

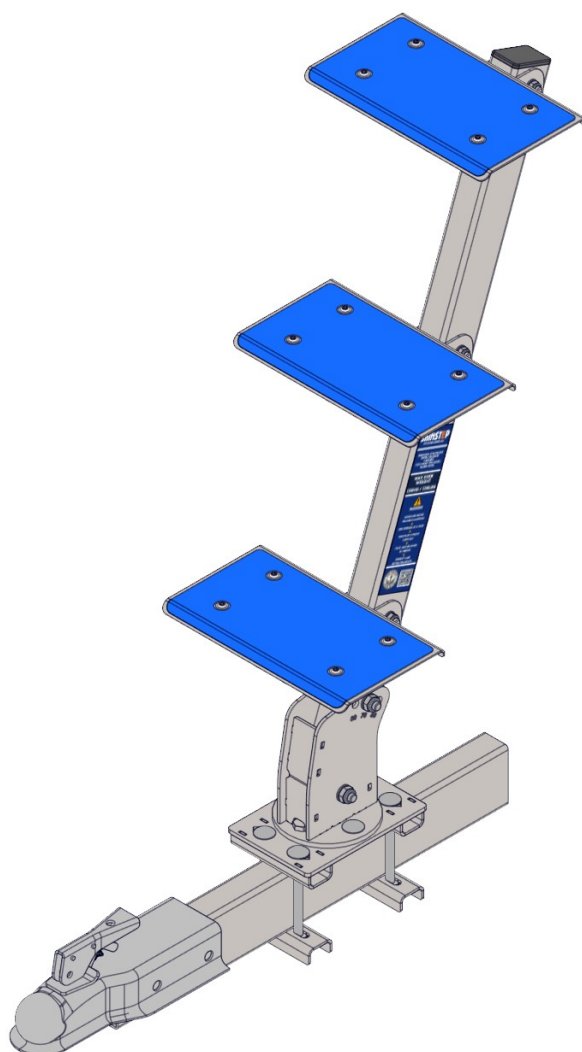


shiftSTEP

PREMIUM STAINLESS STEEL TRAILER LADDER

FITS MOST TRAILERS - MADE IN EU

INSTALLATION & USER MANUAL



GET INTO YOUR BOAT BEFORE IT GETS INTO THE WATER.

MAXIMUM USER MASS 150 kg / 330 lb

One person only. Use only when the trailer is stationary, stable and secured.

LIMITS, FIT AND TOOLS

BEFORE INSTALLATION

FITMENT

- Sound, closed square or rectangular steel drawbar or chassis member with nominal outside width 40, 45, 50, 55 or 60 mm; each setting provides about 1-2 mm installation clearance.
- Supplied M10 x 130 carriage bolts suit a mounting member up to 80 mm high. Shorter or longer lengths are available on request.
- Base has 16 fixed positions at 22.5 degree intervals around one full indexed circle.
- Mast and all three treads use one matching setting: 60, 70 or 80 degrees.

TOOLS

Calibrated torque wrench; TX50, TX40 and TX30 bits; and 17, 13 and 10 mm spanners/sockets. Use hand tools only - never powered or impact wrenches.

CLOSED STRUCTURAL SECTION ONLY. Do not install on a C-channel, open, round, tapered, damaged or non-structural member.

BEFORE YOU START

- Read this manual first.
- Park the tow vehicle and trailer on firm, level ground and apply the tow-vehicle parking brake.
- Confirm the mounting member and every ladder part are straight, structurally sound and free from damage or severe corrosion.
- Use every specified bolt, washer and locknut. Do not drill, grind, bend, weld or otherwise modify any supplied component.

SECURE BEFORE CLIMBING - Use the ladder only when the tow vehicle, trailer and boat are stationary.

STAINLESS STEEL THROUGHOUT

- The mast, treads, base, supports, clamps and all supplied bolts, nuts, washers and retainers are stainless steel.
- Only the anti-slip pads, mast cap and nylon locknut inserts are non-metallic.
- Three 280 mm treads; maximum user mass 150 kg / 330 lb.

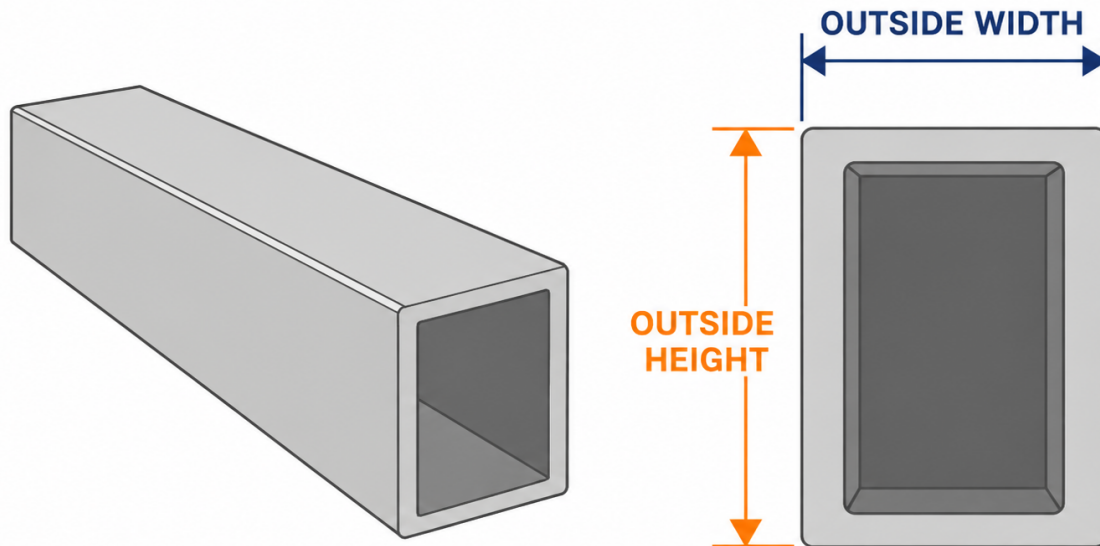
PRODUCT-LABEL SAFETY RULES

- Never use while the trailer is in motion.
- One person at a time.
- Maintain three-point contact and face the ladder.
- Inspect and retighten bolts as specified.

STEP 1

MEASURE THE MOUNTING MEMBER

Measure the closed-section drawbar or chassis member itself.



WIDTH OPTIONS: 40 / 45 / 50 / 55 / 60 mm

130 mm BOLTS SUPPLIED — FOR MEMBERS UP TO 80 mm HIGH



CLOSED SECTION ONLY — NO OPEN CHANNEL

- 1 Measure the outside width and outside height of the mounting member at the intended position.
- 2 Use a sound, closed square or rectangular structural drawbar/frame member. C-channel and other open profiles are not suitable.
- 3 Select the 40, 45, 50, 55 or 60 mm nominal-width setting. The clamp provides approximately 1-2 mm installation clearance.
- 4 Supplied M10 x 130 carriage bolts suit a mounting member up to 80 mm high. Heights over 80 mm require longer bolts.
- 5 Check that the mounting area is flat, unobstructed and structurally sound.

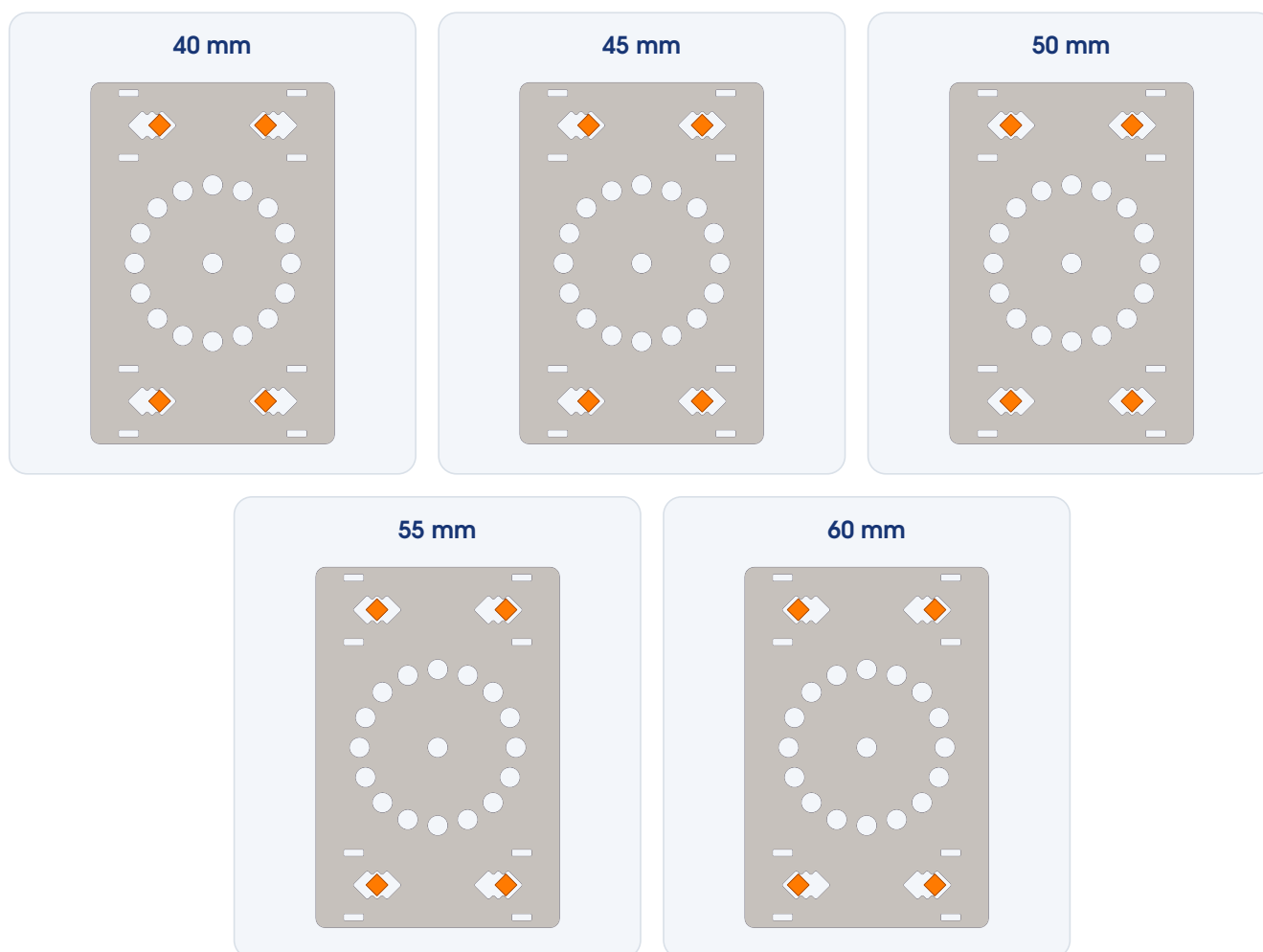
STEP 2

CHOOSE THE MOUNTING WIDTH

Use the measured nominal outside width to select the matching carriage-bolt locations.

SELECT THE BOLT POSITIONS FOR YOUR BEAM WIDTH

Orange diamonds show the four M10 carriage-bolt square-neck locations.



FOR 45 mm AND 55 mm, THE MIRRORED LEFT/RIGHT ARRANGEMENT IS ALSO VALID

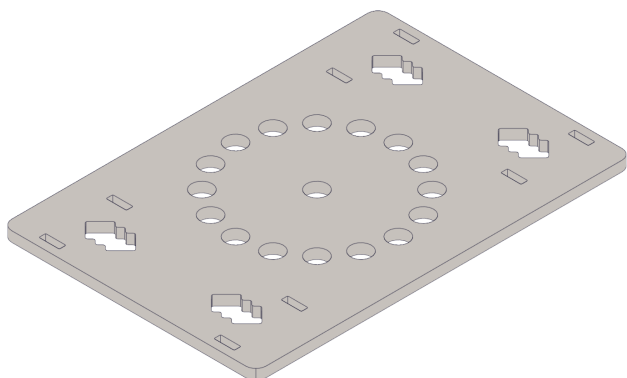
- 1 Find the measured nominal width and use the highlighted bolt arrangement shown on the complete base.
- 2 The orange diamonds identify the square-neck positions. Insert the bolts only after fitting the supports and placing the base on the mounting member, as shown next.
- 3 Repeat the same arrangement at the front and rear of the base, then use the corresponding circular holes in both supports and both lower clamps.

USE THE MATCHING ARRANGEMENT at both ends of the base and in the corresponding circular support/clamp holes.

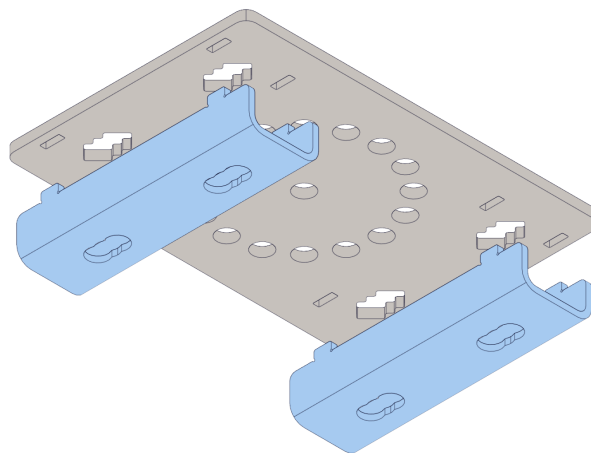
STEPS 3-4

BUILD THE BASE

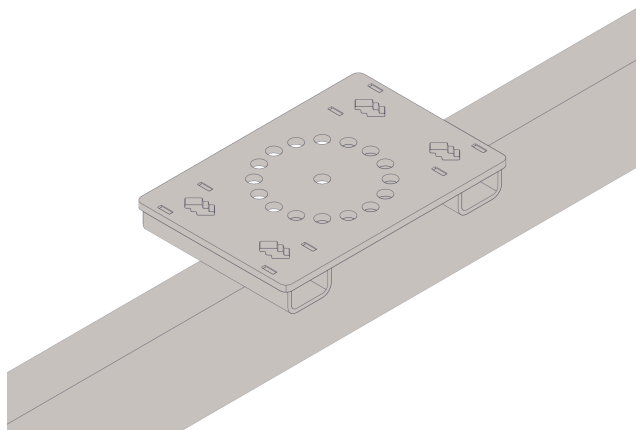
Start with the base and the two tabbed support pieces.



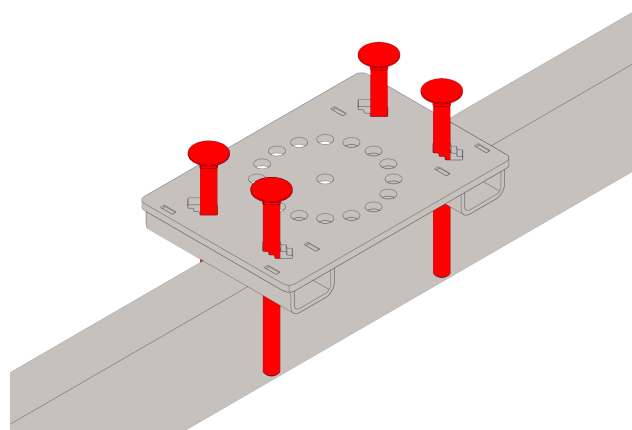
1 BASE PLATE



2 CLICK BOTH BLUE SUPPORTS INTO PLACE



3 PLACE THE BASE ON THE BEAM



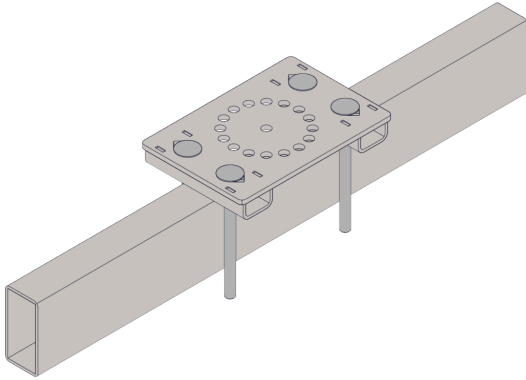
4 INSERT FOUR BOLTS IN SELECTED POSITIONS

The two support pieces are shown in blue. Align all four tabs on each support - eight tabs in total - and press until every tab clicks fully into its base slot.

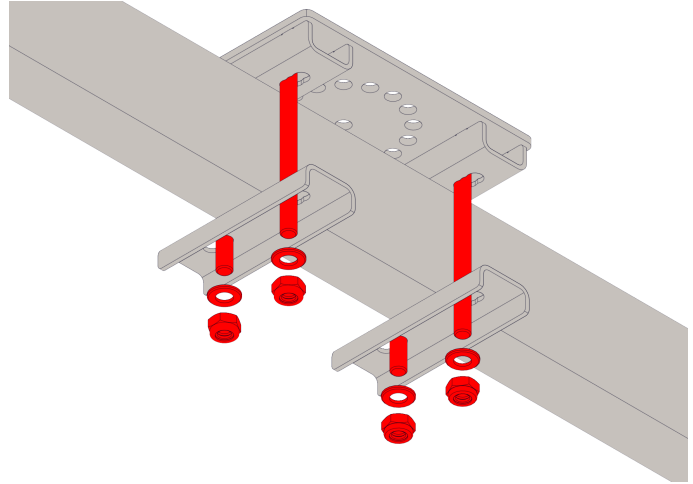
Place the base on the beam first; then insert all four bolts in the width positions selected on page 4.
Check: eight tabs fully engaged, both supports seated flat, and all four carriage-bolt square necks seated.

STEP 5

CLAMP THE BASE TO THE TRAILER



1 BASE ABOVE THE MOUNTING MEMBER



2 UNTABBED CLAMPS BELOW

USE THE MATCHING CIRCULAR HOLES

- 1** Use the corresponding circular holes in each upper support and lower clamp for the selected nominal mounting width.
- 2** Fit both untabbed lower clamps beneath the mounting member. Add one washer and one locknut to each bolt: four washers and four nuts in total.
- 3** Confirm all four carriage-bolt square necks are fully aligned and seated in the selected square base locations.
- 4** Start all four nuts by hand. Keep both clamps square to the mounting member and use hand tools only.
- 5** Leave the nuts loose enough for the base to slide forward and backward along the beam. Keep the assembly supported. Do not apply final torque.

DO NOT APPLY FINAL TORQUE YET. Continue to the horizontal-position check on the next page.

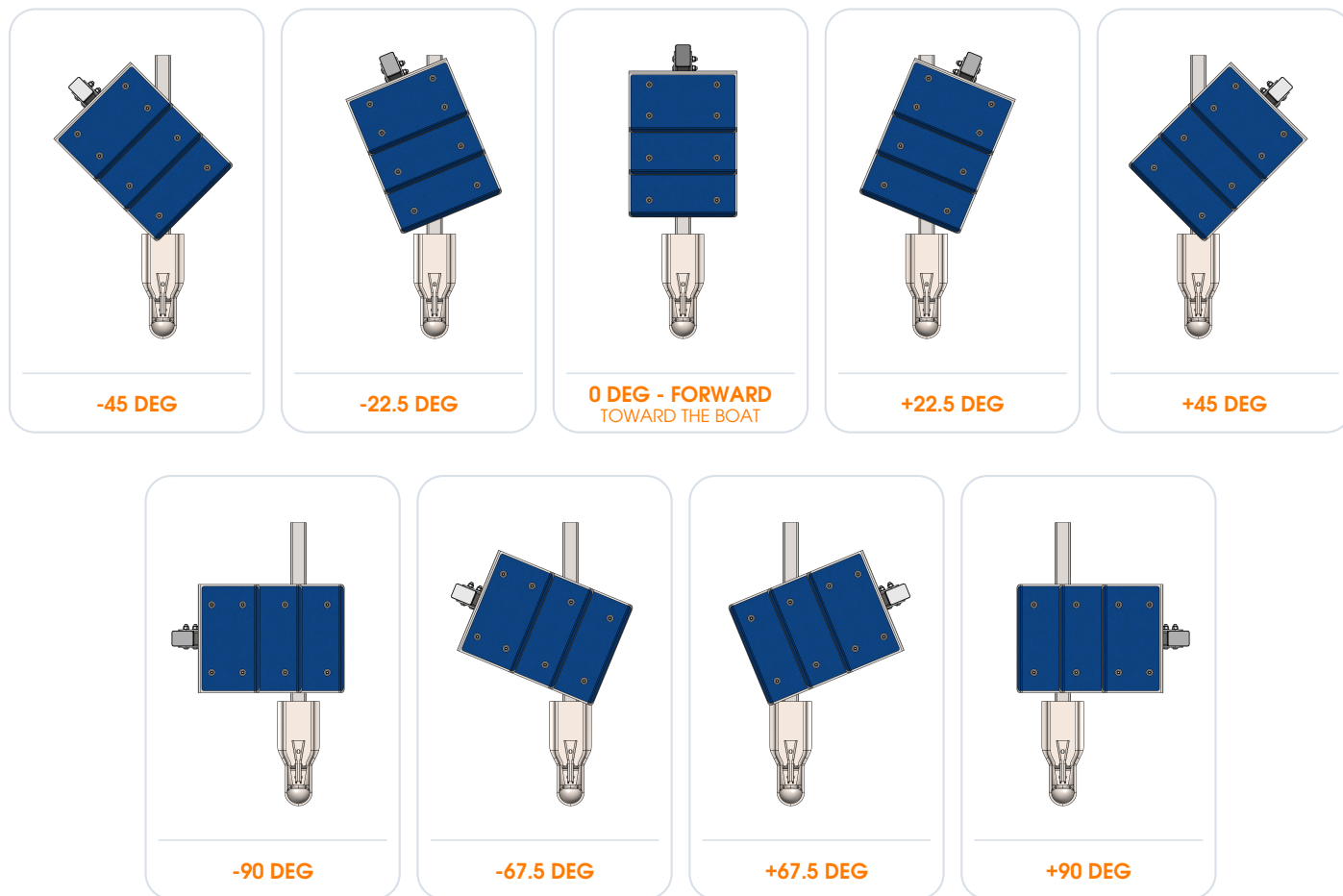
BEFORE MOVING ON

- No gap between each support and the base.
- Lower clamps are parallel and fully supported.
- At least two full threads project beyond every nylon locking insert.
- All square necks remain seated in their base locations.

STEPS 6-7

CHOOSE THE HORIZONTAL POSITION

Choose a starting direction; check the complete fit after the bracket and mast are installed.



0 DEGREES IS FORWARD, TOWARD THE BOAT. Nine positions are shown. The disc has 16 fixed positions around the full circle, indexed every 22.5 degrees.

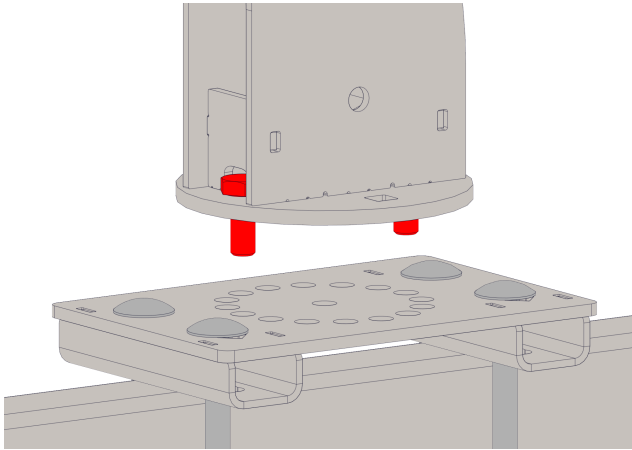
CHOOSE A STARTING POSITION

- 1 Use the views above to choose an initial direction for boarding.
- 2 Keep the mounting-clamp nuts loose enough for the base to slide along the beam.
- 3 Fit the combined mast-base bracket and disc, then the mast, as shown next. Final clearance checks follow all three adjustments.

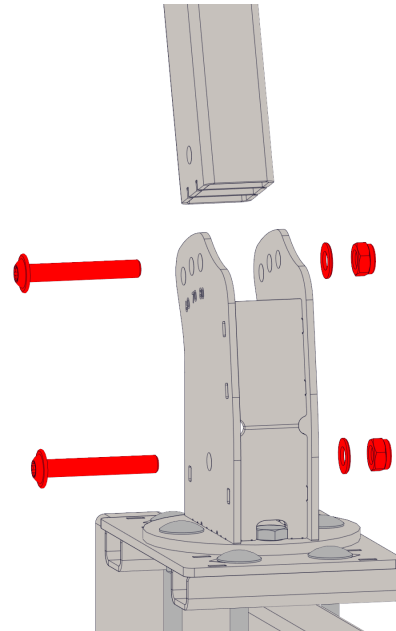
DO NOT APPLY FINAL TORQUE UNTIL THE COMPLETE POSITION FITS.

STEPS 6-7 CONTINUED

FIT THE BRACKET AND MAST



1 LOWER THE BRACKET AND DISC TOGETHER



2 FIT THE MAST WITH TWO M10 BOLTS

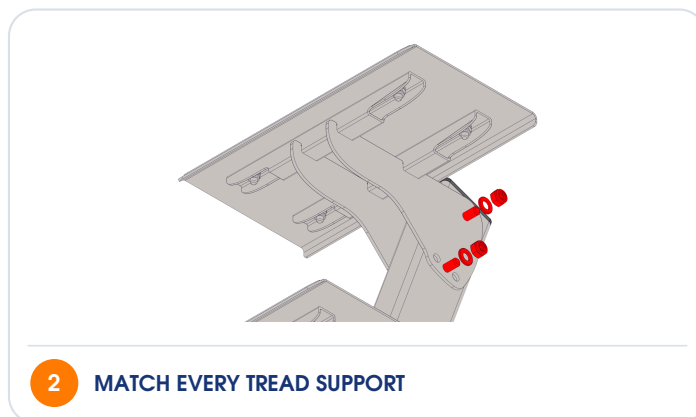
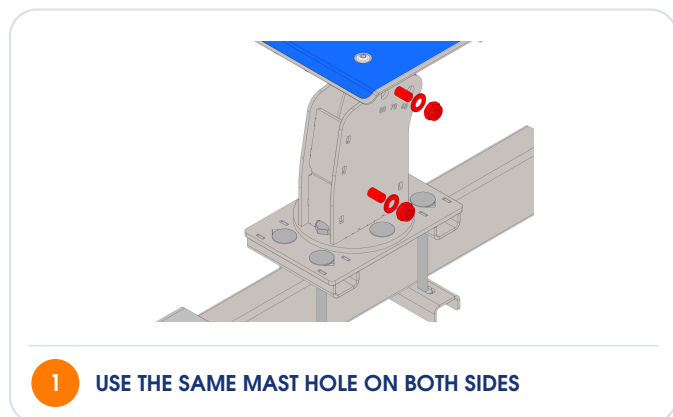
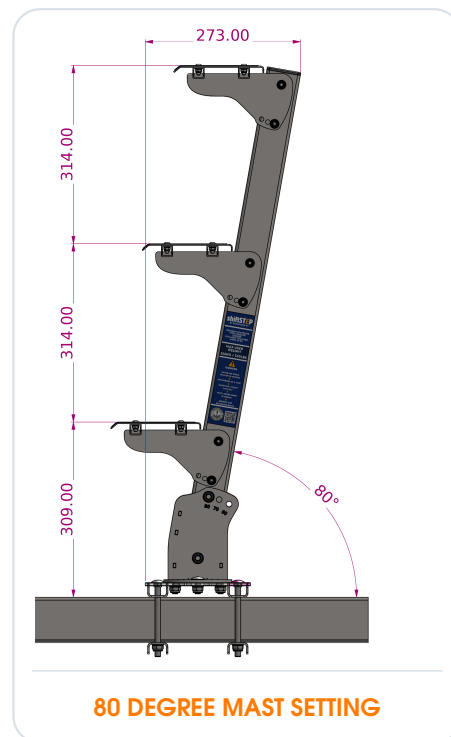
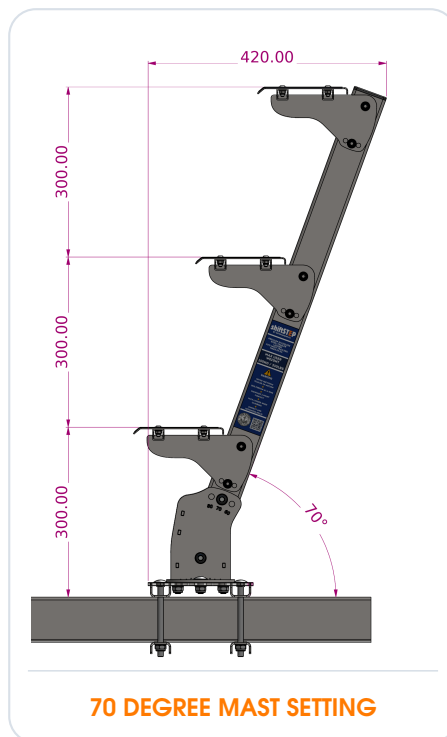
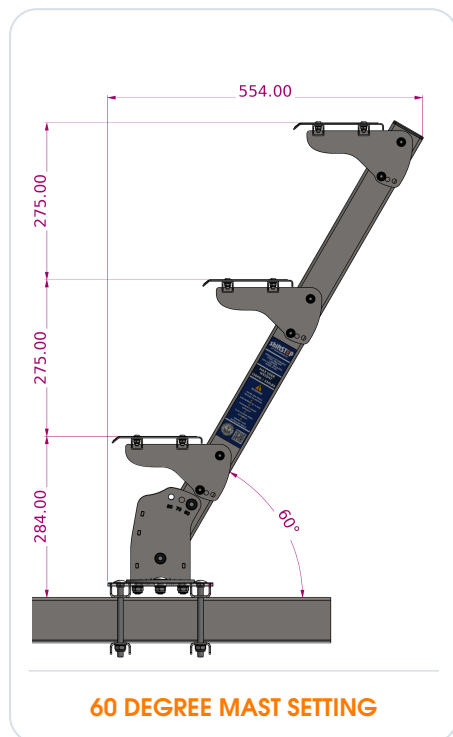
- 1** The mast-base bracket and disc form one assembly. Two bolts are already held in place to make positioning easier.
- 2** Lower both captive bolts into the base holes for the chosen horizontal position. Add their washers and nuts, but leave them loose for adjustment.
- 3** Support the mast and fit it into the bracket with the two M10 bolts, washers and nuts. Use the same angle setting on both sides.
- 4** Leave the mast nuts loose enough to change the angle. Support the mast whenever moving the bolts to another setting; do not let it fall or swing freely.
- 5** Keep the two side carriage bolts aside until the final horizontal position is confirmed. The base, disc and mast are still being adjusted.

DO NOT APPLY FINAL TORQUE YET. The base must remain able to slide, and the horizontal position and mast angle must remain adjustable.

STEPS 8-9

SET THE MAST AND EVERY TREAD

Choose one setting - 60, 70 or 80 degrees - and use it throughout.



- 1** Support the mast. Choose 60, 70 or 80 degrees and use the same marked hole on both sides. Keep the two M10 nuts loose for trial fitting.
- 2** Fit each tread support with its two M8 bolts, washers and nuts. Match its 60, 70 or 80 degree setting to the mast; this sets the tread parallel to the mounting member.
- 3** Fit each tread with four M6 bolts, washers and nuts. Use all specified fasteners and keep the ladder supported during trial fitting.
- 4** Before final tightening, check all three adjustments together on the next page: base slide, horizontal position and mast angle.

DO NOT MIX ANGLES. The mast and every tread must use the same 60, 70 or 80 degree setting.

STEPS 10-11

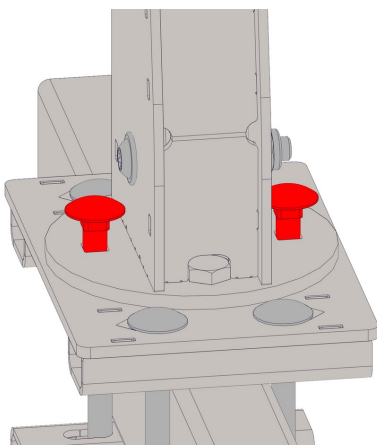
CHECK THE FIT AND LOCK

Use all three adjustments together to suit your boat and trailer.

THREE ADJUSTMENTS BEFORE FINAL TIGHTENING

- 1 **SLIDE THE BASE:** move it forward or backward along the beam while the four lower clamp nuts remain loose enough to slide.
- 2 **SELECT THE HORIZONTAL POSITION:** support the assembly, loosen the captive-bolt nuts as needed and lift both bolts clear of the holes. Rotate to another indexed position, then lower both bolts fully.
- 3 **SET THE MAST ANGLE:** support the mast and move the two mast bolts to the matching 60, 70 or 80 degree setting. Match all three tread supports to that setting.

CHECK CLEARANCE from the trolling motor, boat bow, winch, straps, coupling, tyres, road and other equipment. Check boarding access and space for boat loading and unloading.



1 INSERT BOTH SIDE CARRIAGE BOLTS

- 1 After the complete position fits, insert both side carriage bolts. Fully seat their square necks in the disc notches, then add washers and nuts.
- 2 Tighten the four lower clamp nuts diagonally in three passes: 10, 20 and 30 Nm. Tighten all four disc nuts evenly to 30 Nm.
- 3 Tighten the mast and tread fasteners to the values on the next page. Recheck every fastening group and all clearances.

FINAL CHECK: The base must not slide or rock, the disc must not rotate, and the mast and treads must not move. Do not climb until every fastener is tightened.

TORQUE REFERENCE

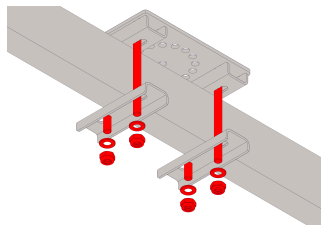
TORQUE EVERY NUT

Use the matching Torx bit and spanner. Apply torque at the nut.

MOUNTING CLAMPS

M10 carriage bolts

17 mm spanner



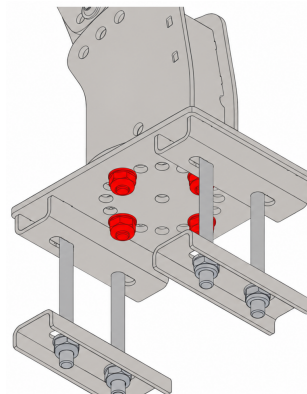
TIGHTEN ALL 4 NUTS

30 Nm

DISC

M10 TX50 + carriage bolts

TX50 + 17 mm



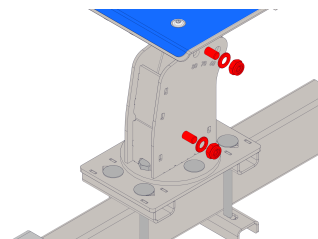
TIGHTEN ALL 4 NUTS

30 Nm

MAST

M10 TX50 bolts

TX50 + 17 mm



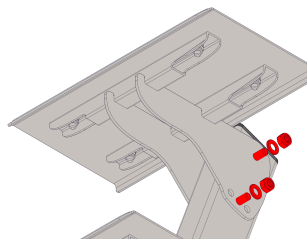
TIGHTEN BOTH NUTS

30 Nm

TREAD SUPPORTS

M8 TX40 bolts

TX40 + 13 mm



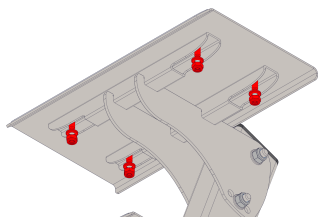
ALL 6 NUTS - 2 PER TREAD

15 Nm

TREADS

M6 TX30 bolts

TX30 + 10 mm



ALL 12 NUTS - 4 PER TREAD

6 Nm

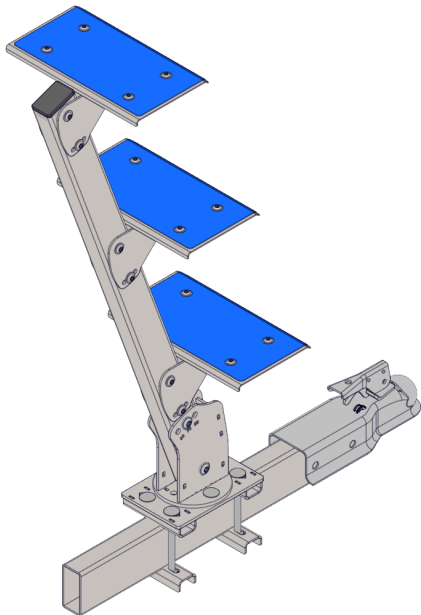
TORX / SPANNER SIZES**M10** TX50 + 17 mm spanner**M8** TX40 + 13 mm spanner**M6** TX30 + 10 mm spanner

Carriage bolts are held by their fully seated square necks; apply torque at the 17 mm nut.

HAND TOOLS ONLY: start every nut by hand and tighten slowly. Never use powered or impact tools. Stop immediately if a fastener binds.

BEFORE EVERY CLIMB

FINAL CHECK, USE AND CARE



COMPLETED INSTALLATION

CHECK

- Tow vehicle, trailer and boat are stationary and secured against movement.
- No movement at the base, disc, mast or treads.
- At least two full threads project beyond each locknut; square necks remain seated.
- Treads and anti-slip pads are clean, dry and secure.
- Ladder clears the boat, equipment, tyres and road.

CLIMB

- Face the ladder and maintain three points of contact.
- One person only. Maximum 150 kg / 330 lb including carried items.

STOP USE if any part is loose, bent, cracked, incomplete, obstructed or severely corroded.

SIMPLE INSPECTION SCHEDULE

Before each use	Mounting, fasteners, treads, damage and clearance
After first 50 km	Recheck every torque with a calibrated wrench
After salt water	Rinse with fresh water and allow to dry
Monthly / 250 km	Check clamps, disc, mast, supports, locknuts and anti-slip pads
After impact	Stop use and inspect the mounting member, structure, welds and fasteners

Clean with fresh water, mild detergent and a soft brush. Do not use steel wool, chlorine bleach or aggressive acids.

Technical support: donmarine.eu | info@donmarine.eu