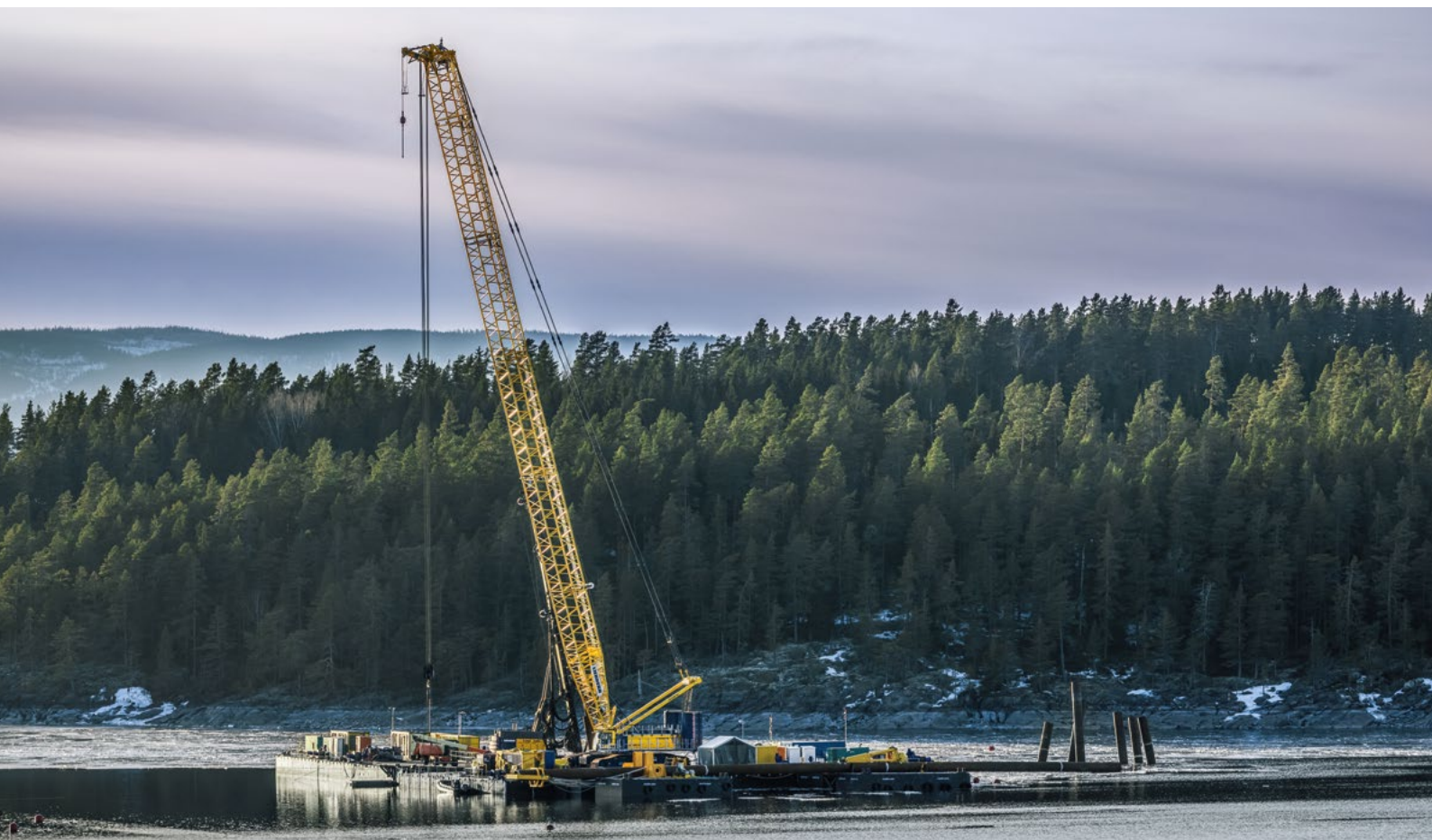


LR 1400 SX

Instruction manual



Dear scale model enthusiast

Congratulations – You are now the owner of the Liebherr LR 1400 SX 1:50 scale model. At WSI Models we have brought down those similar characteristics of the Liebherr LR 1400 SX to a 1:50 scale model for you to enjoy.

We wish you lots of joy with the new WSI crane model, however please do read this manual carefully in order to set up this crane correctly.

WSI Models

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1. General assembly recommendations

- Please study the manual before you start building up the model and take your time.
- Execute the set-up of the model step by step, carefully and slowly. It is advised to build this crane with two persons.
- Please try to guide the wire with your fingers while winding it up to a winch. It will help to avoid that it gets jammed aside of a winch.
- Please don't put too much force on the small and filigree parts. This might cause damages.
- In this manual the part numbers (such as **A6** or **B3**) refer to the location in the foam box. A location followed by a letter (such as **B5A** or **B9G**) refers to a certain part at this location, which can be found on page 7
- For small parts such as nuts and wires the tweezers can be used (location B7)

The manual can also be found by scanning the QR code below, or you can visit the WSI website www.wsi-models.com/en/manuals



LIEBHERR

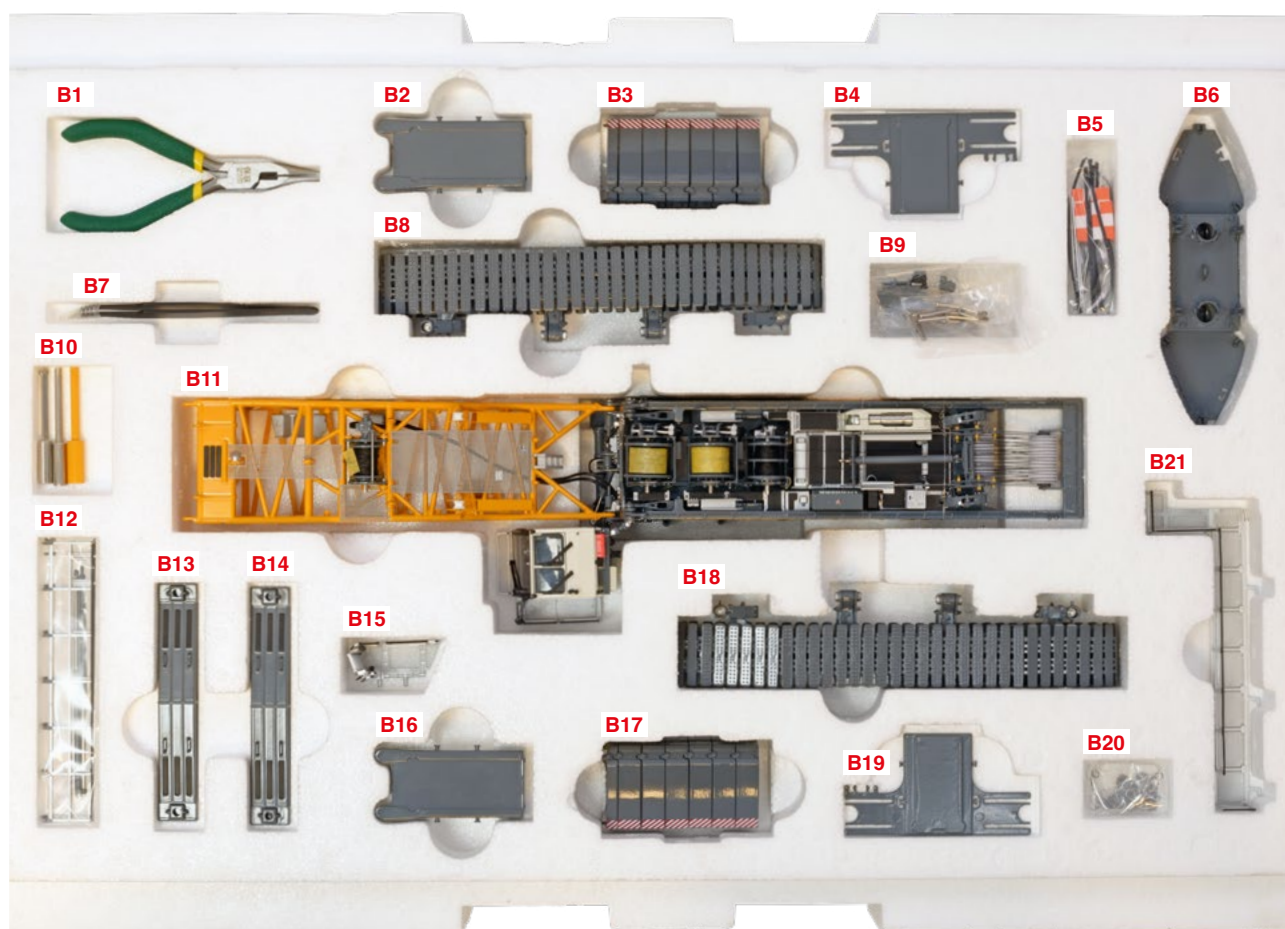


HIGH QUALITY DIECAST SCALE MODELS

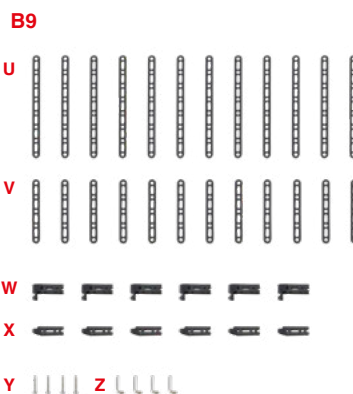
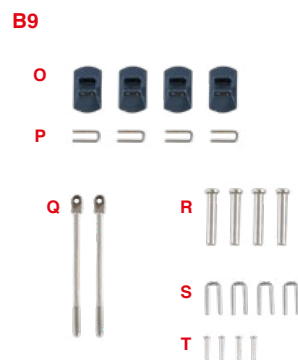
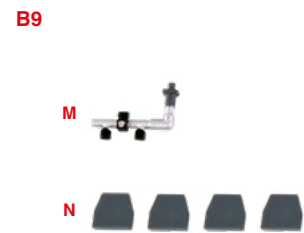
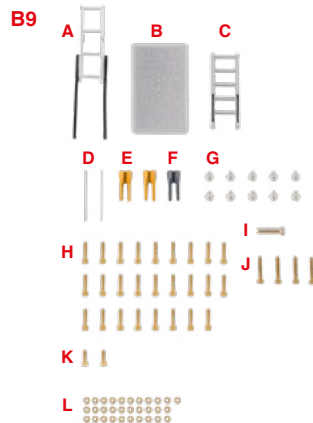
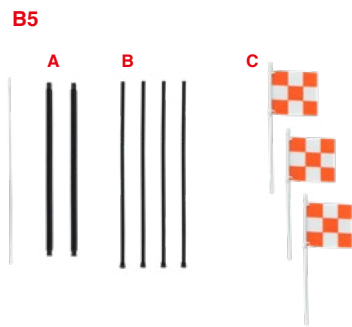
2. Parts list



A1.	Main boom head	1x	A9.	Jib section 12m	1x
A2.	Main boom section 6m	1x	A10.	Jib base section	1x
A3.	Jib A-frame	1x	A11.	Pulley block 300t	1x
A4.	Main boom section 12m (A)	1x	A12.	Jib section 12m	1x
A5.	Pulley block 100t	1x	A13.	Jib pendant straps	2x
A6.	Main boom section 12m (B)	1x	A14.	Jib backstay straps	2x
A7.	Jib head	1x	A15.	Main boom pendant straps	2x
A8.	Rope guide	1x			



B1.	Pliers and spare parts	1x	B13.	Support pad for reducing ground pressure	1x
B2.	Carbody counterweight slab 20.1t	1x	B14.	Support pad for reducing ground pressure	1x
B3.	Counterweight slab (6x10t and 1x 5t)		B15.	Main access	1x
B4.	Carbody counterweight slab 6.2t	1x	B16.	Carbody counterweight slab 20.1t	1x
B5.	<i>See page 7 for parts list</i>		B17.	Counterweight slab (5t and 10t)	7x
B6.	Basic counterweight slab 20t	1x	B18.	Left crawler side frame	1x
B7.	Tweezers	1x	B19.	Carbody counterweight slab 6.2t	1x
B8.	Right crawler side frame	1x	B20.	End switch support frame with chains	1x
B9.	<i>See page 7 for parts list</i>		B21.	Platform on uppercarriage	1x
B10.	Tools for bolts and nuts (A/B) and winches (C)	1x			
B11.	Uppercarriage	1x			
B12.	<i>See page 7 for parts list</i>				



B5A.	Hydraulic hose for crawler side frames	2x	B9O.	Foot of support cylinder	4x
B5B.	Hydraulic hose for cylinder of the ground pressure reducing plates	4x	B9P.	Locking pin for foot of support cylinder	4x
B5C.	Warning flag	3x	B9Q.	Track width adjusting cylinder	2x
B9A.	Ladder on uppercarriage	1x	B9R.	Locking pin for crawler side frame	4x
B9B.	Platform for carbody counterweight slab	1x	B9S.	Locking pin for ground pressure reducing plates	4x
B9C.	Ladder for carbody counterweight slab	1x	B9T.	Locking pin for track width adjusting cylinder	2x
B9D.	Hand rail pole	2x	B9U.	Rear counterweight tie-down bracket B	12x
B9E.	Rope lock part for winch rope	2x	B9V.	Rear counterweight tie-down bracket D	12x
B9F.	Rope lock part for luffing jib rope	1x	B9W.	Rear counterweight tie-down bracket A	6x
B9G.	Locking pin for basic counterweight slab	4x	B9X.	Rear counterweight tie-down bracket C	6x
B9H.	Middle sized bolts	26x	B9Y.	Pin with spring cotter pin and locking plate	18x
B9I.	Locking pin for basic counterweight slab 20t	2x	B9Z.	Bended pin for counterweight lashing	6x
B9J.	Long sized bolts	4x	B12A.	Right guard rail part	1x
B9K.	Short sized bolts	2x	B12B.	Left front guard rail part	1x
B9L.	Universal nuts	31x	B12C.	Tilting-back support of main boom	2x
B9M.	Bar with working lights	1x			
B9N.	Cover plate for cylinder of the ground pressure reducing plates	4x			

3. Crane assembly | 3.1 Undercarrier assembly



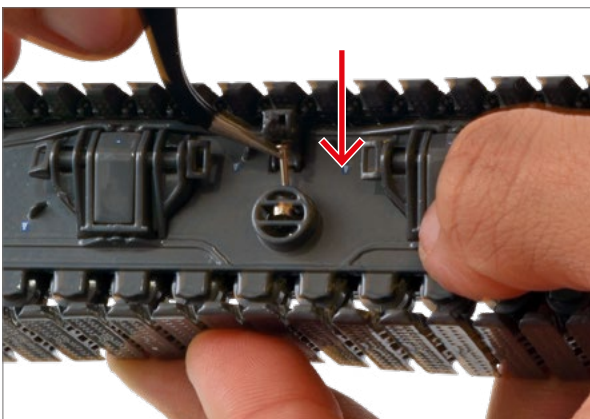
Take the body out of the box (location B11) and remove the rubber bands. Place the body on a flat surface



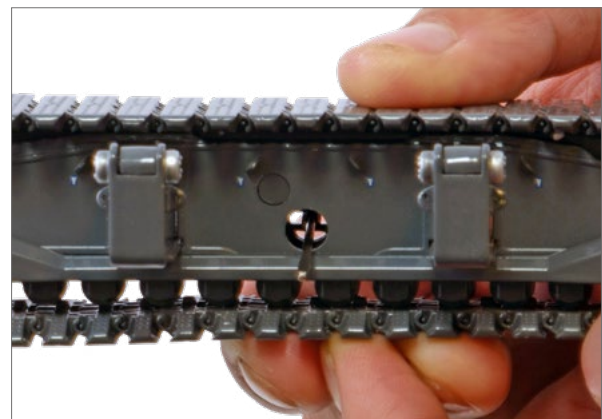
Swing the outriggers outward and turn the undercarriage

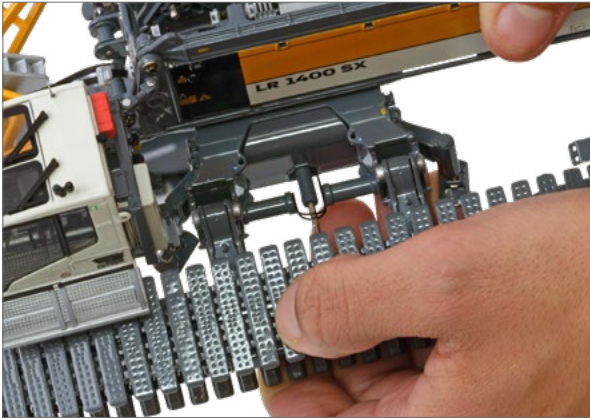


Connect the outrigger pads (B9O) to the outrigger feet and lock with the locking pins (B9P)

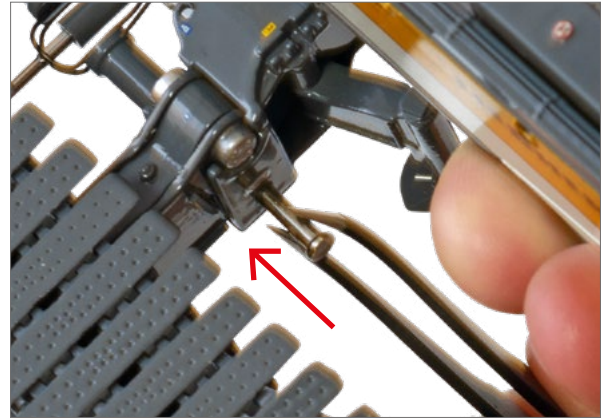


Connect the sliding cylinders (B9Q) to the crawler side frames (B8 and B18) and lock with the locking pin (B9T)





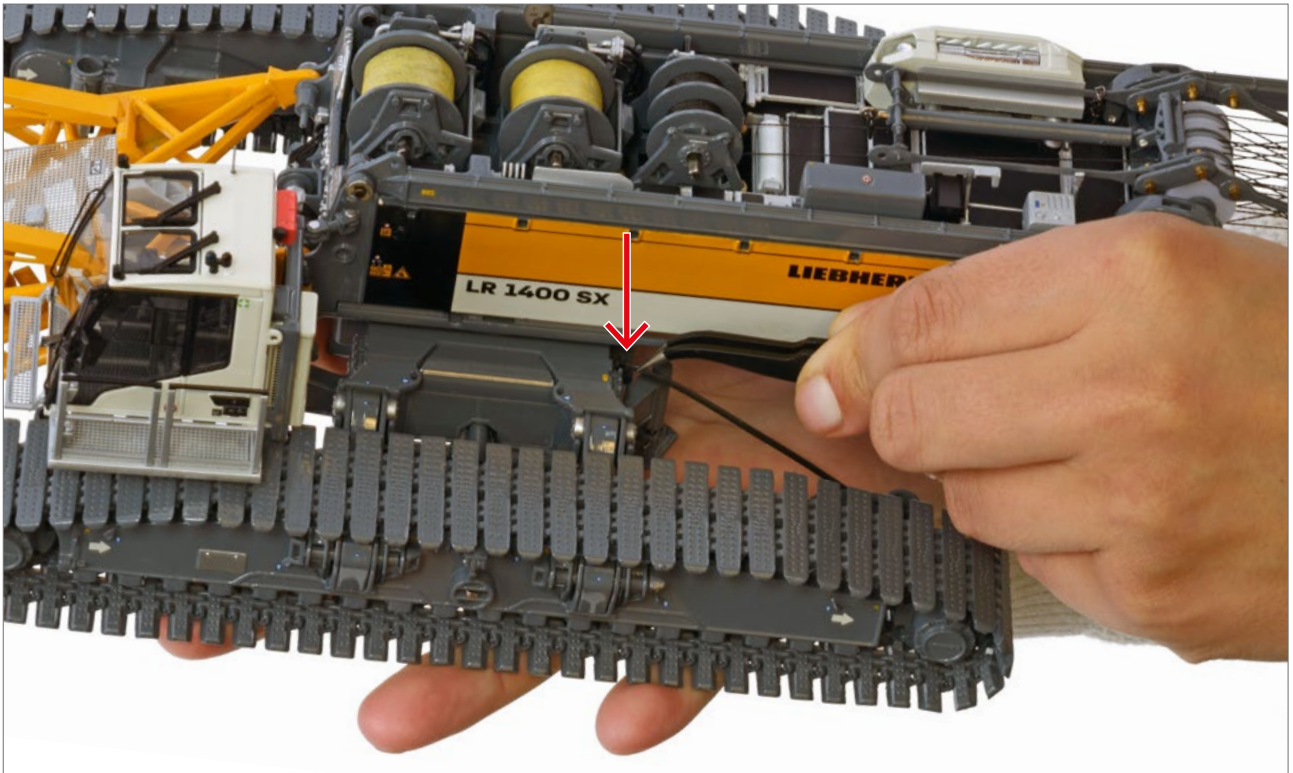
Place the crawler side frames onto the undercarriage. Assemble and connect the slide cylinders carefully



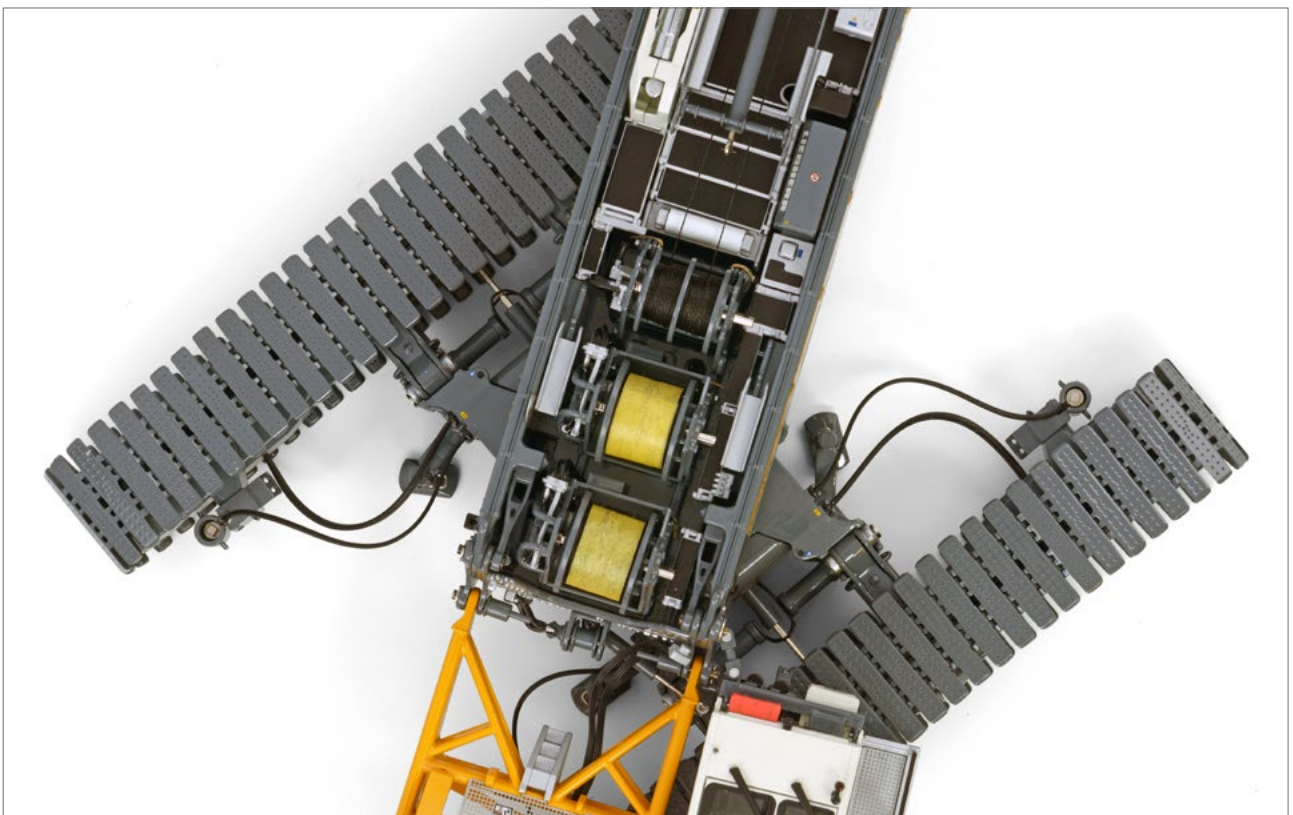
Connect the crawler side frames with the locking pins (B9R)



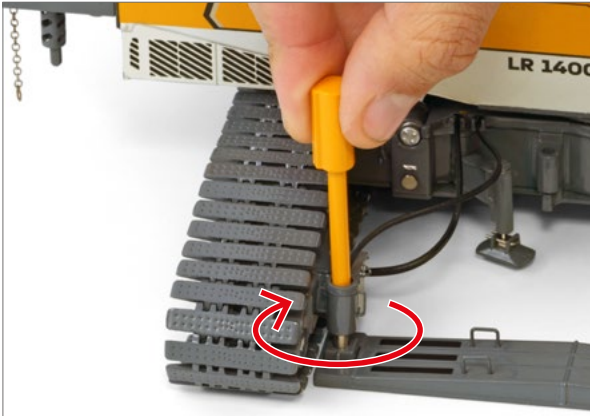
Assembly overview



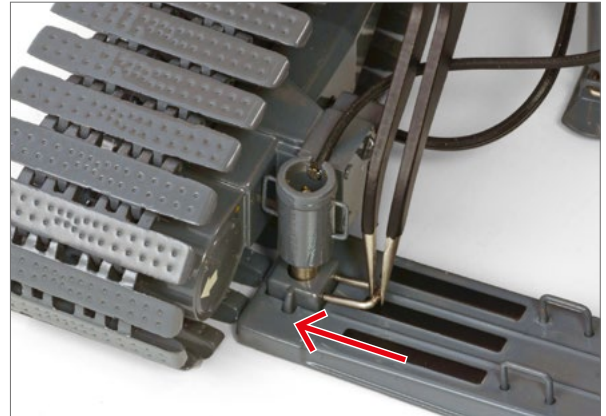
Connect the hydraulic hoses to the crawler units (B5A) and to the cylinders of the ground pressure reducing plates (B5B)



Overview photo. Two hoses for the crawler units, four for the cylinders



Place the ground reduction plates (B13 and B14) and turn the outriggers clockwise until the outrigger feet are down



Lock the ground reduction plate to the cylinder with the locking pins (B9S)

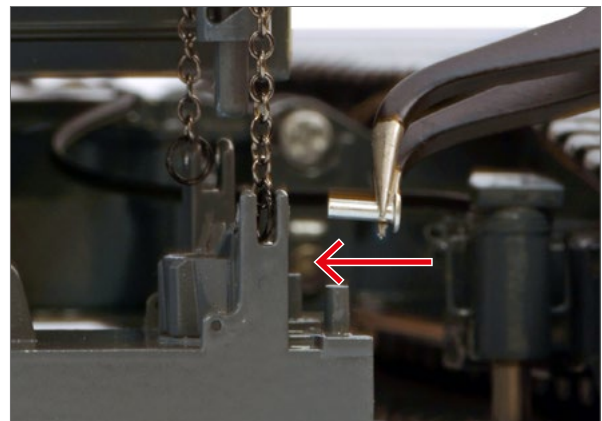


Place the outrigger covers (B9N)

3. Crane assembly | 3.2 Counterweight installation

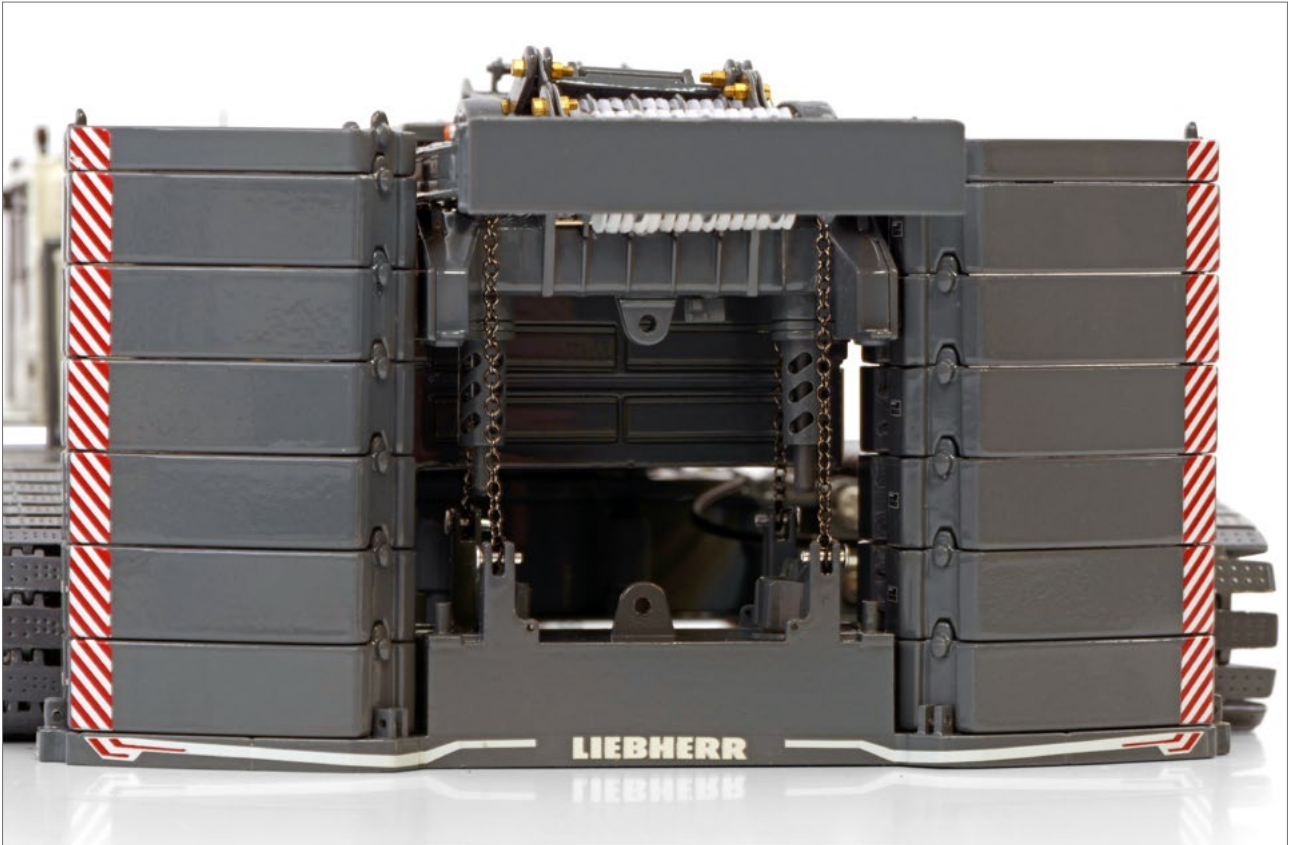


Lay the basic counterweight slab 20t (B6) underneath the chains at the back of the body. The high connection tower must be pointed to the front (see picture on the left below)

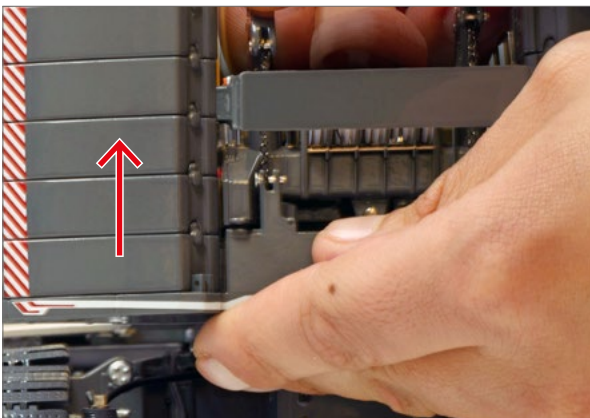


Lock the chains to the ballast plate with the locking pins (B9G)

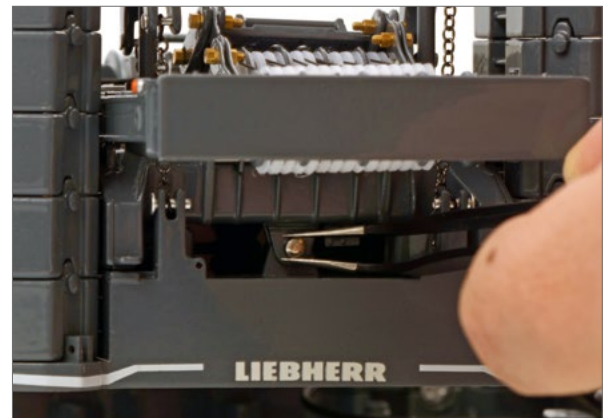




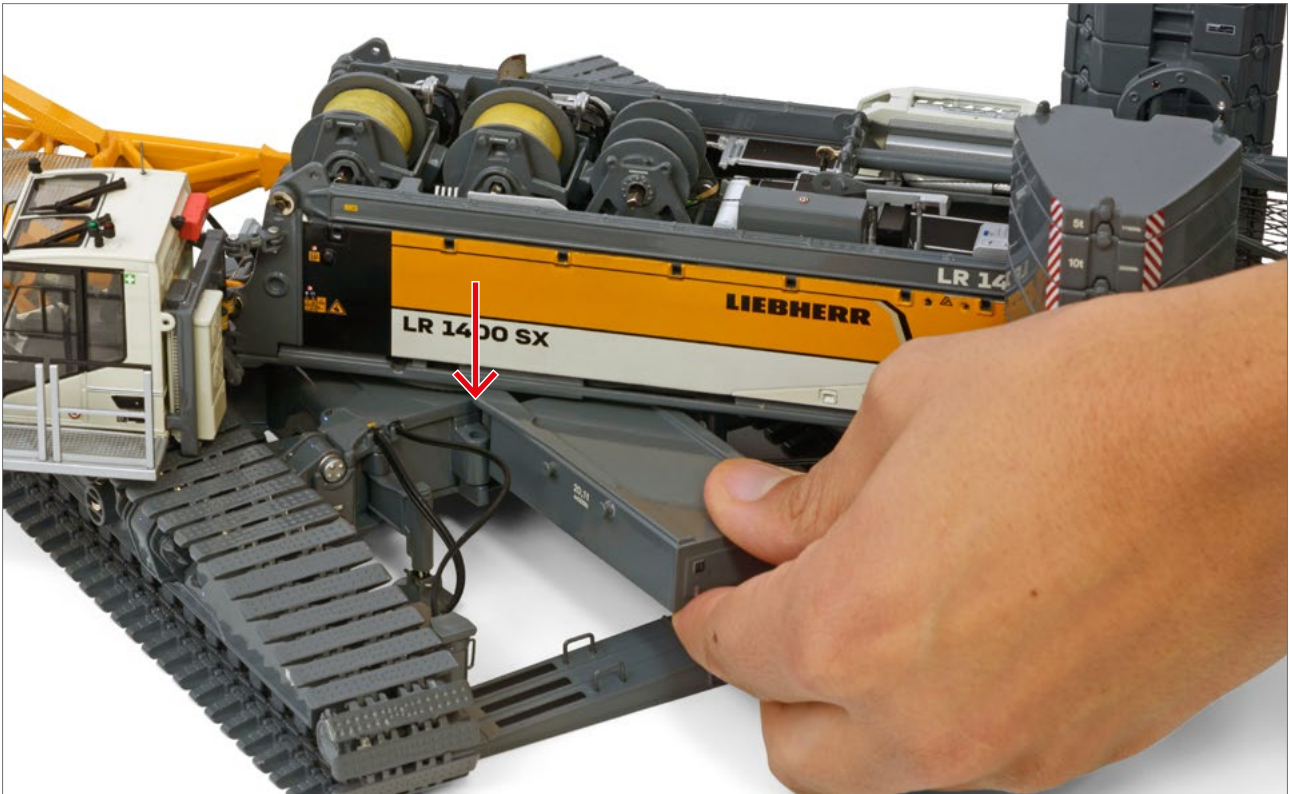
Stack the ballast blocks (B3 and B17) at both sides of the basic counterweight slab



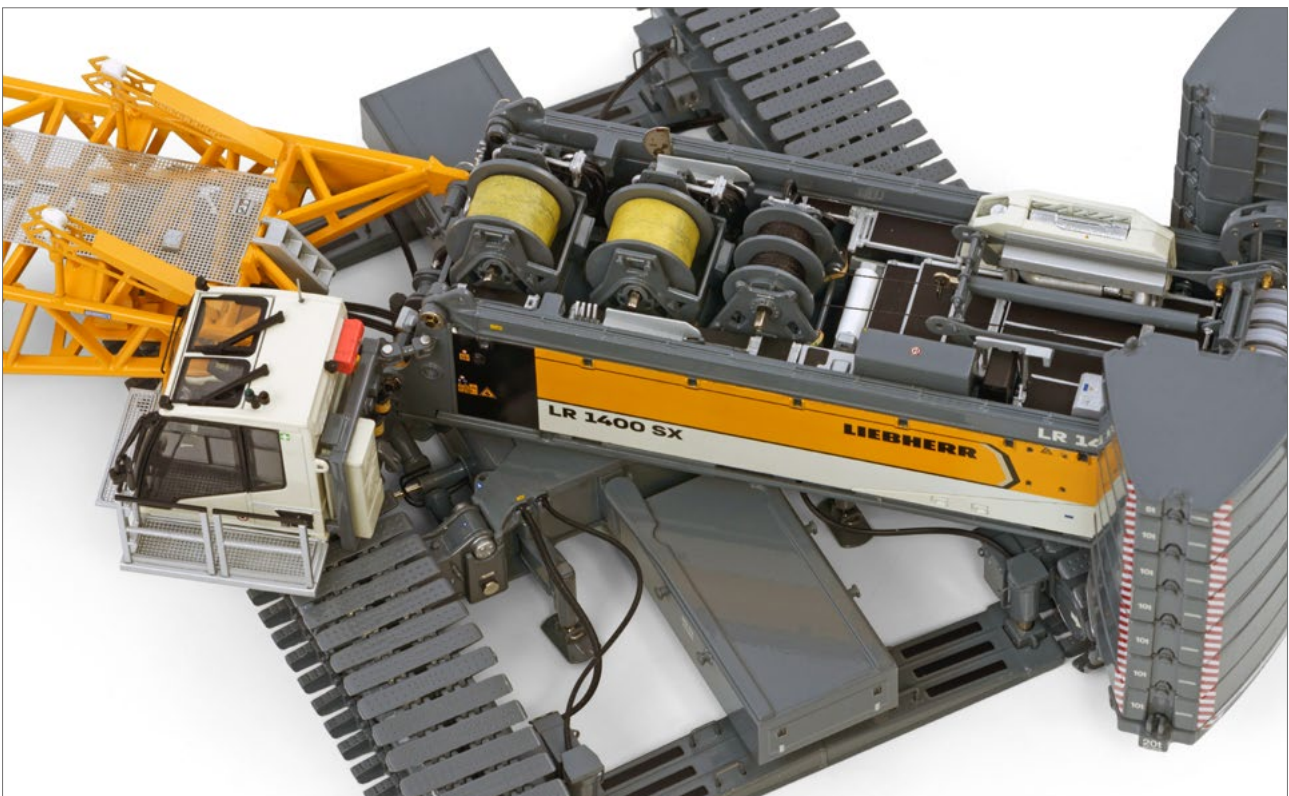
Move the basic counterweight slab 20t up while pulling out the cylinders on top

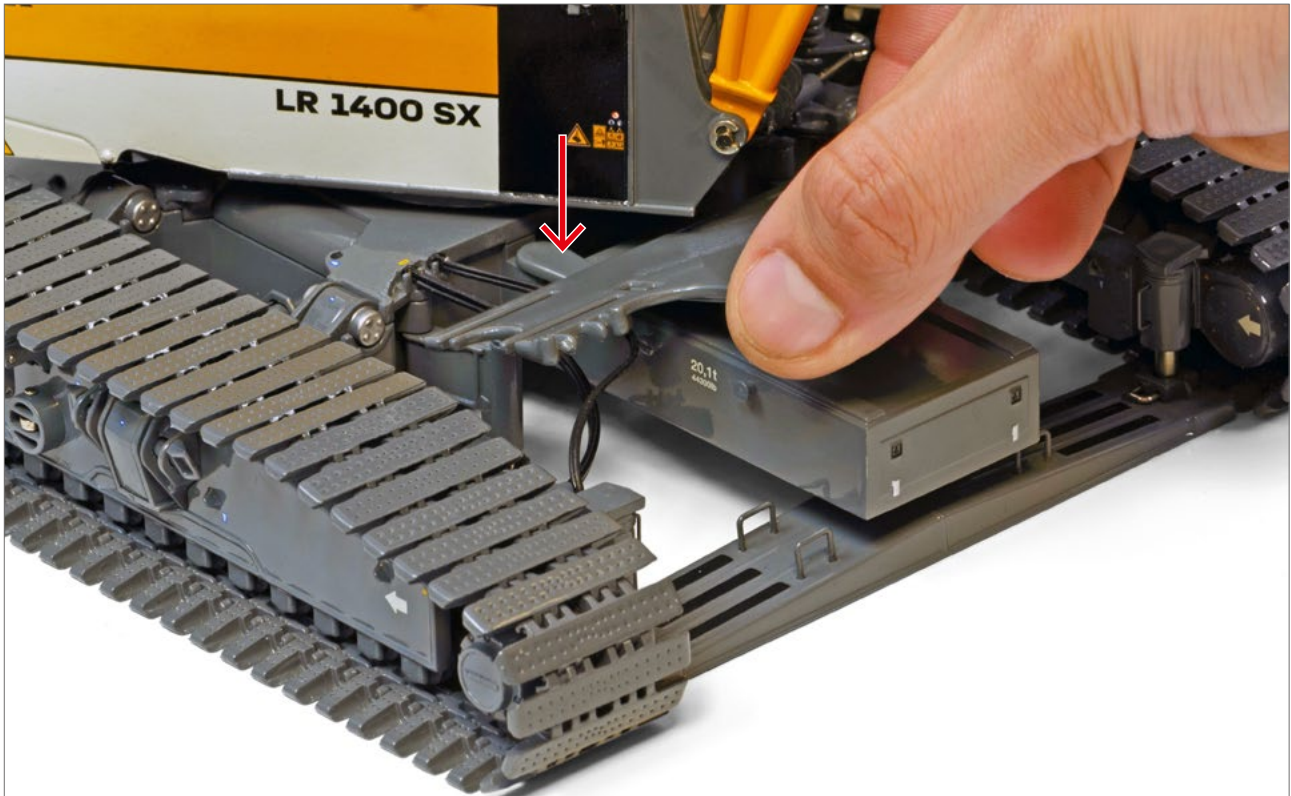


Lock the basic counterweight slab 20t with the locking pin (B9H)

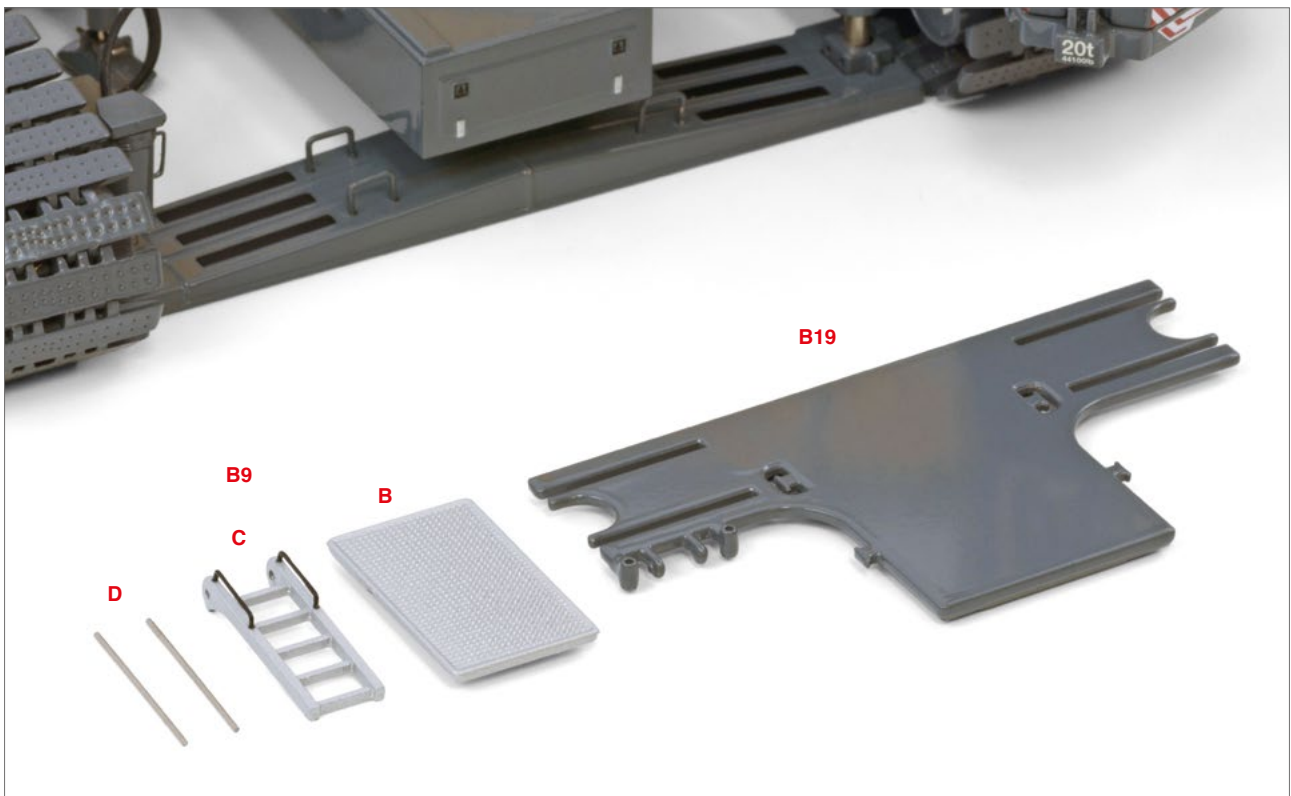


Hang the carbody counterweight slabs 20.1t (B2 and B16) at the front and back of the undercarriage





Place the carbody counterweight slab 6.2t (B4) above the carbody counterweight 20.1t at the front side



Connect the ladder (B9C) to the other carbody counterweight slab 6.2t (B19) and attach the two handrail poles (B9D)

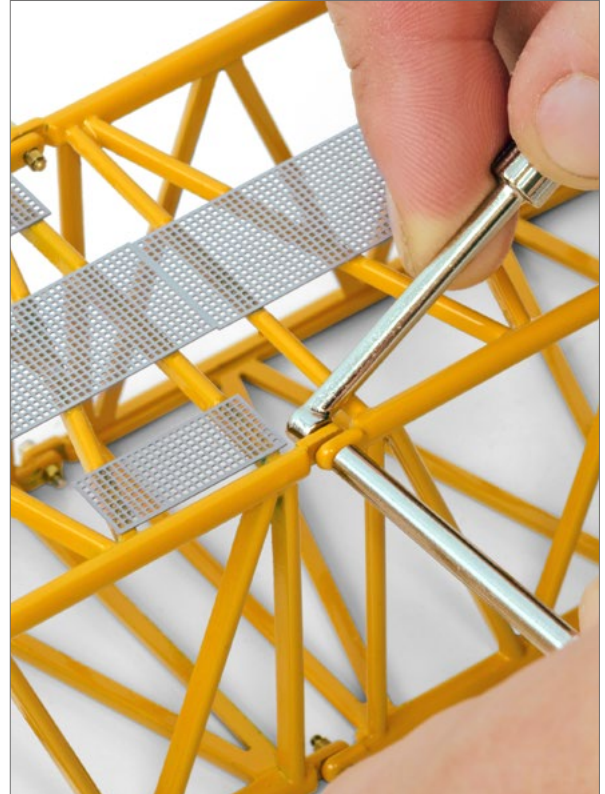


Place the platform (B9B) on top of the carbody counterweight slab 6.2t (B19). Place the complete assembly on top of the carbody counterweight slab 20.1t at the back

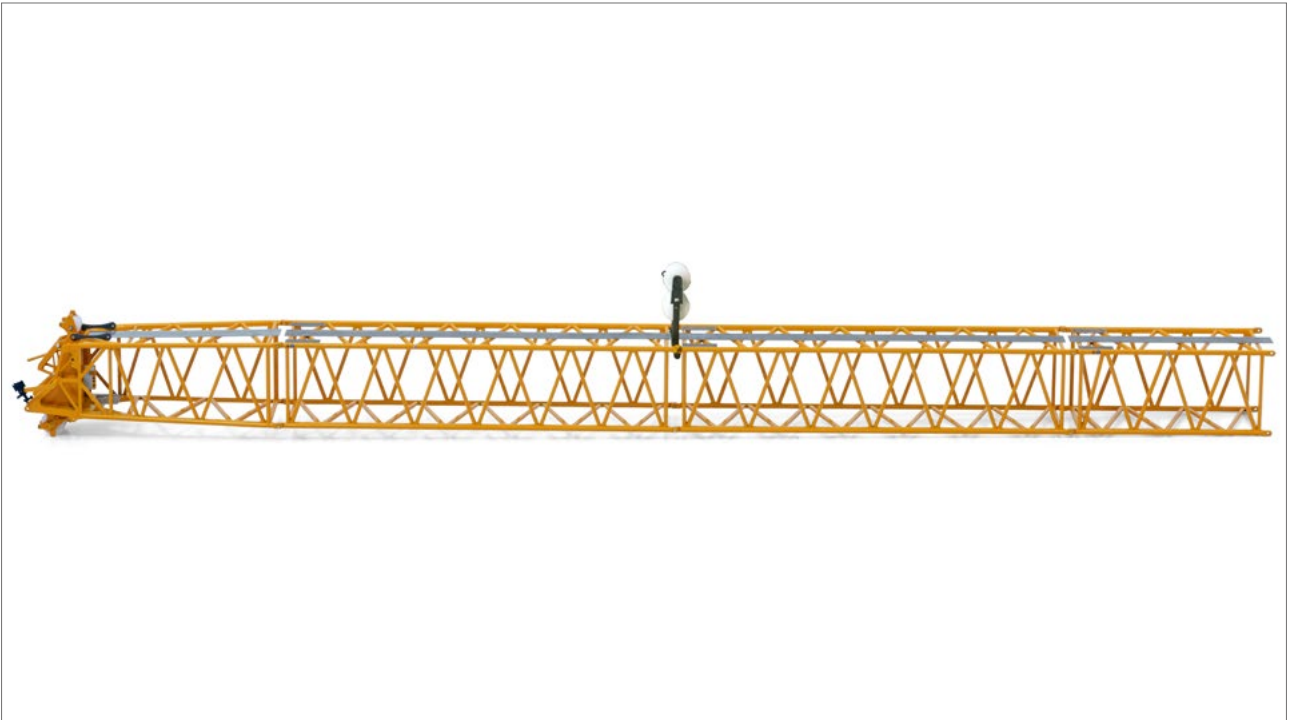
3. Crane assembly | 3.3 Boom assembly



Mount the rope guide (A8) in between 12m booms with screws (B9J) and nuts (B9L). Please make sure the boom parts are connected correctly so the rope guide can be placed



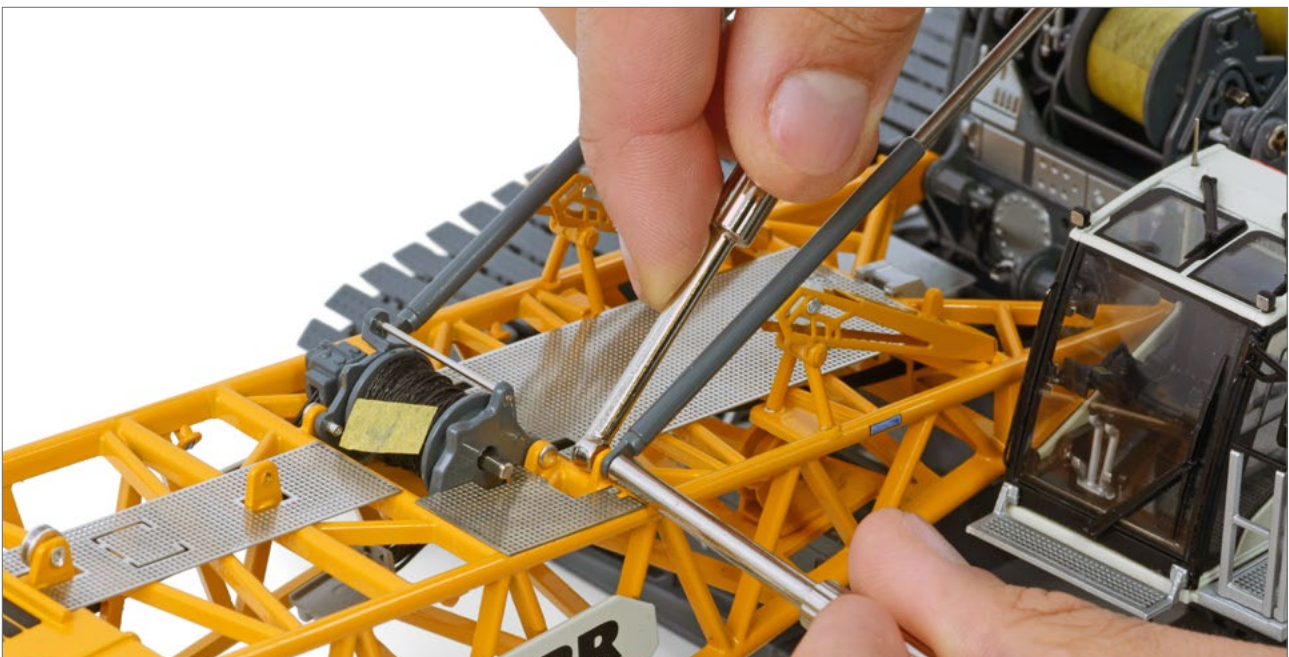
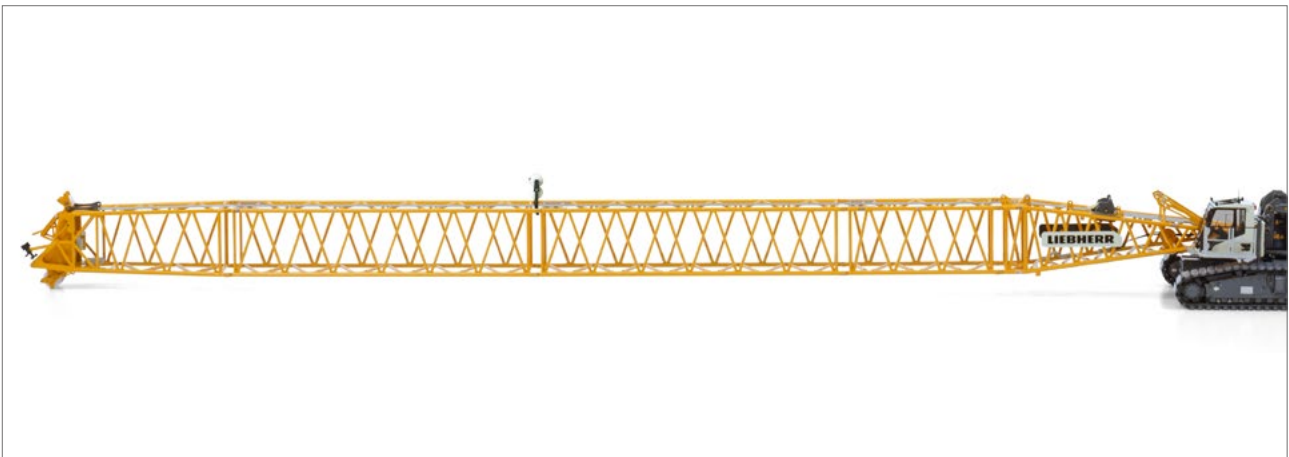
Use the tools (B10A and B10B) connect the bolts and nuts



Assemble the boom parts (A1, A4, A6, A2) with the bolts (B9H) and nuts (B9L) according to the overview



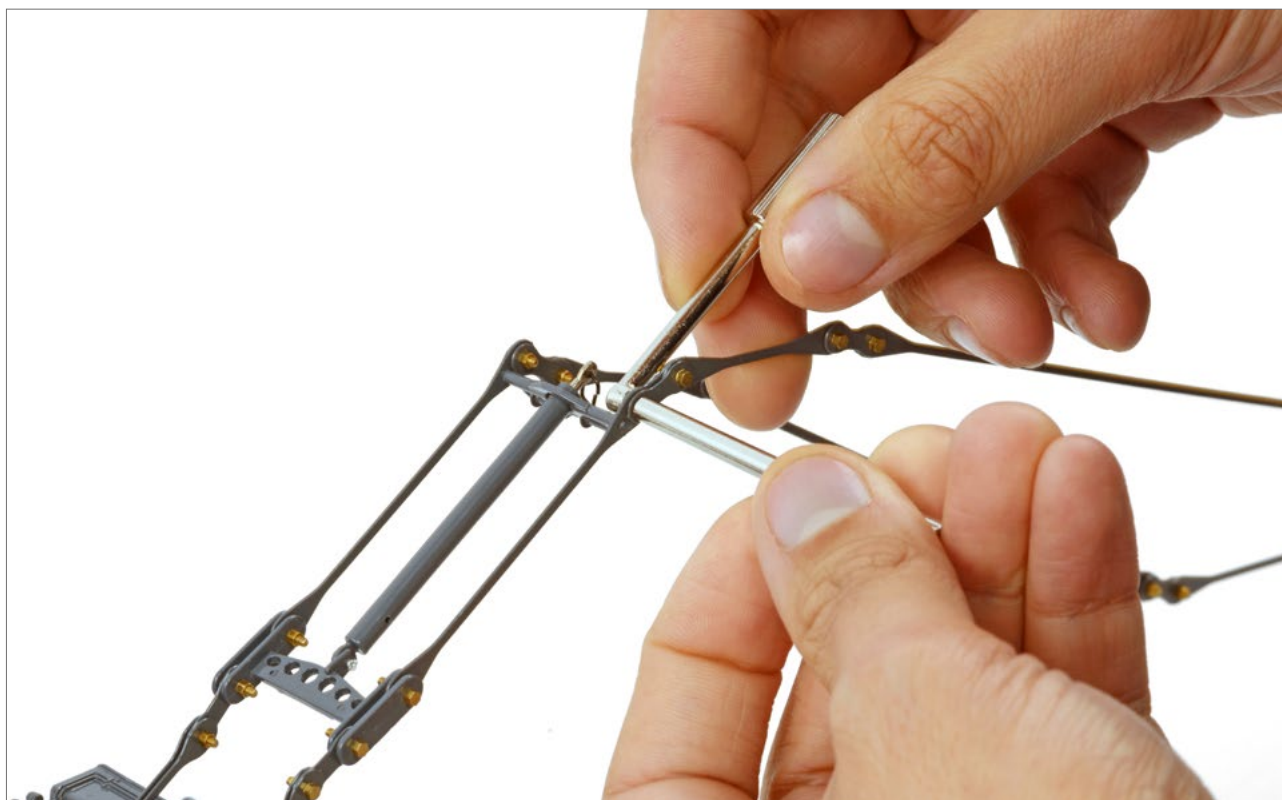
Connect the boom assembly to the body with the bolts (B9H) and nuts (B9L)



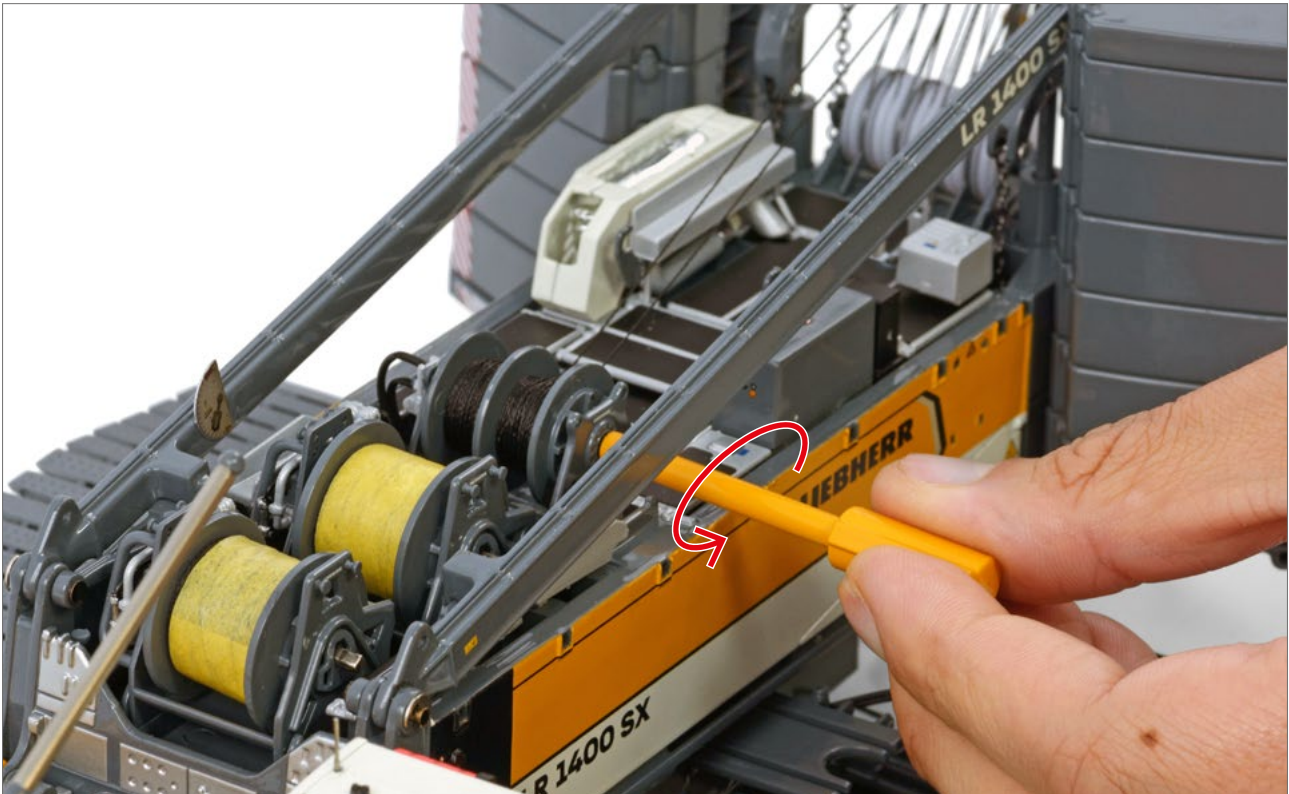
Connect the tilting back supports (B12C) to the first boom part with bolts (B9H) and nuts

3. Crane assembly | 3.4 Connecting the pendant straps

Please note that for the next 3 steps a second person is needed to assist

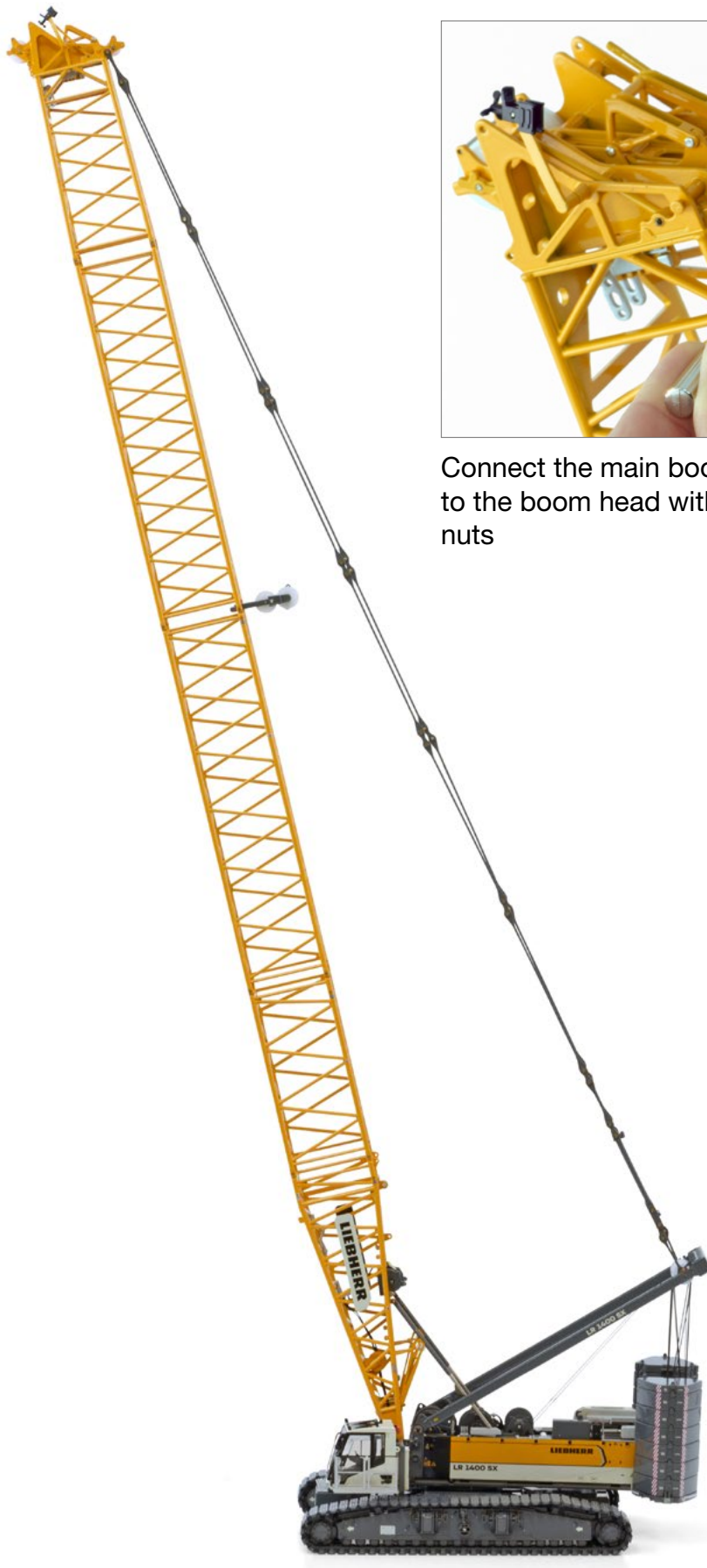


Connect the main boom pendant straps (A15) to the A-frame with bolts (B9H) and nuts



Let a second person raise the A-frame by turning winch #1 counterclockwise with the key (B10C) until the connection rods can be connected to the boom head. **Please take in mind to always keep tension on the rope and pulleys.**

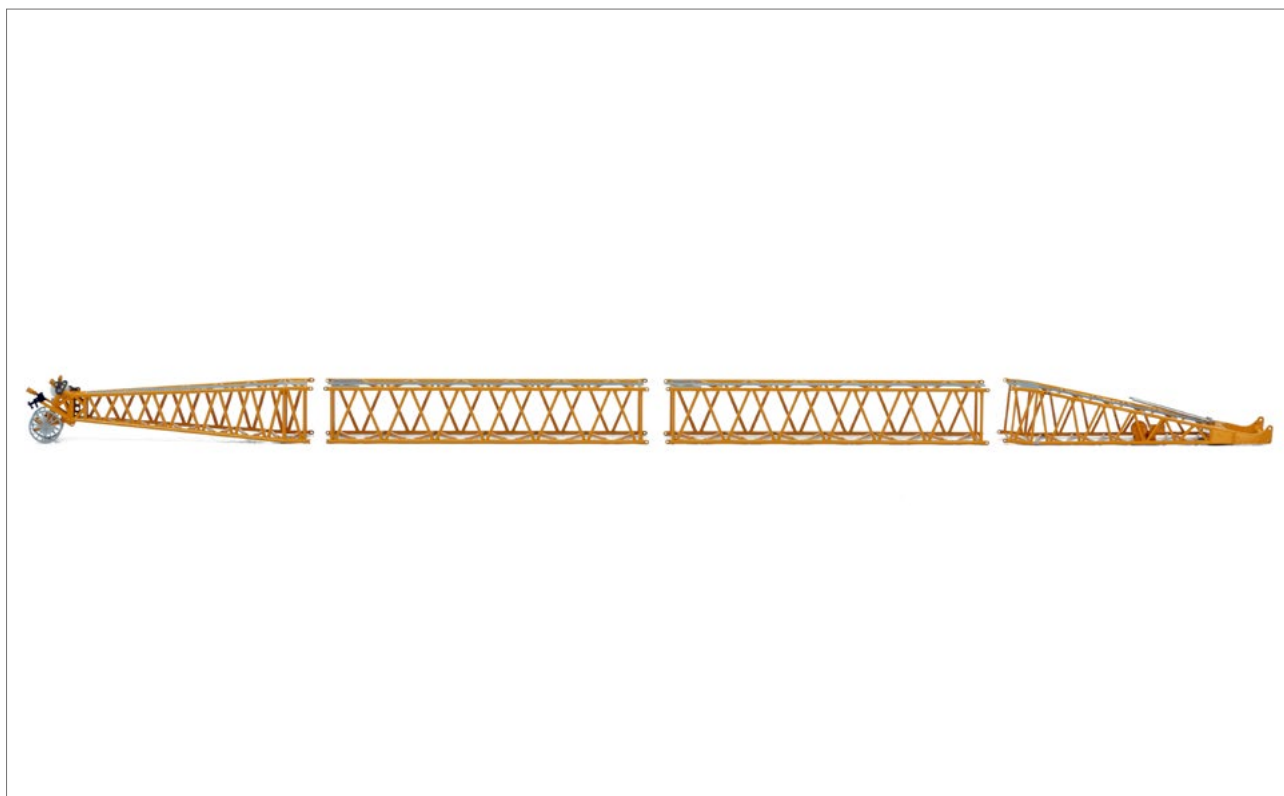




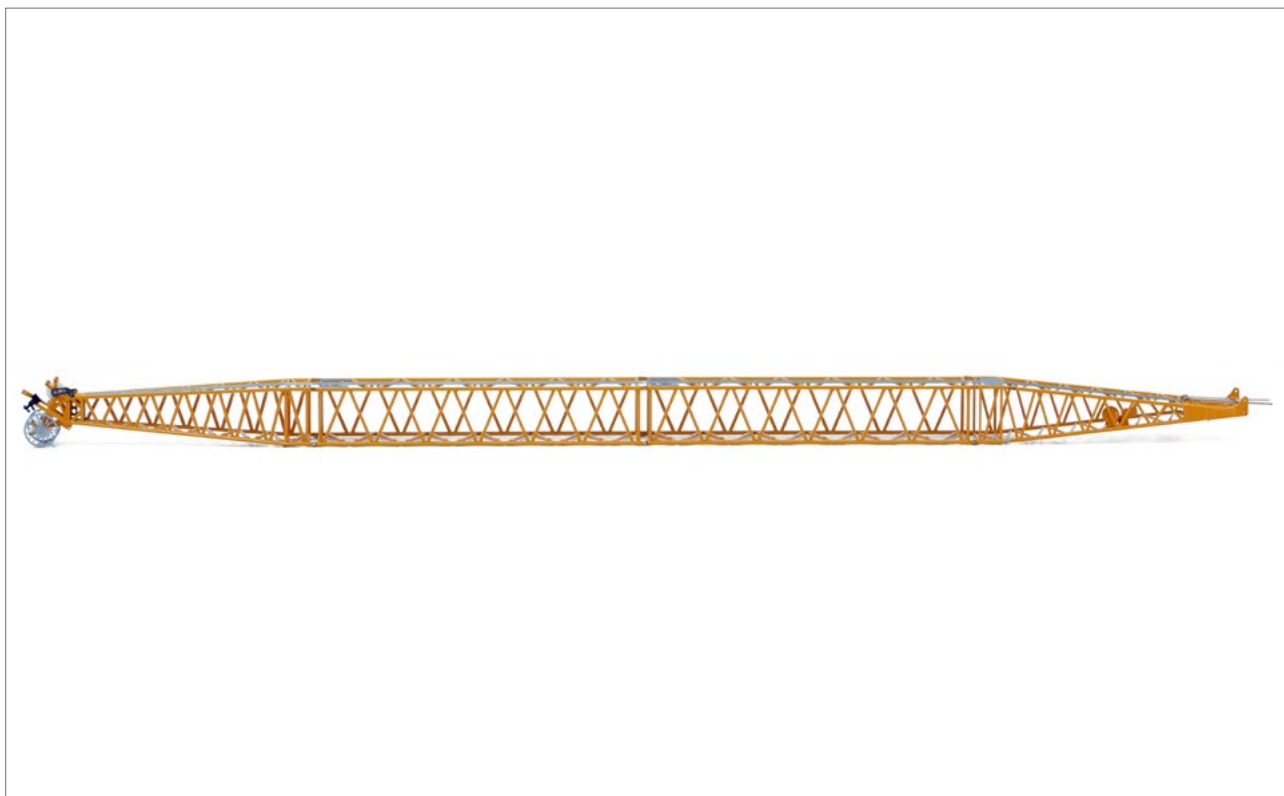
Connect the main boom pendant straps to the boom head with bolts (B9K) and nuts

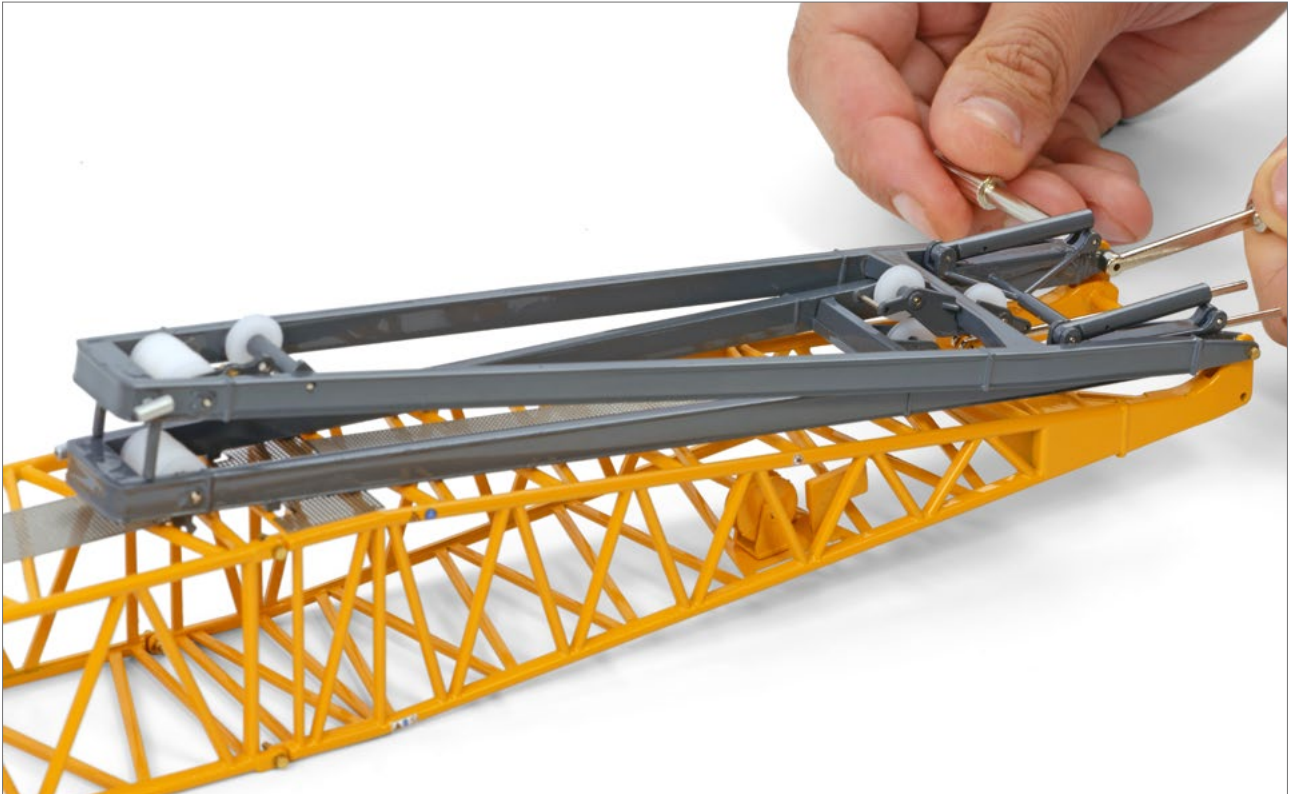
Assembly overview

3. Crane assembly | 3.5 Jib assembly



Assemble the jib parts (A7, A9, A12, A10) with the bolts (B9H) and nuts according to overview below





Place the jib A-frame onto the jib assembly and connect with the pre-assembled bolts and nuts



Connect the jib pendant straps (A13) to the jib A-frame with bolts (B9H) and nuts

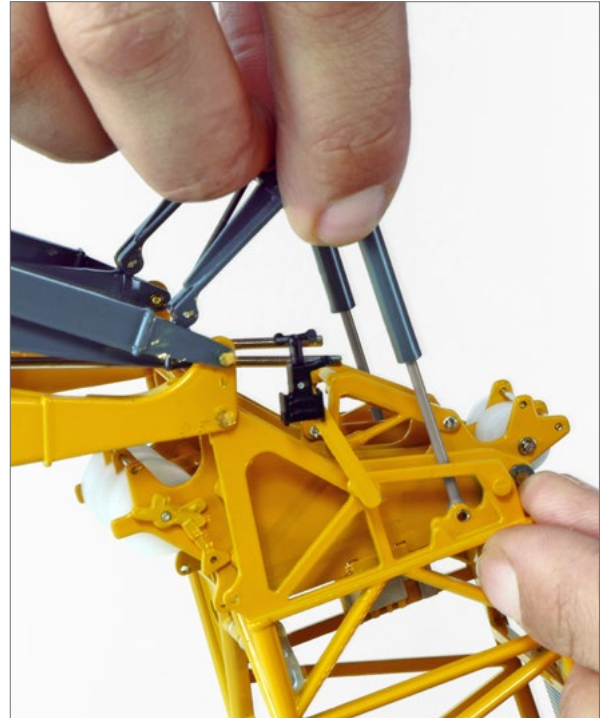


Connect the other end of the jib pendant straps to the jib head with bolts (B9H) and nuts

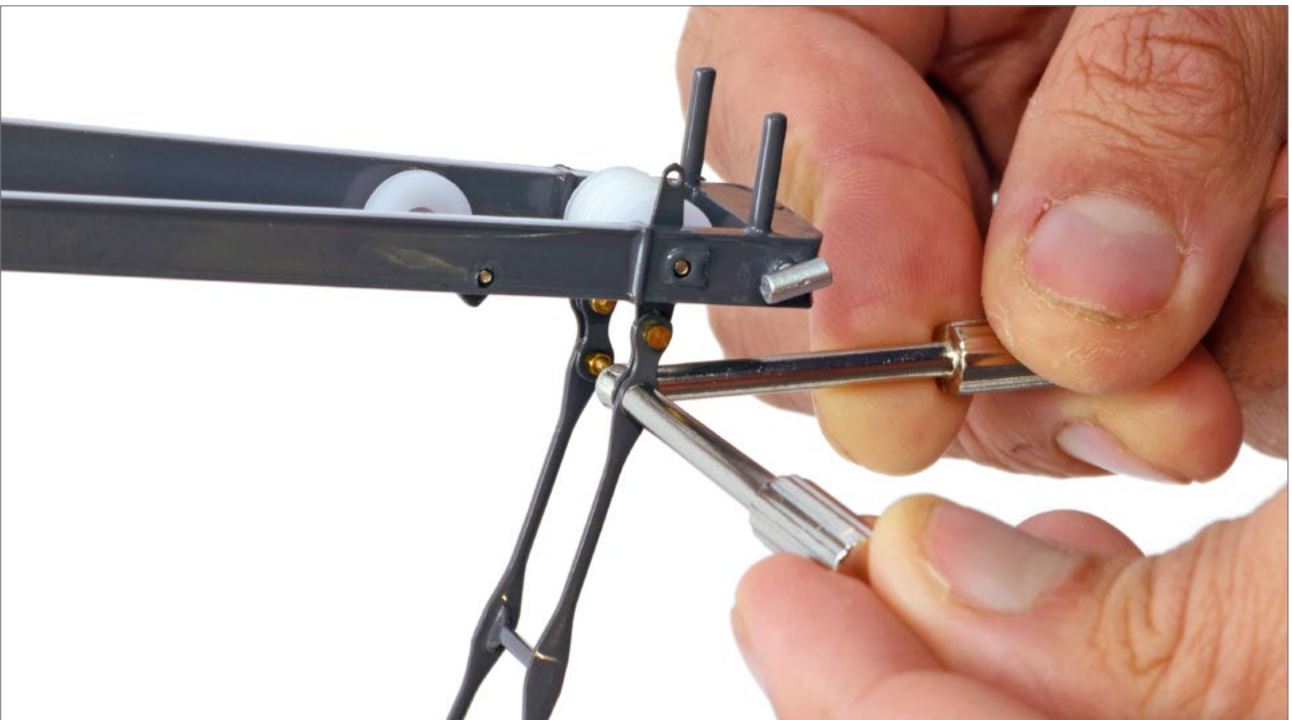
Please note that for the next 3 steps a second person is needed to assist



Place the jib assembly onto the main boom head and connect with bolts (B9J) and nuts while a second person holds the end of the jib



Connect the hydraulic tilting-back supports on top of the main boom head



Swing the jib A-frame backwards and connect to the jib backstay straps (A14) with the bolts (B9H) and nuts



Connect the lower end of the jib backstay straps to the main boom base section with the bolts (B9H) and nuts



Assembly overview

4. Reeving plan | Jib rope



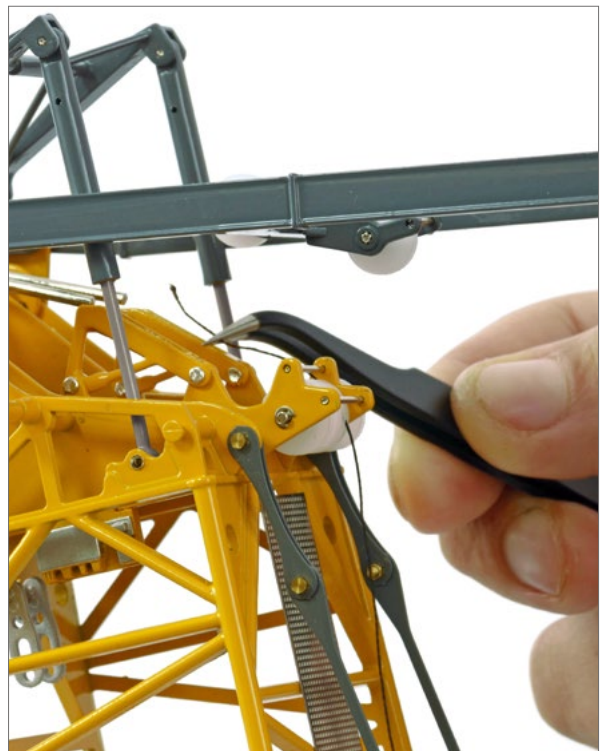
Take off the sticker at winch #4 to release the jib rope



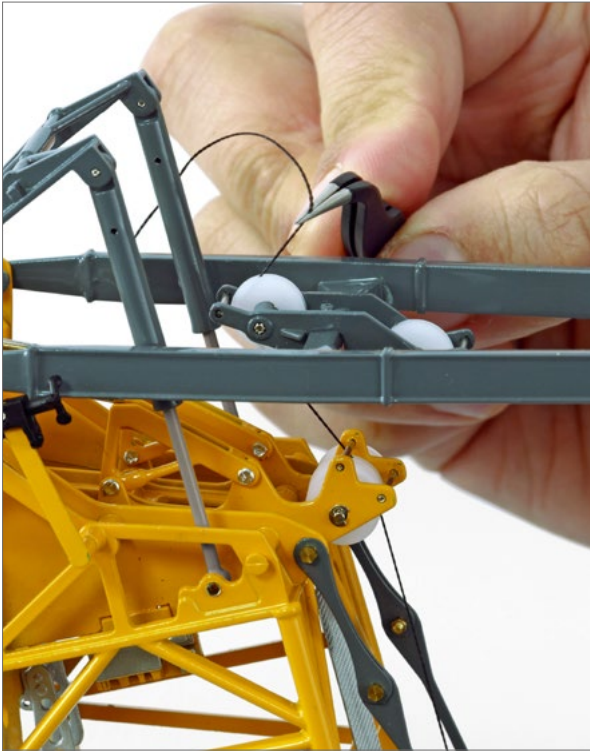
Turn the winch counterclockwise with the key (B10C) while carefully pull out the rope. **Please take care to always keep tension on the rope**



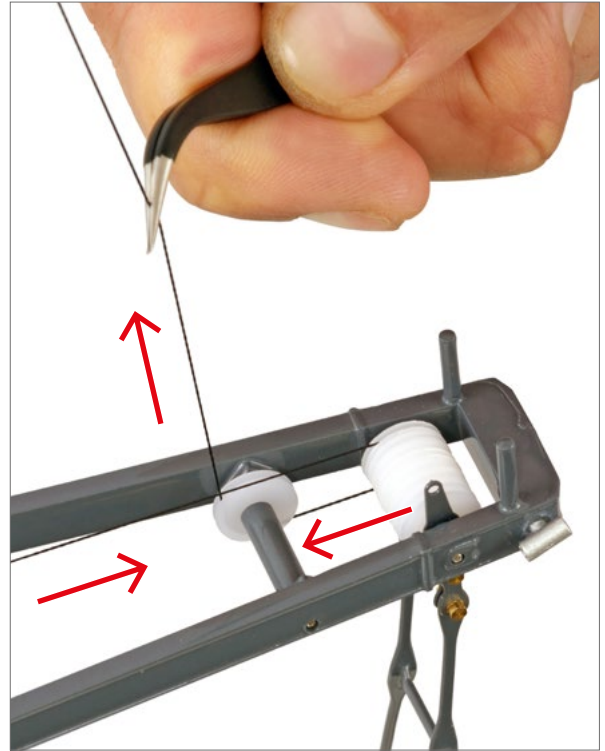
Pull the rope through the rope guide on the boom



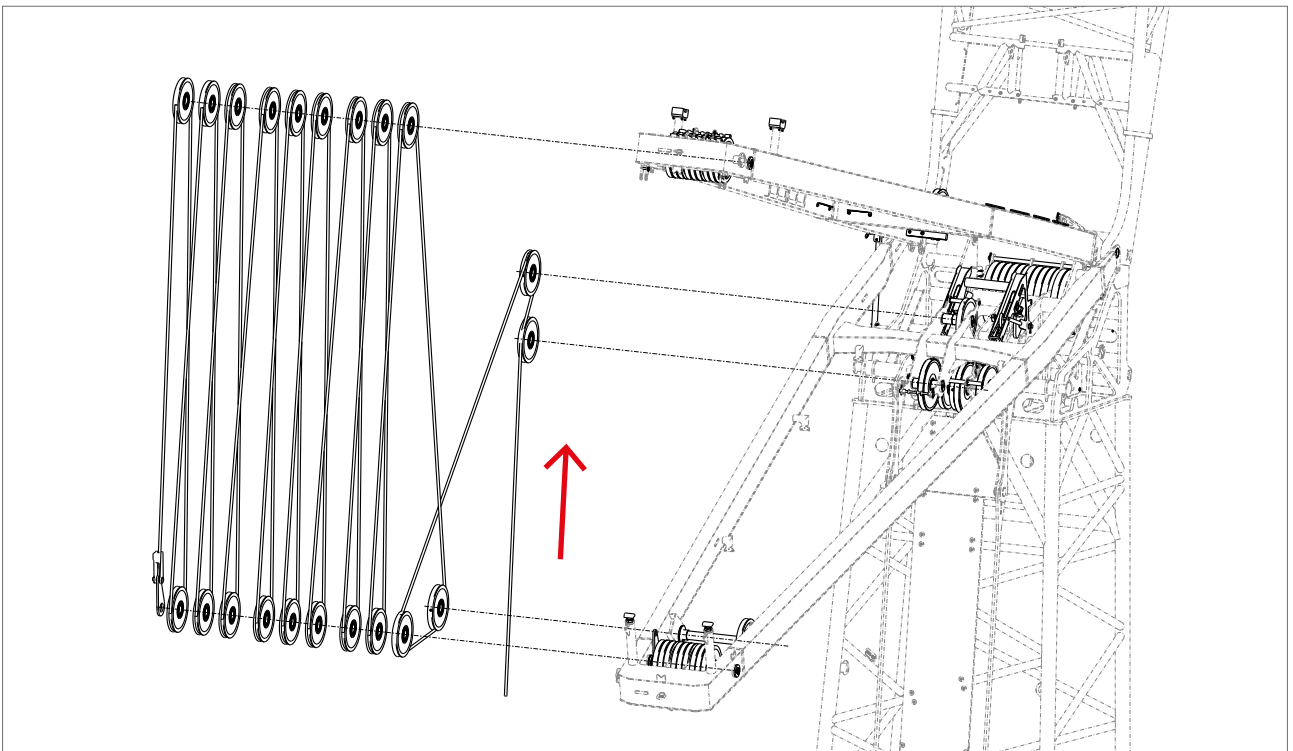
Pull the rope over the pulley on top of the boom end



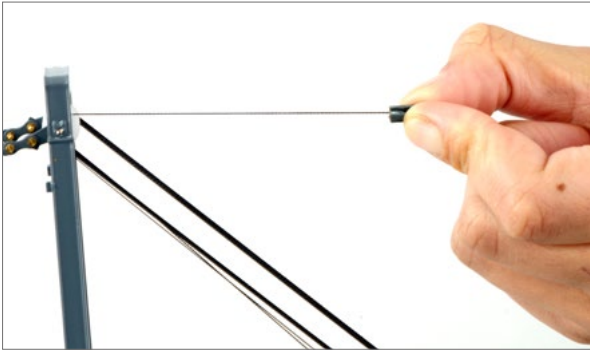
Pull the rope over the lower pulley of the jib A-frame



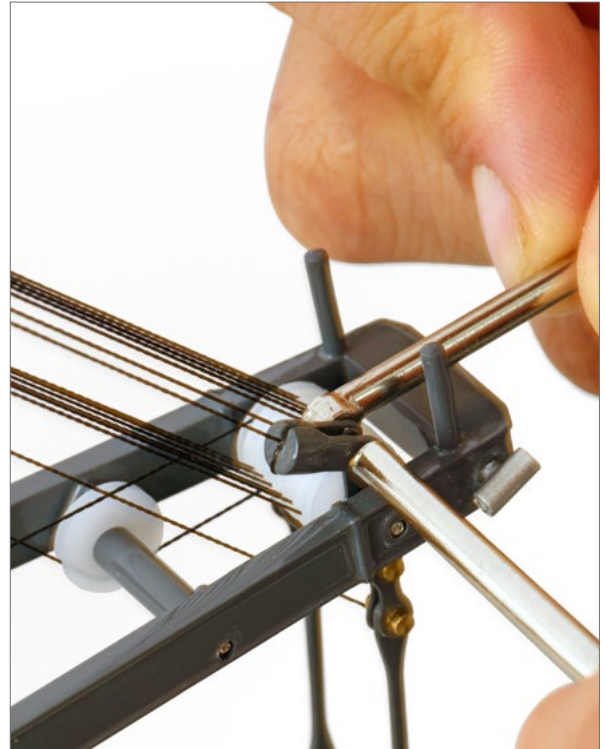
Pull the rope over the two most left pulleys at the top of the jib A-frame



Pull the rope over the first pulley of the upper A-frame and reeve the rope according to the reeving plan



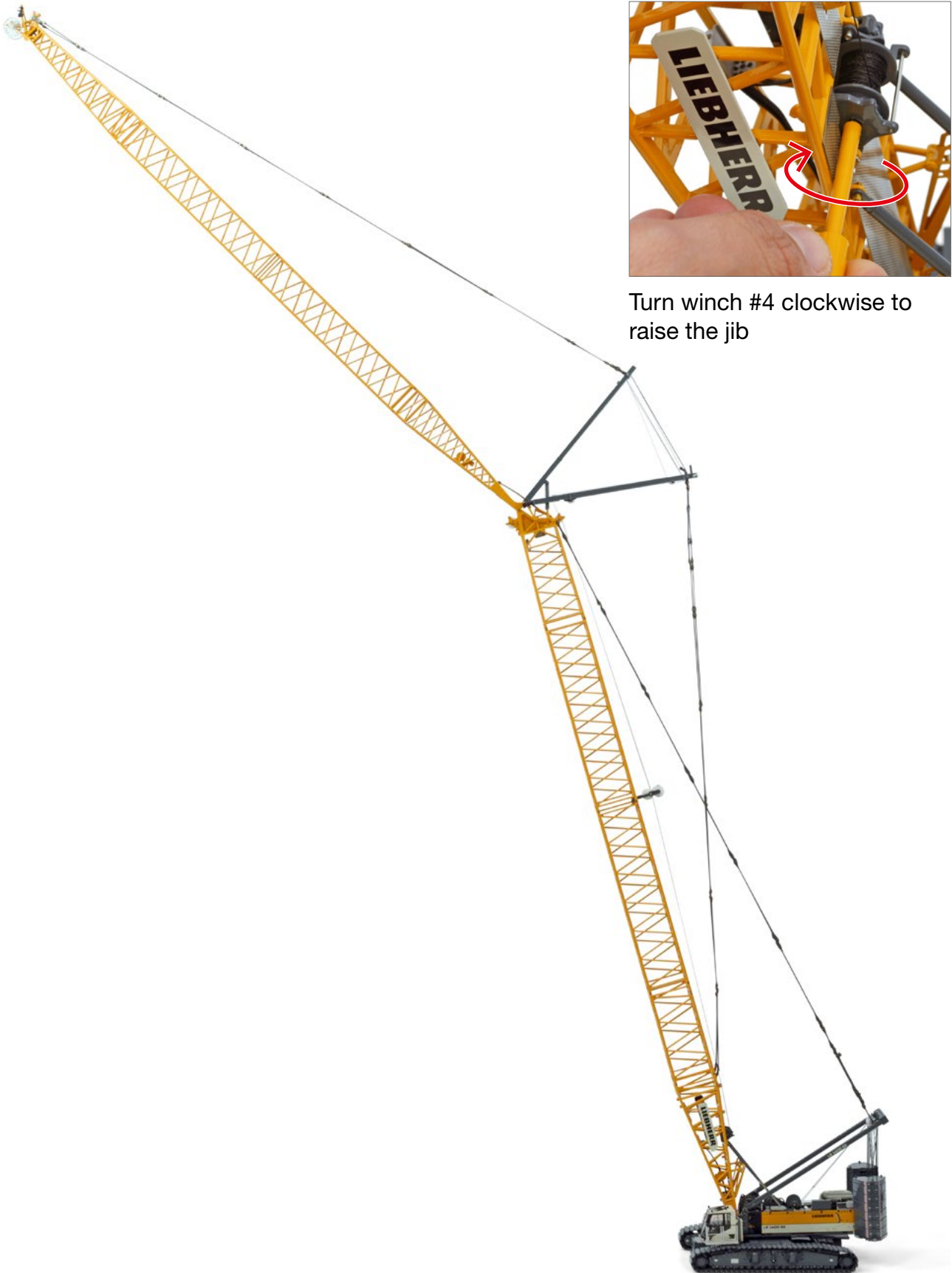
Knot and glue the end of the rope to the rope lock part (B9F)



Connect the rope lock part to the eyelet on the lower jib A-frame section with bolts (B9H) and nuts



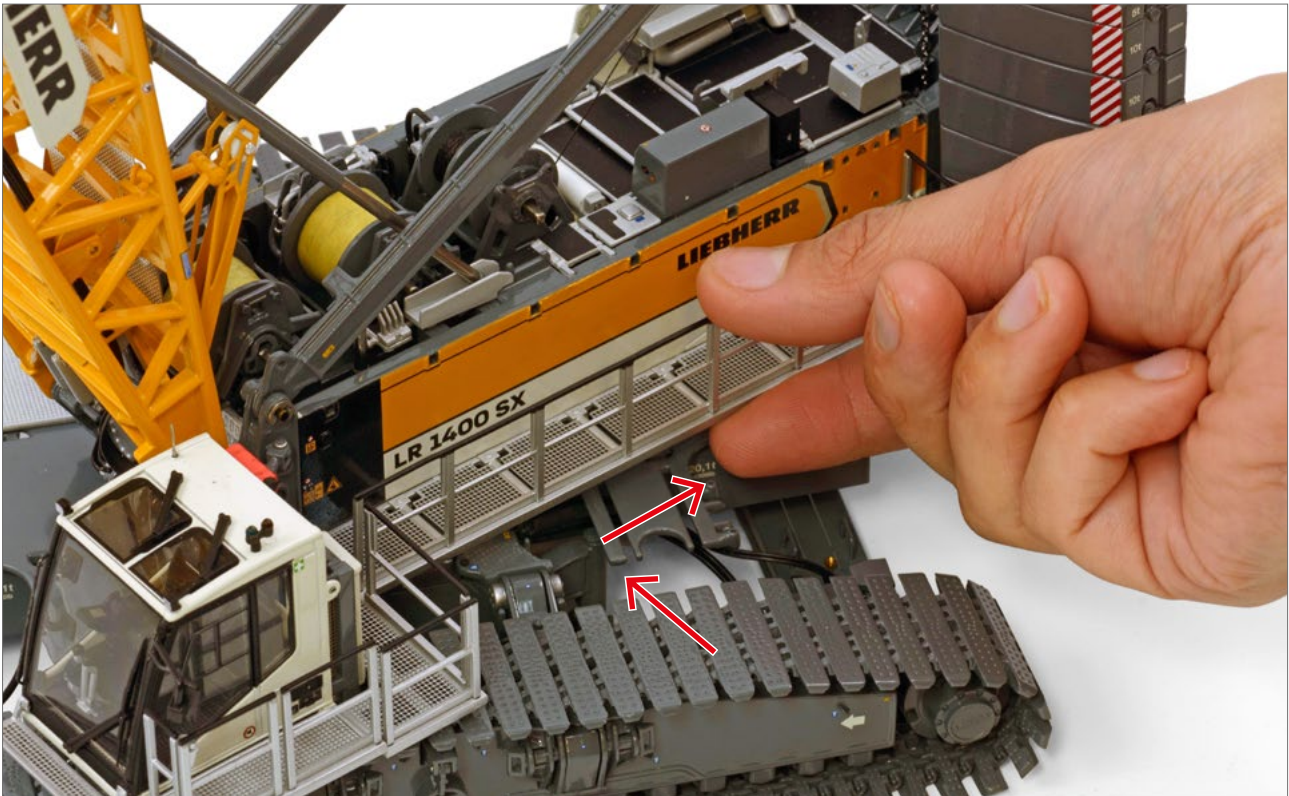
Reeving overview



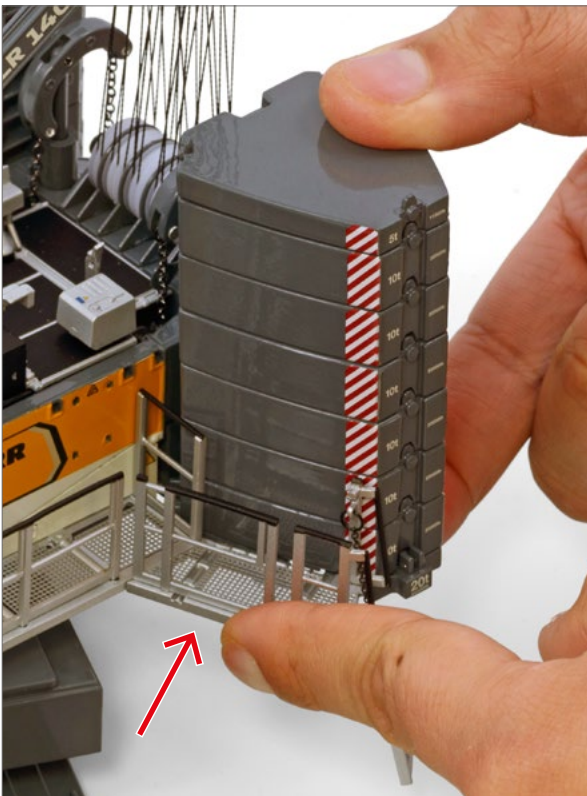
Turn winch #4 clockwise to raise the jib

Assembly overview

5. Details | 5.1 Platforms and handrails



Place the walking platform at the left side of the uppercarriage (B21). This can be done by pushing the hooks into the slots and locking them by pushing the platform to the back



Place the main access part (B15) onto the ballast plate by pushing the pins into the holes in the ballast plate



Place the guard rail (B12A) onto the right side of the uppercarriage by pushing the pins into the slots. Then the left side guard rail (B12B) can be placed at the left side of the uppercarriage

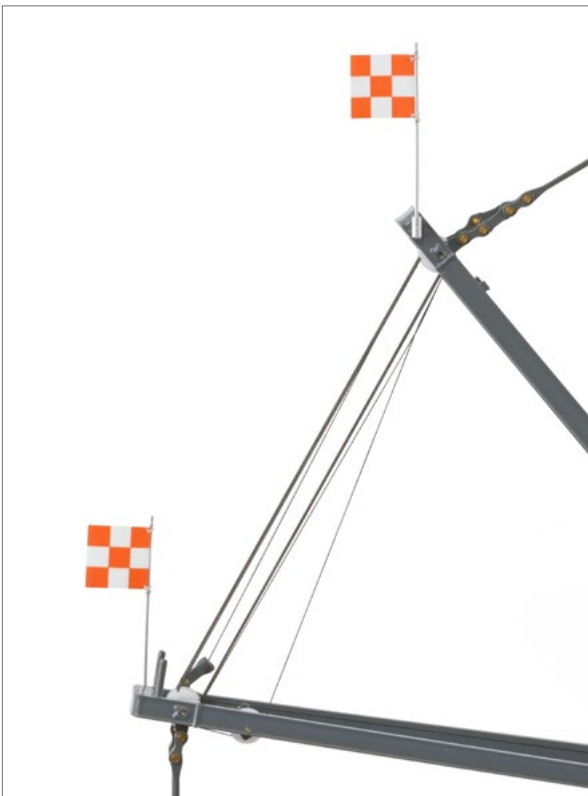


Place the ladder (B9A) at the side of the uppercarriage

5. Details | 5.2 Other



Place the working light unit (B9M) at the right side of the uppercarriage

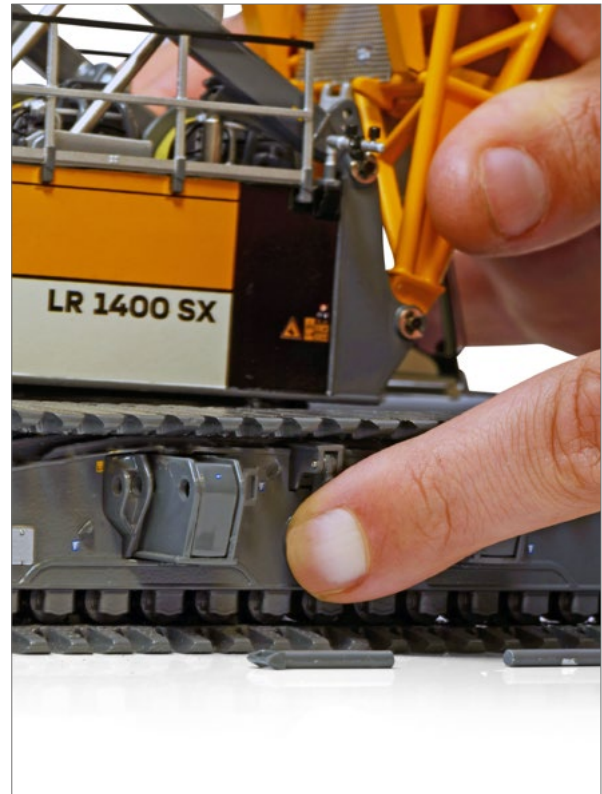


Place the warning flags (B5C) on top of the jib and jib A-frame

6. Optional | 6.1 Adjusting of track width



Take out the pins which lock the crawler side frames



Push the crawler side frames inwards for a narrow track setup or pull outwards to have a wide track setup



Lock with the locking pins

6. Optional | 6.2 Placing rear counterweight lashing



Assemble rear counterweight lashing. At each side 3 lashings are needed



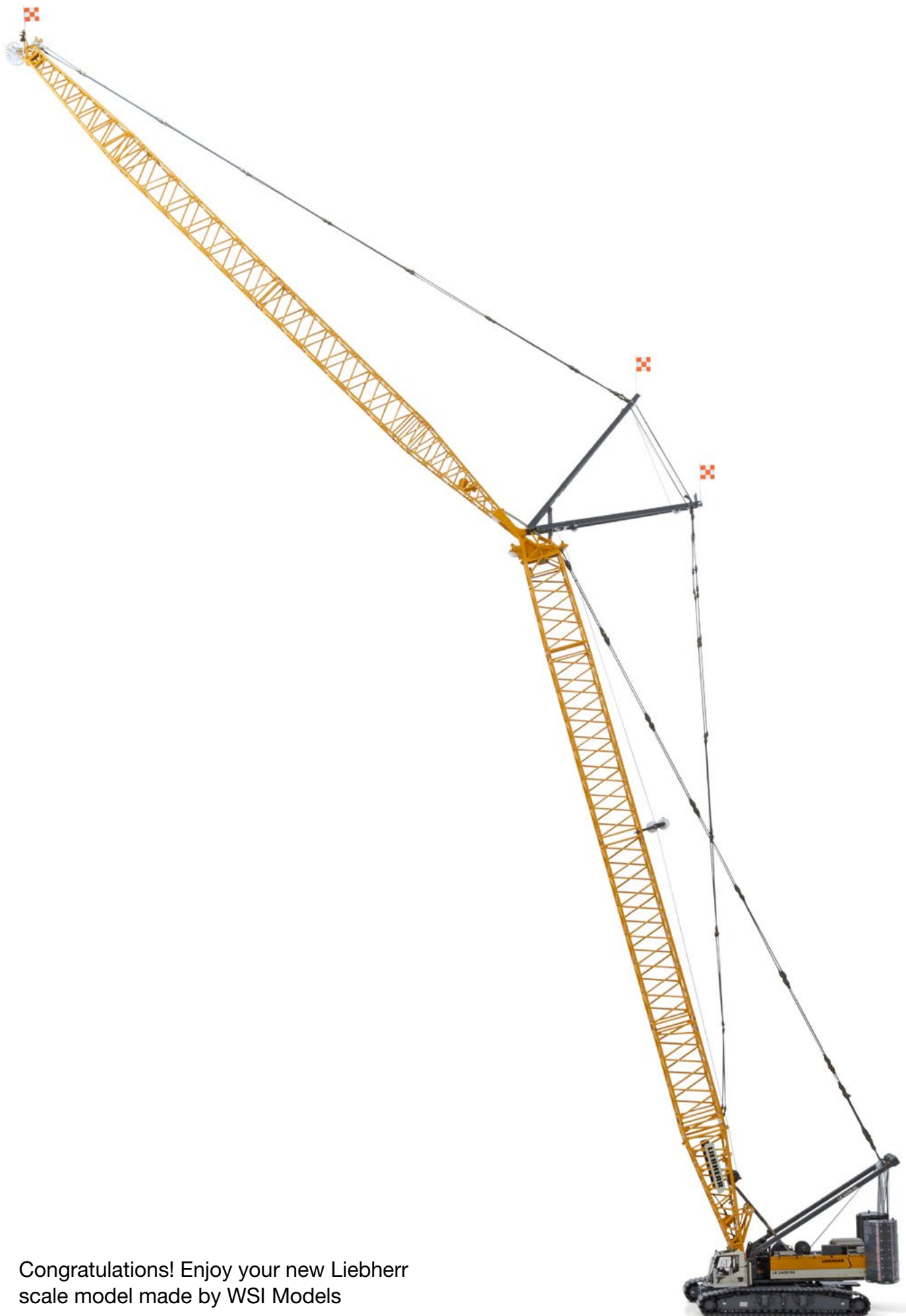
Connect the lashing at the bottom with the bended pin (B9Z)



Connect the lashing at the top of the ballast blocks



Repeat these steps for all six lashings



Congratulations! Enjoy your new Liebherr
scale model made by WSI Models

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