE_LENS_TRAILER_LIGHT	Reverse Lens, Trailer Light_1	2
461	Socket button head screw M4x0.7 x 18	Socket button head screw M4x0.7 x 18	16

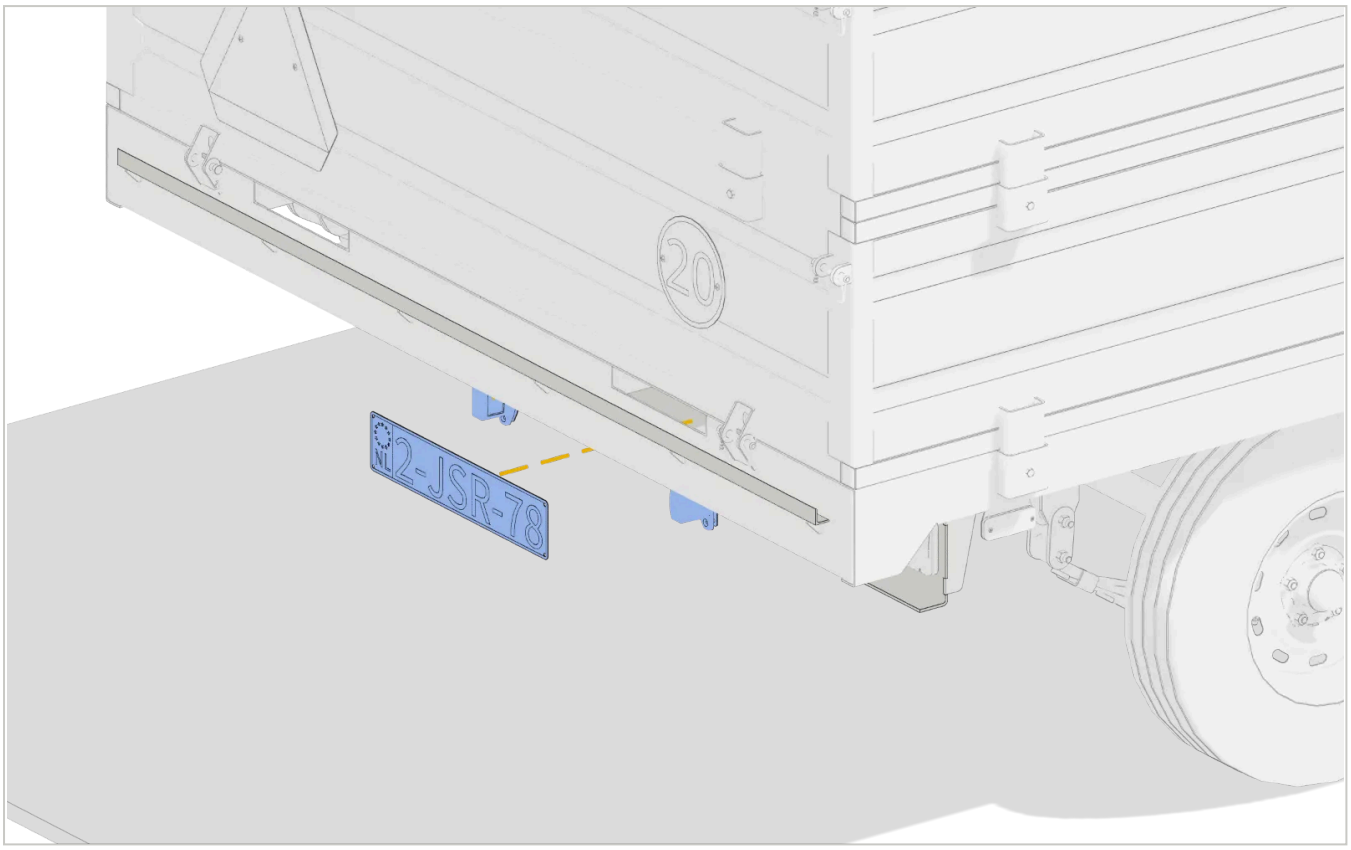
125 Fit the M6 washers and nuts



Fit a washer and an M6 nut on each stud from the front of the bar and tighten by hand plus a quarter turn.

Item	Part number	Description	Qty
469	Hex nut grade A & B M6x1	Hex nut grade A & B M6x1	8
311	PLAIN_WASHER_NORMAL_GRADE_A_M6	Plain washer normal grade A M6_9	8

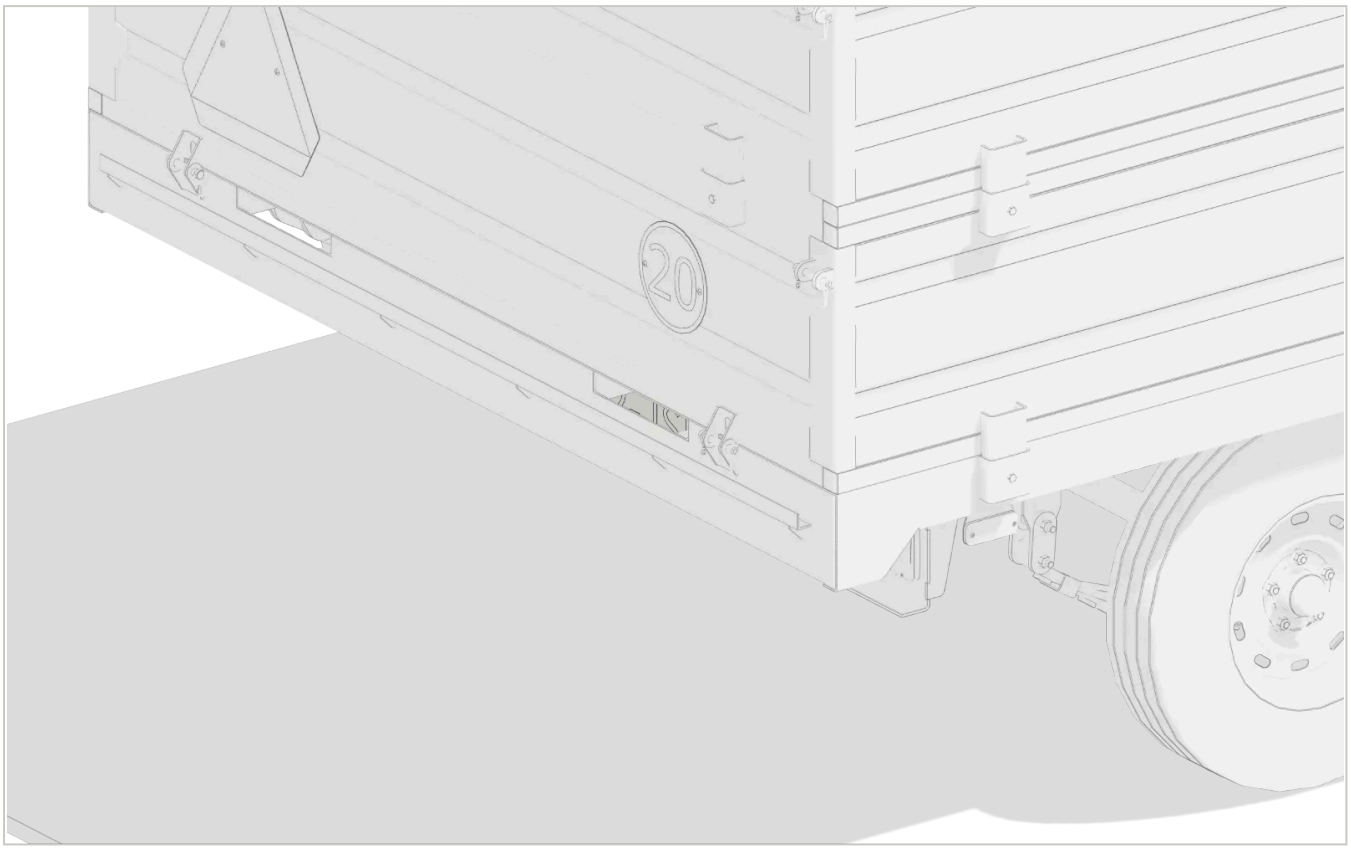
126 Fit the plate lights and the licence plate



Hold the two plate light housings with their gaskets and the licence plate against the rear face of the bumper bar.

Item	Part number	Description	Qty
65	GASKET_PLATE_LIGHT	Gasket, Plate Light_1	2
92	HOUSING_PLATE_LIGHT	Housing, Plate Light_1	2
128	LENS_PLATE_LIGHT	Lens, Plate Light_1	2
129	LICENSE_PLATE_EUROPE	License Plate, Europe	1

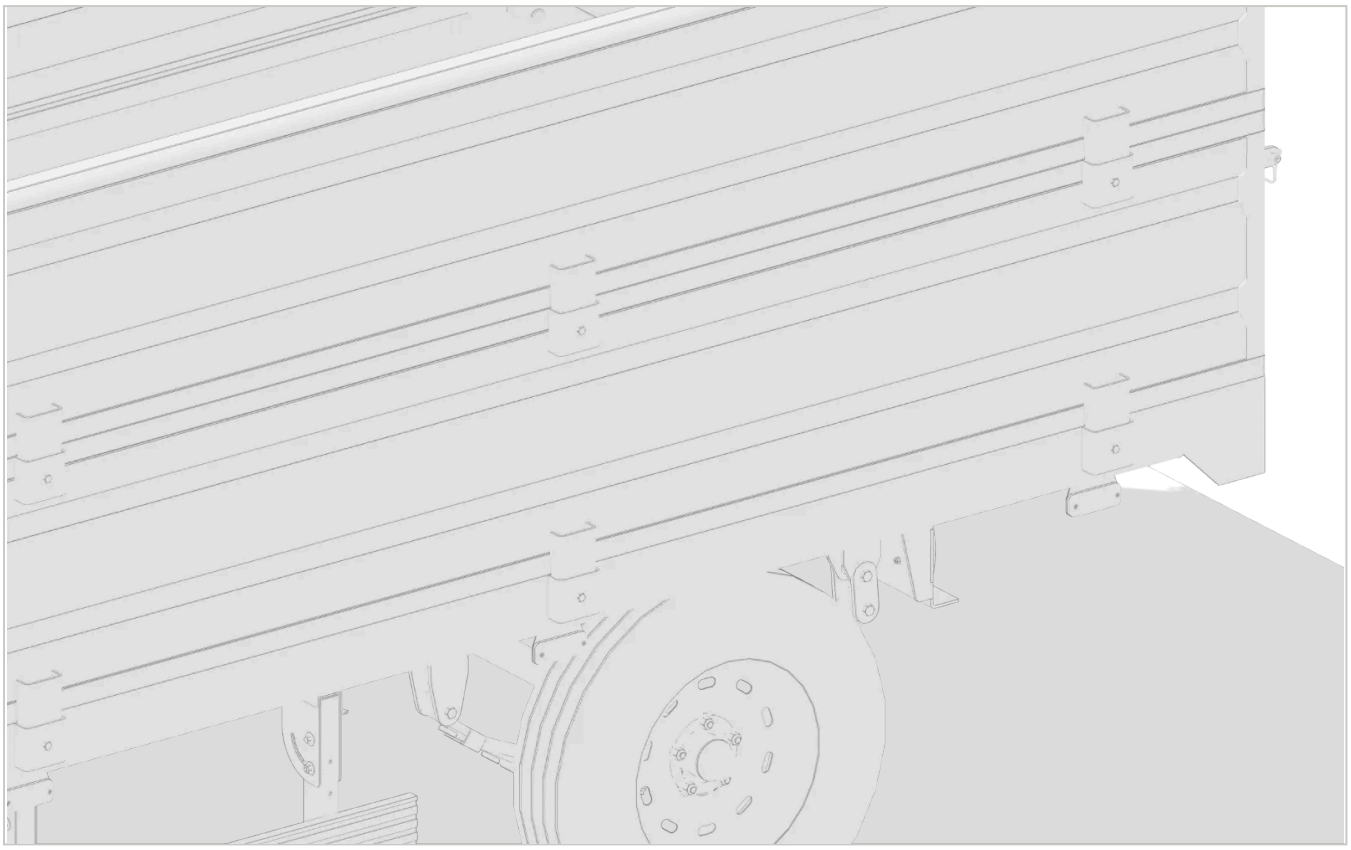
127 Fit the M6 screws



Push the four M6 x 20 countersunk screws through the plate lights and the four M6 x 16 pan head screws through the licence plate into the bar.

Item	Part number	Description	Qty
139	PH_COUNTERSUNK_FLAT_HEAD_SCREW_M6X1_X_20	PH Countersunk flat head screw M6x1 x 20_3	4
465	PH Pan head screw M6x1.00 x 10	PH Pan head screw M6x1.00 x 10	4

128 Fit the M6 washers and nuts



Fit a washer and an M6 nut on each screw from the front of the bar and tighten.

Item	Part number	Description	Qty
469	Hex nut grade A & B M6x1	Hex nut grade A & B M6x1	8
311	PLAIN_WASHER_NORMAL_GRADE_A_M6	Plain washer normal grade A M6_9	8