

# RHINO-RACK®

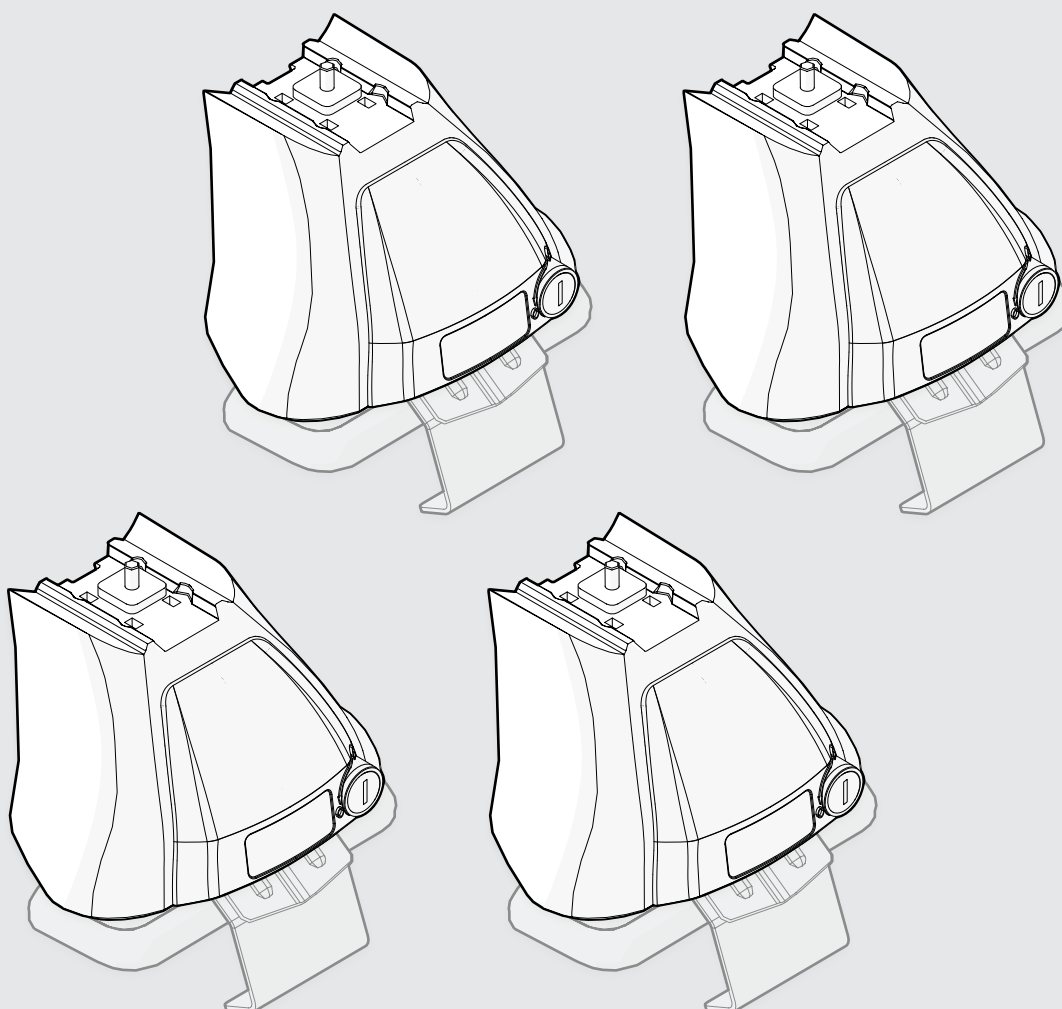
## Leg Instructions

RLKVA (Two Bars) / RLKVAH (One Bar)

**Important:**

1. Check the Rhino-Rack website to ensure you have the latest issue of these instructions.
2. Please refer to your fitting instruction to ensure that the roof racks are installed in the correct locations.
3. Check the contents of kit before commencing fitment and report any discrepancies.
4. Place these instructions in the vehicle's glove box after installation is complete.
5. These instructions must be followed for warranty to be upheld.

**Fit Time:** 30 mins



**RHINORACK.COM**

Document No: 520-RFI-00216

Issue No: 14

Issue Date: 15/01/2025

Carrying Capacity

Check the website and the **vehicle owners hand book** for your vehicle manufacturer’s maximum carrying capacity. Load must be evenly distributed over the system.

2 BARS

DYNAMIC ROAD LOAD LIMIT (NOTE: DIFFERENT ON AND OFF ROAD CARGO LIMIT)  
\*USE THE VEHICLE MANUFACTURER’S MAXIMUM ROOF ALLOWANCE IF IT IS LOWER THAN THE FIGURE LISTED

 LOAD LIMIT	 SYSTEM WEIGHT	 ON ROAD CARGO LIMIT	OR	 OFF ROAD CARGO LIMIT (ON ROAD CARGO LIMIT / 2)	
UP TO 75 kg * 165 lb	– 5 kg 11lb	=		UP TO 70 kg 154 lb	UP TO 35 kg 77 lb

1 BAR

DYNAMIC ROAD LOAD LIMIT (NOTE: DIFFERENT ON AND OFF ROAD CARGO LIMIT)  
\*USE THE VEHICLE MANUFACTURER’S MAXIMUM ROOF ALLOWANCE IF IT IS LOWER THAN THE FIGURE LISTED

 LOAD LIMIT	 SYSTEM WEIGHT	 ON ROAD CARGO LIMIT	OR	 OFF ROAD CARGO LIMIT (ON ROAD CARGO LIMIT / 2)	
UP TO 35 kg * 77 lb	– 2.5 kg 6lb	=		UP TO 32.5 kg 72 lb	UP TO 16 kg 35 lb



Cargo Load Limit

Total permissible weight allowed on top, and attached to roof racks whilst the vehicle is in motion.



System Weight

Total weight of the roof rack system. (e.g. Crossbars, Backbone, Platform)



Max System Load Capacity

Please ensure you use the vehicle manufacturer’s maximum roof allowance if it is lower than the figure listed in the fitting chart/supplement.



Vehicle Manufacturer’s Load Limit

Total permissible weight attached to the roof of the car. This is inclusive of the weight of the roof rack system.

In service maintenance checks

- All bolt connections should be checked after driving a short distance when you first install your roof racks.
- All bolted connections should be checked again at regular intervals (weekly is recommended, depending on road conditions, usage, loads and distances travelled).
- All bolted connections should be checked each time they are re-fitted.
- Off-road conditions are more rigorous. Check all bolted connections and your load more regularly.
- Ensure that your vehicle manufacturer’s GVM, and gross axle weights are not exceeded (refer to vehicle owner’s manual).

Torque Settings:

Unless stated otherwise in these instructions, all fasteners should be set to the following torque settings:

4-5Nm  
3-4lbs/ft

8-10Nm  
6-7.5lbs/ft

16-18Nm  
12-13lbs/ft


Note for Dealers and Fitters

It is your responsibility to ensure these fitting instructions are given to the end user or client. These instructions remain the property of Rhino-Rack Australia Pty. Ltd. and may not be used or changed for any other purpose than intended.

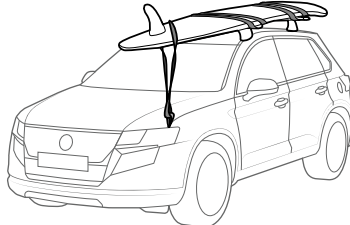
Exercise extreme care when transporting wind-resistant loads. Special consideration must be taken when cornering and braking.

Off-road conditions can be much more rigorous. Extreme care must be taken on any driven path that does not contain a surface protection layer (tar/bitumen).



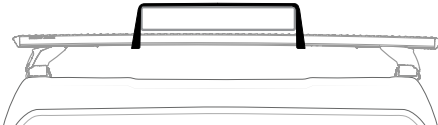


Long flexible loads must be securely attached to a **rigid support** and be tied down to the bonnet.

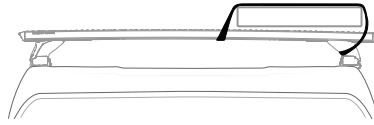


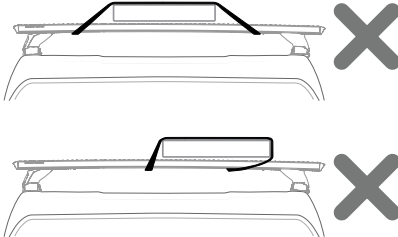
Paddle/ Surfboards should be fixed to the front of the vehicle.

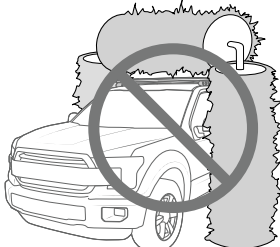
✓ Use only **non-stretch** fastening ropes or straps to attach cargo to roof racks. Always ensure you fasten your load to the crossbar securely,



Loads must be tied down to roof rack, **NOT** around legs

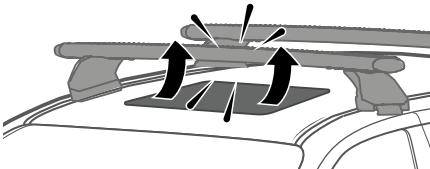





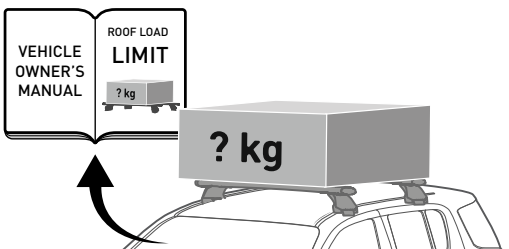


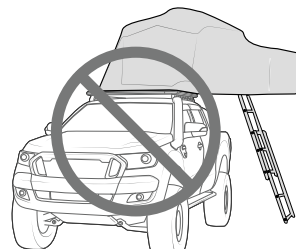
Racks must be removed when vehicle is put through an automatic car wash.

⚠ Ensure sunroof will not collide with roof rack system. ⚠



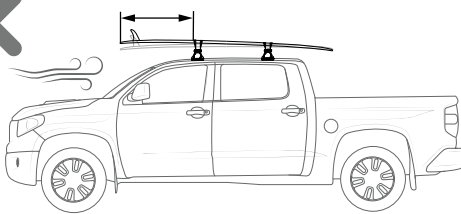




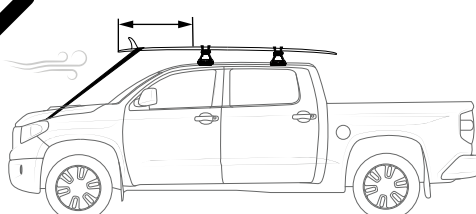


⚠ Rooftop tents are not recommended.

✗



✓



Surfboard Overhang greater than **600mm / 23 5/8in** must be tied to the bonnet

✗ Do NOT obstruct windscreen camera sensors



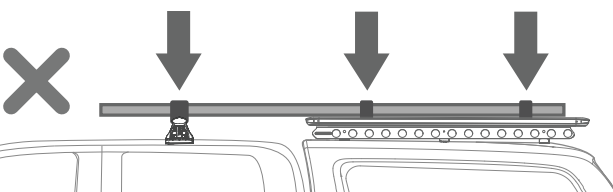
✓ ⚠



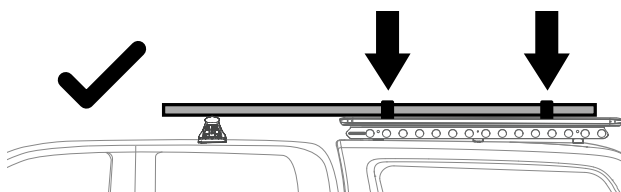
Warranty for roof rack system will be void if the front of the kayak is not secured to the bonnet

Tub/tray/canopys can move independently from the vehicle cabin. Rigidly fix to either the cabin roof racks **or** the tub/tray/ canopy roof racks but not both simultaneously.

✗

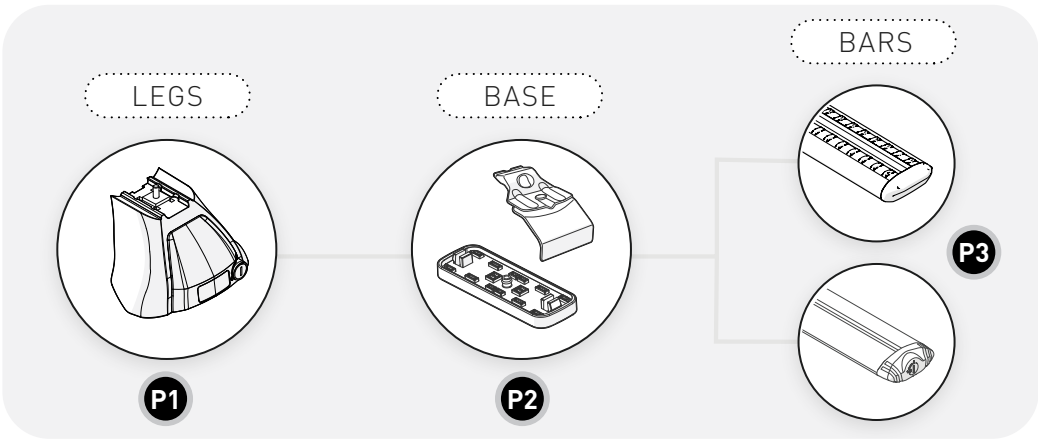


✓



System Components

To complete the installation ensure you have **Base Kit**, **Legs** and **Crossbars**.

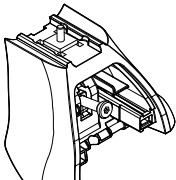


TOOLS REQUIRED:

- T1 - Scissors / Cutters
- T2 - Measuring Tape

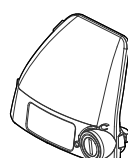
P1 RLKVA Parts List

Leg



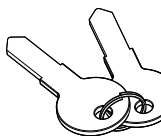
**A x2** (RLKVAH)  
**A x4** (RLKVA)

Cover (Preassembled)



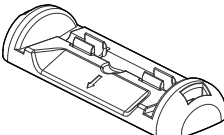
**B x2** (RLKVAH)  
**B x4** (RLKVA)

Metal Key (Pair)




**C x1**

Foot Plate




**D x2** (RLKVAH)  
**D x4** (RLKVA)

Torque Key



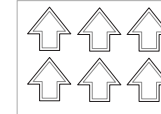
**E x1**

Location Decals Sheet



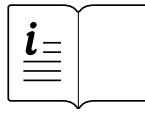
**F x1**

Positioning Decals Sheet



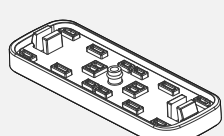
**G x1**

Instruction

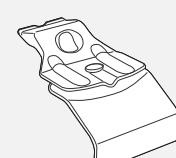


**H x1**

P2 DK PARTS (Included in Base Kit)



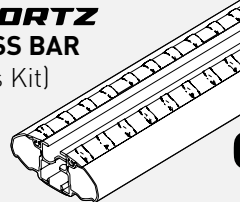
**I x2** (RLKVAH)  
**I x4** (RLKVA)



**J x2** (RLKVAH)  
**J x4** (RLKVA)

P3 CROSS BAR (Included in Bars Kit)


**SPORTZ CROSS BAR**  
(Bars Kit)



**K x1** (RLKVAH)  
**K x2** (RLKVA)

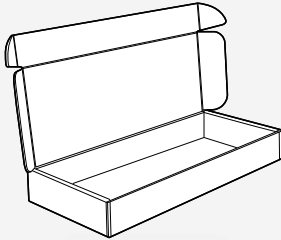
**OR**

**VA CROSS BAR**  
(Bars Kit)




**K x1** (RLKVAH)  
**K x2** (RLKVA)

**P1**

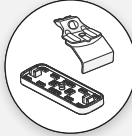


**LEGS**

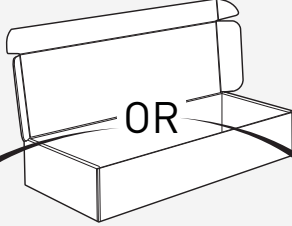


**P2**

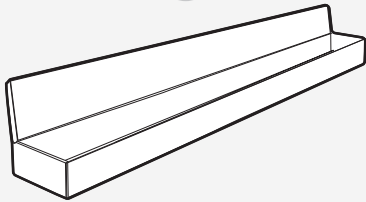
**BASE KIT**



**OR**

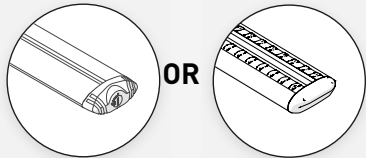


**P3**



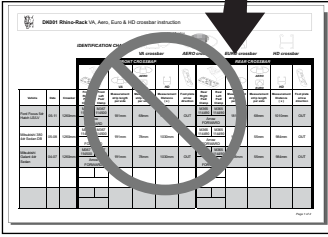
**VA BAR**

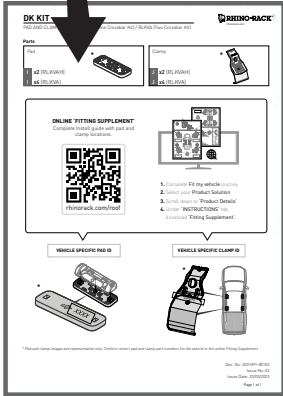
**SPORTZ BAR**



**OR**

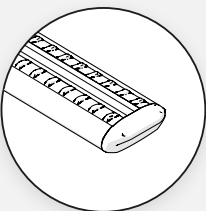
**EXAMPLE**



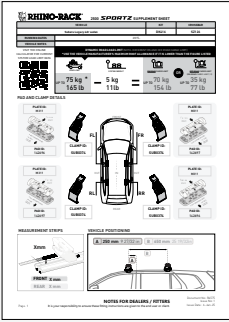



If the **DK sheet** in your **BASE KIT** **P2** box looks like this, please follow the **QR code** below to our online **“Fit My Vehicle”** journey to find the **correct** supplement sheet **specific to your vehicle**.

**SPORTZ BAR**



**EXAMPLE**

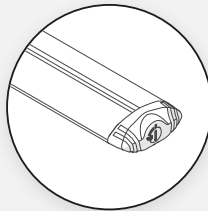




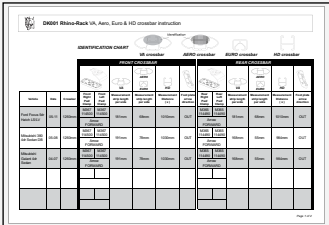
For RLKVA Leg with **SPORTZ** Bar go to Step **1** - **23**.


**OR**

**VA BAR**



**EXAMPLE**





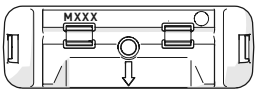
For RLKVA Leg with **VORTEX** Bar go to Step **24** - **44**.

FOR SPORTZ BAR INSTALLATION

(For VORTEX Bar, skip to Step 24 )

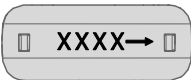
1

Plate Arrow Faces  
IN / OUT  
← →



TOP VIEW:  
EXAMPLE

Pad Arrow Faces  
FRONT / REAR  
IN / OUT  
↕



PAD UNDERSIDE:  
EXAMPLE

D

PLATE

I

PAD

RHINO-RACK

2000 SPORTZ SUPPLEMENT SHEET

VEHICLE

MODEL

YEAR

CHASSIS

DRIVING DIRECTION

LEFT

RIGHT

VEHICLE NOTES

UP TO 75 kg \* 165 lb

UP TO 5 kg 11 lb

UP TO 70 kg 154 lb

PAD AND CLAMP DETAILS

PLATE ID: M211

CLAMP ID: SUB0376

PAD ID: 142897

PLATE ID: M211

CLAMP ID: SUB0376

PAD ID: 142896

VEHICLE POSITIONING

A 250 mm 9.27/32 in

B 650 mm 25.59 in

NOTES FOR DEALERS / FITTERS

It is your responsibility to ensure these fitting instructions are given to the end user on sheet

EXAMPLE

REFER TO ONLINE FITTING  
SUPPLEMENT SHEET

FL

FORWARD

FR

D

I

OUT

IN

OUT

D


I

REAR


RL

RR

LEGS



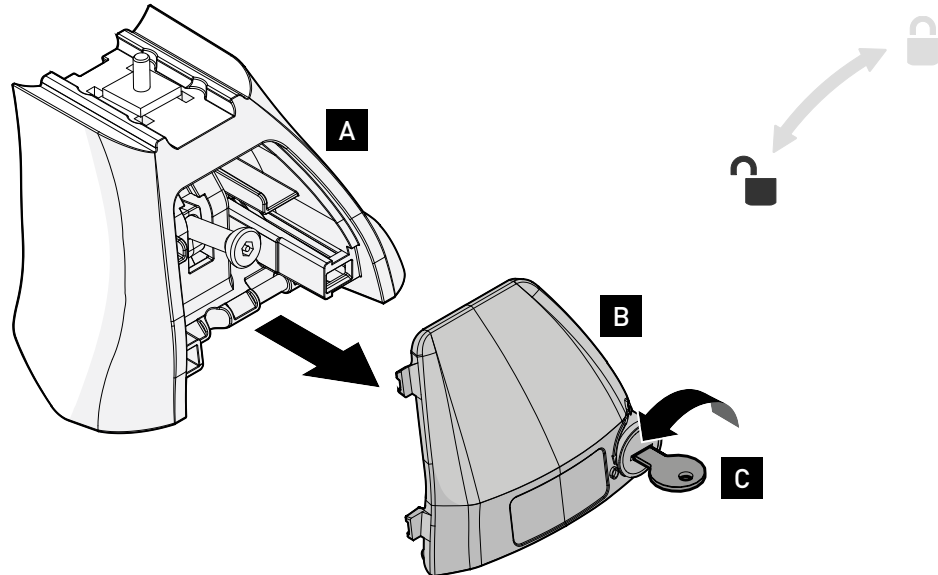
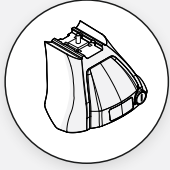
BASE KIT



Page 6 of 28

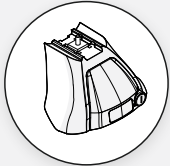
2

LEGS

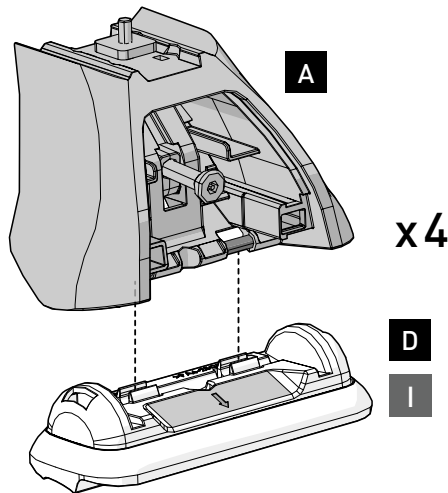


3

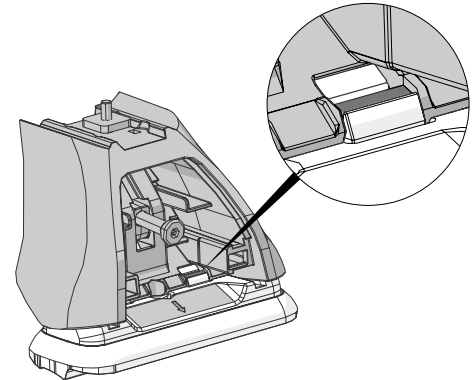
LEGS



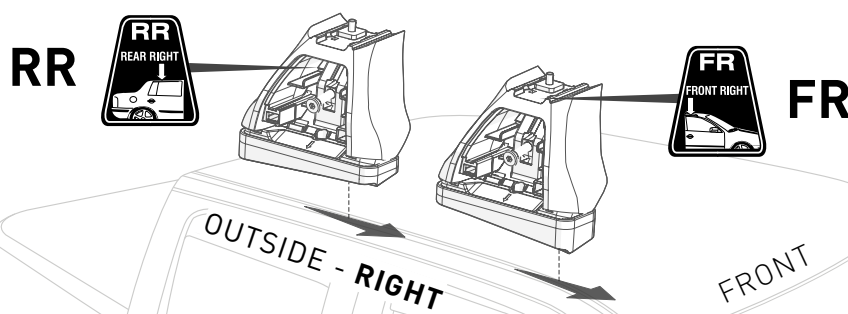
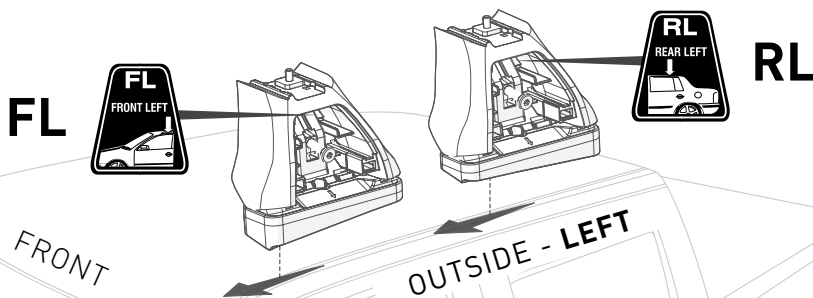
BASE KIT



Refer to Step 1.



3

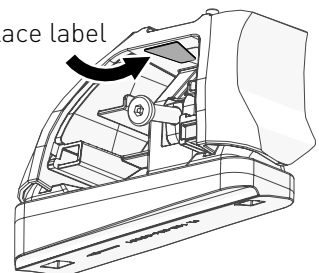


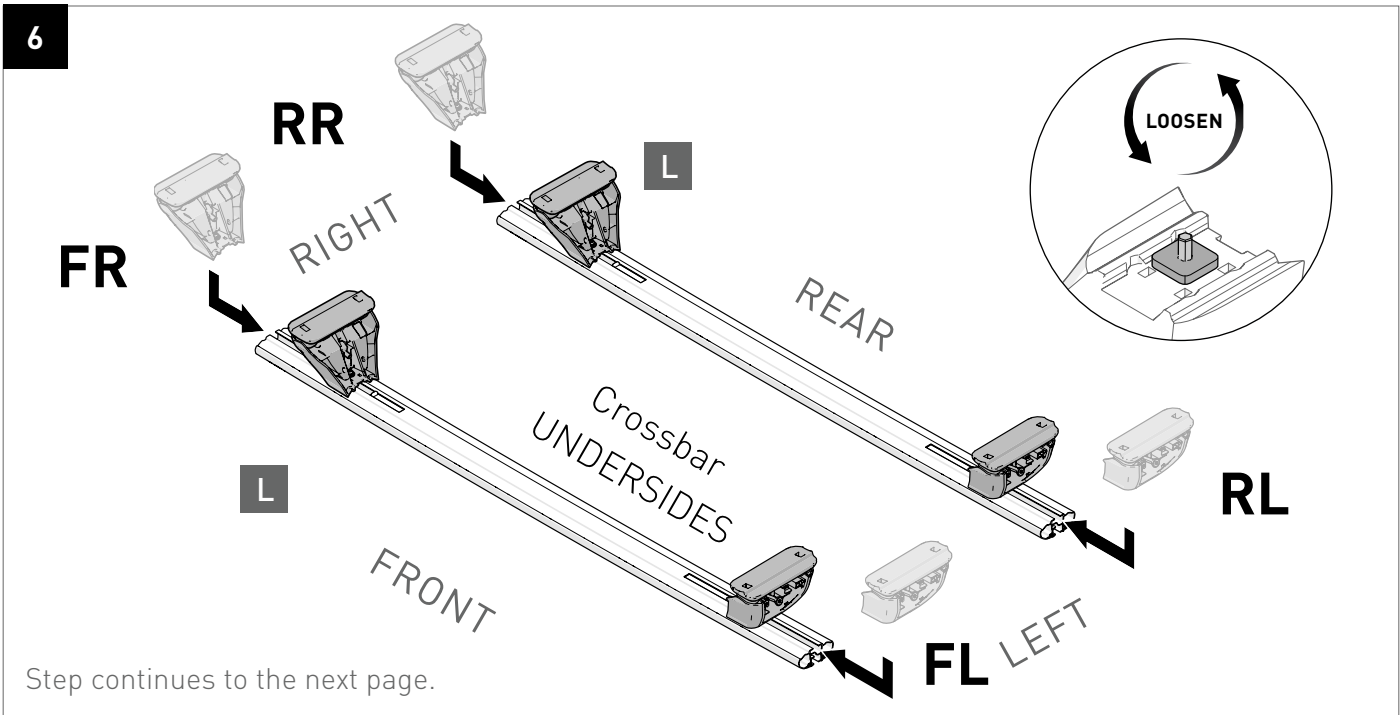
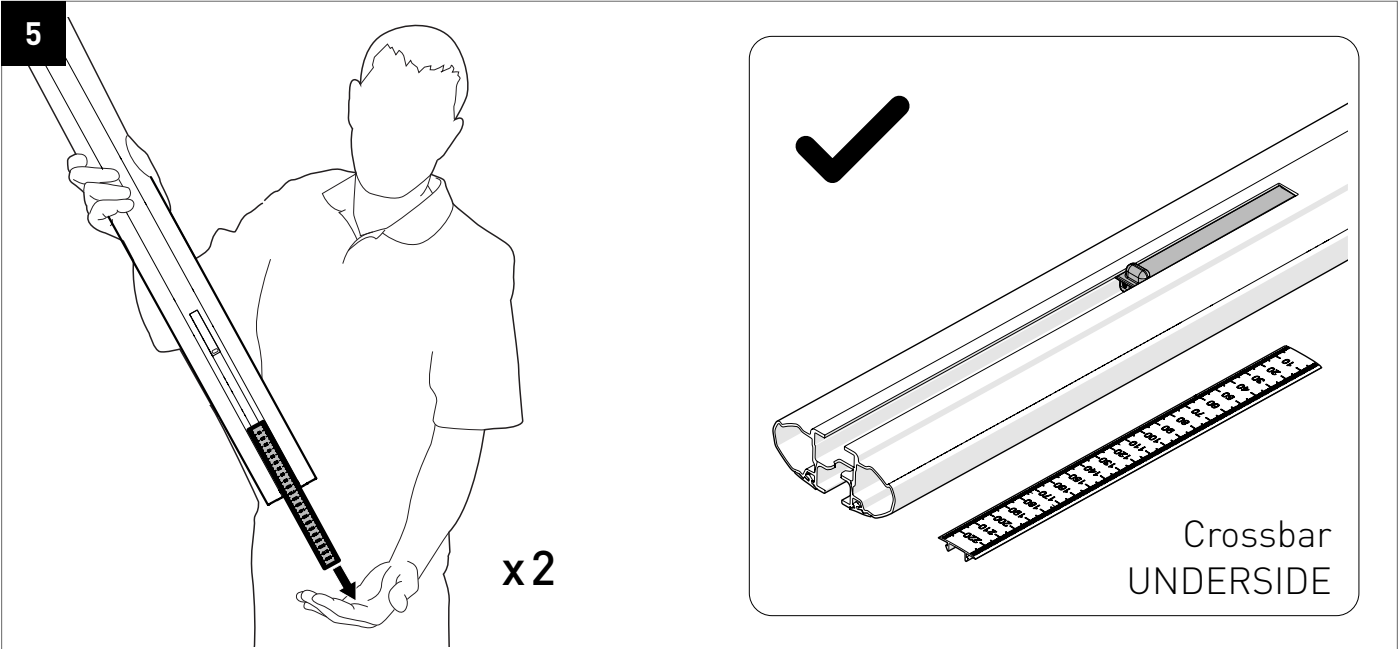
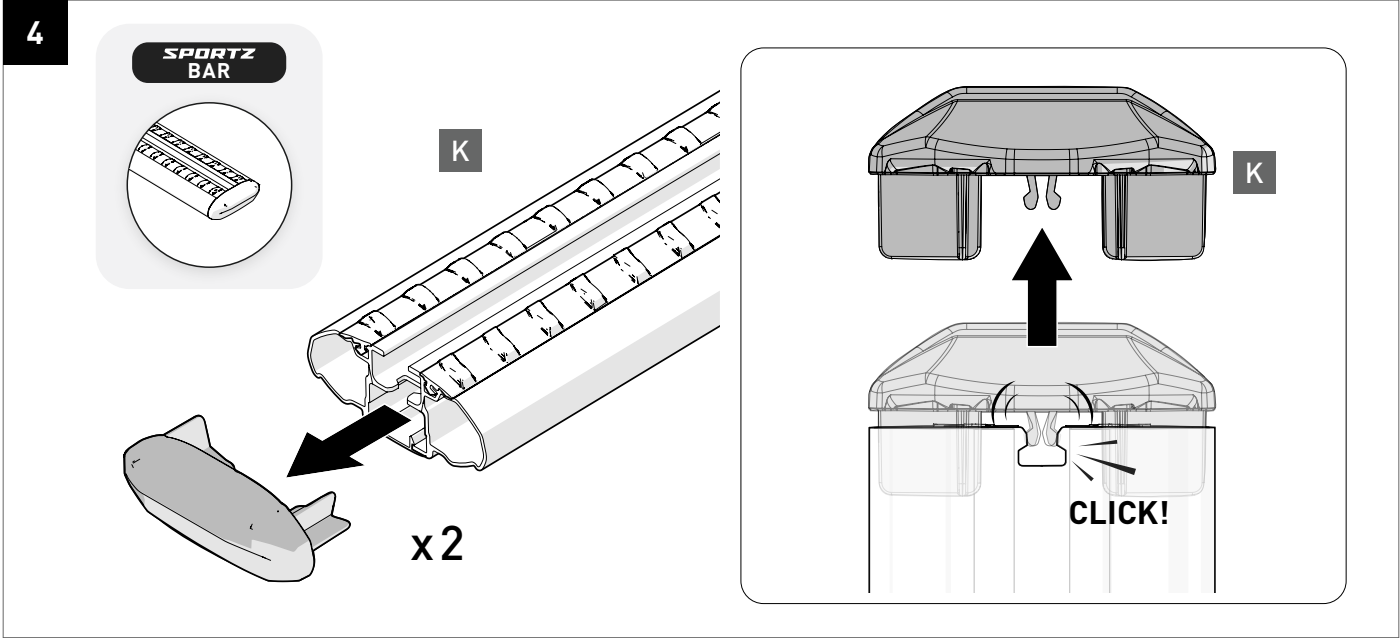
LEG LOCATION LABELS F



Place labels to help identify the leg's location on the vehicle roof when re-fitting crossbars.

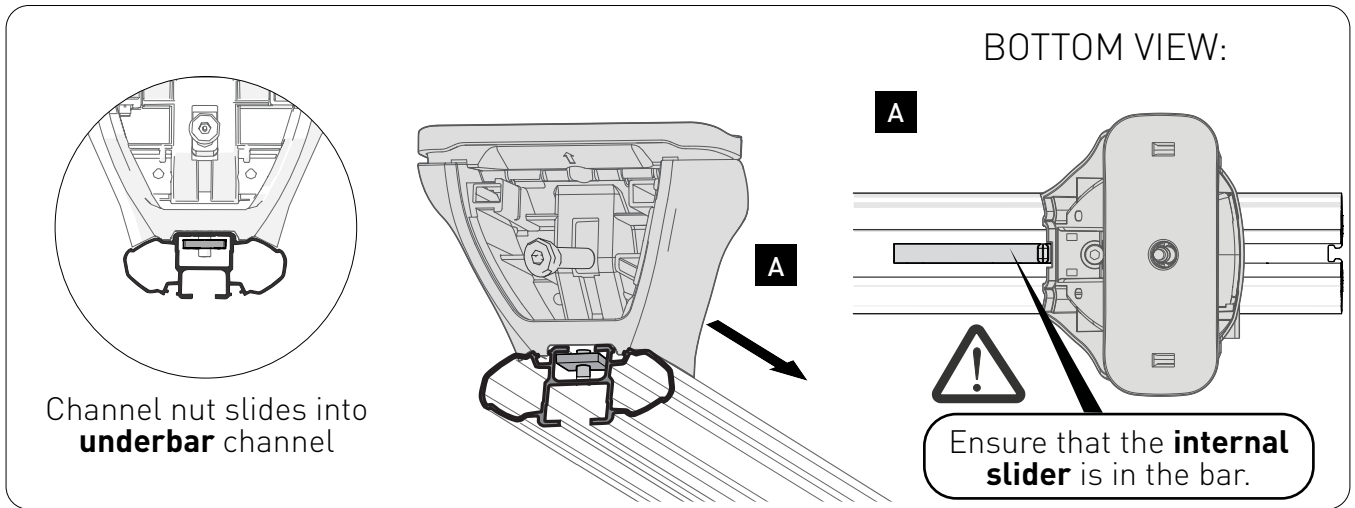
Place label



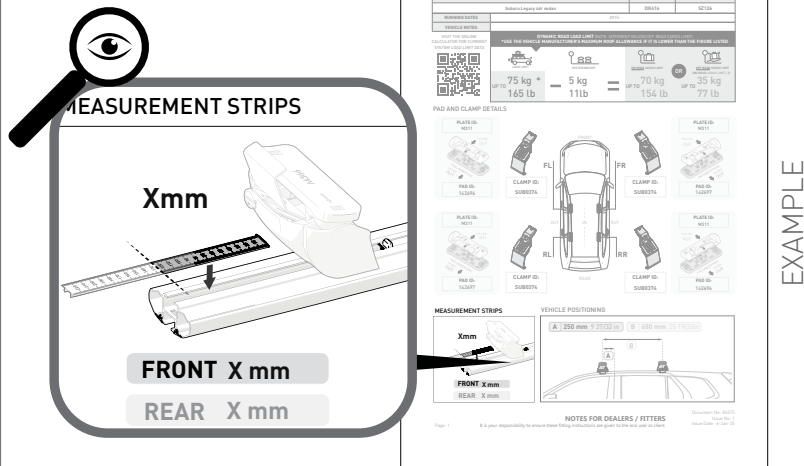


Step continues to the next page.

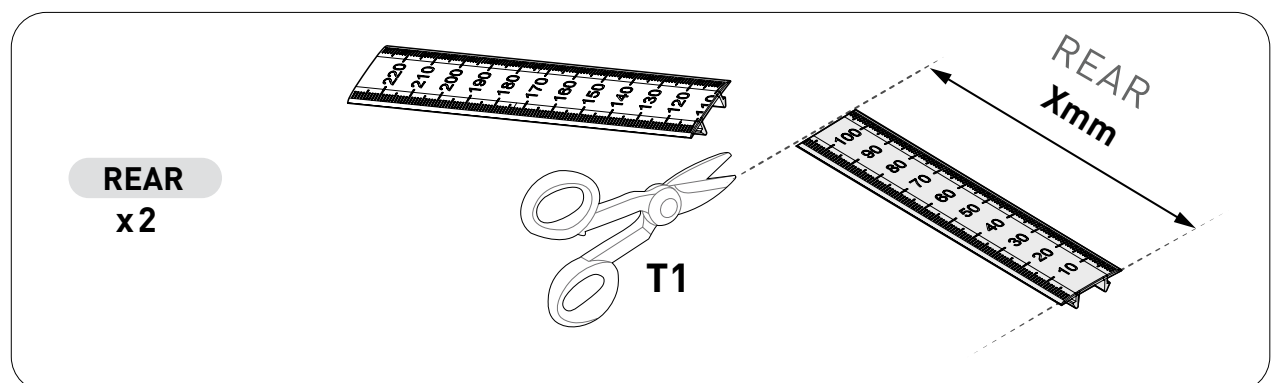
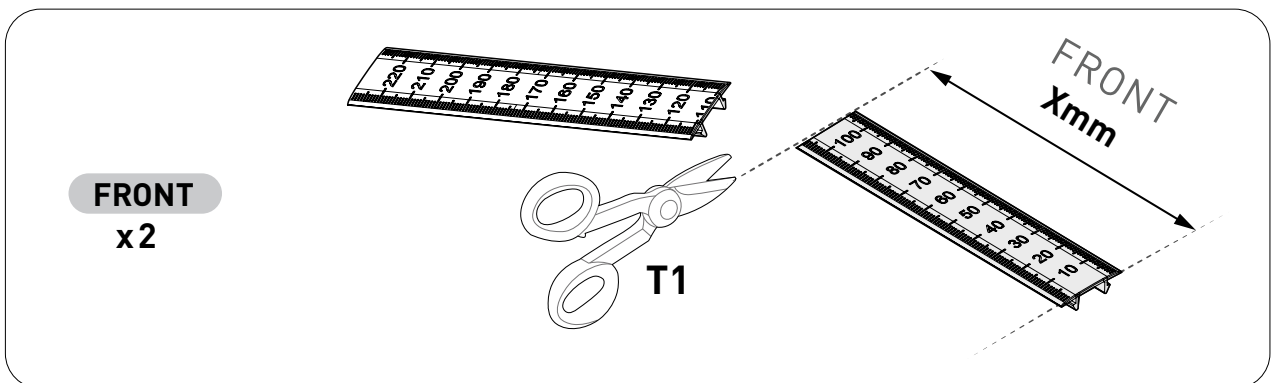




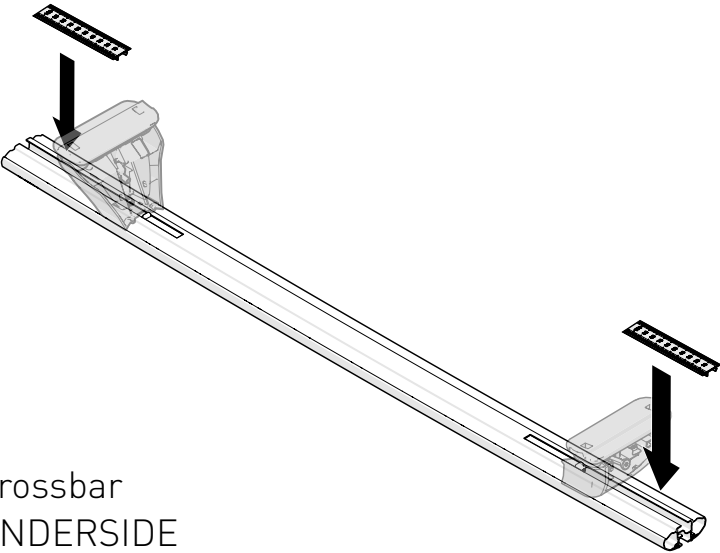
7



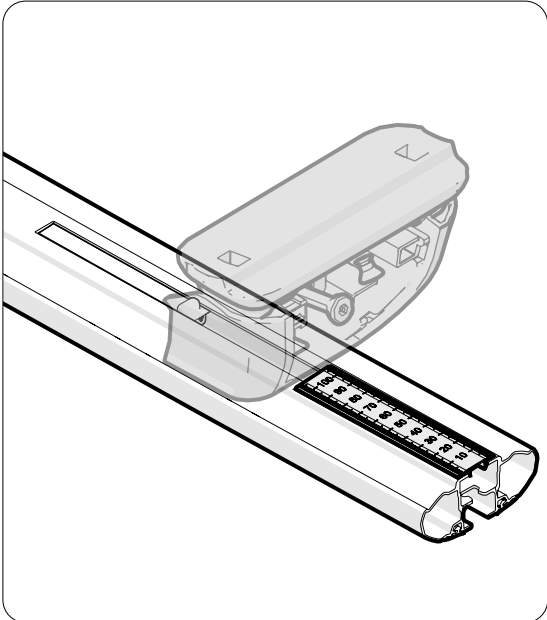
REFER TO ONLINE FITTING  
SUPPLEMENT SHEET



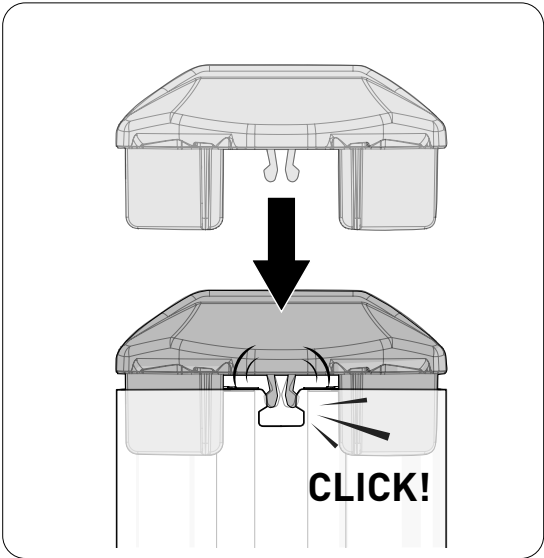
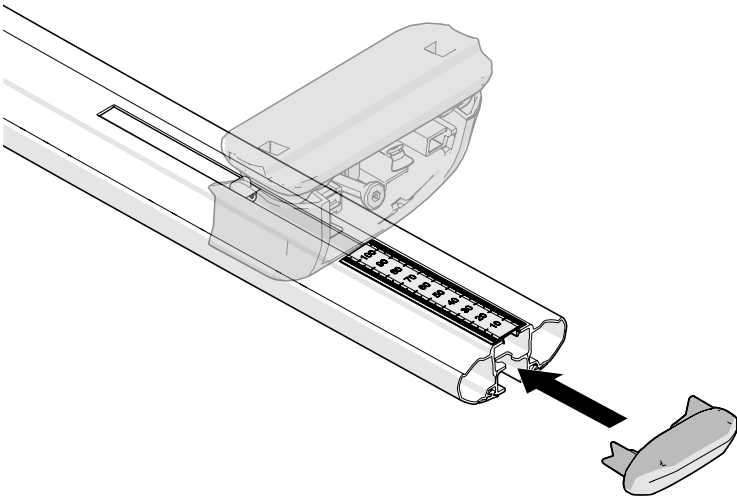
8



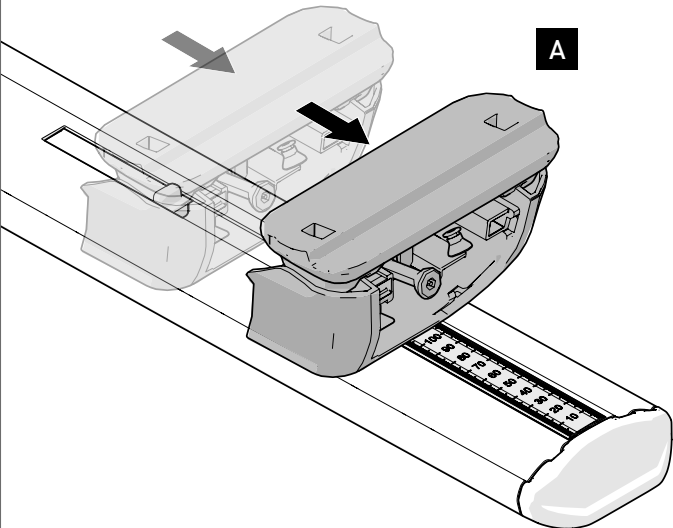
Crossbar  
UNDERSIDE



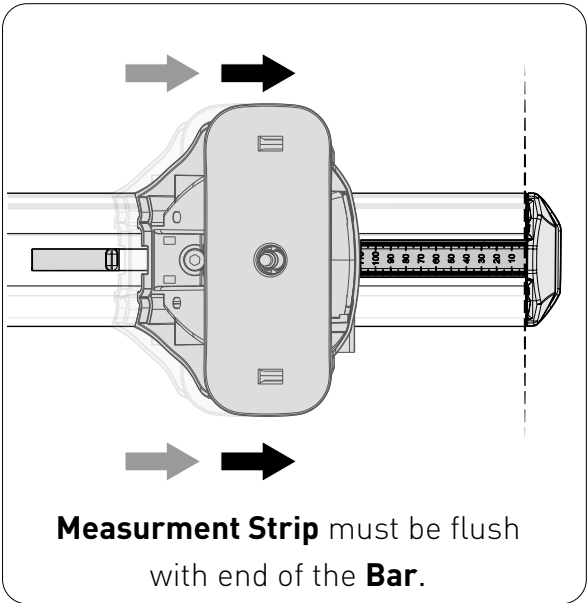
9



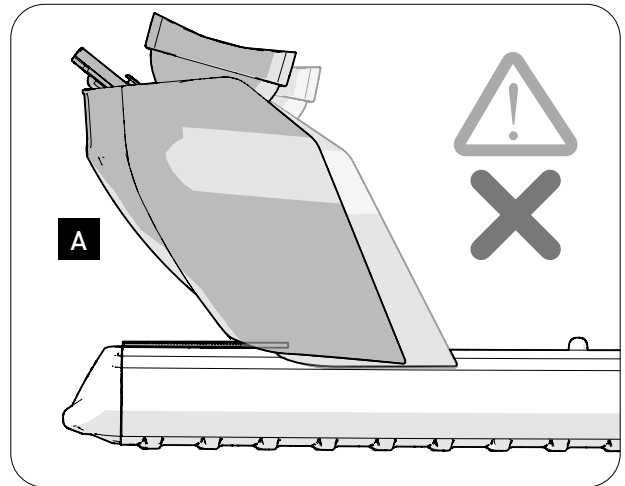
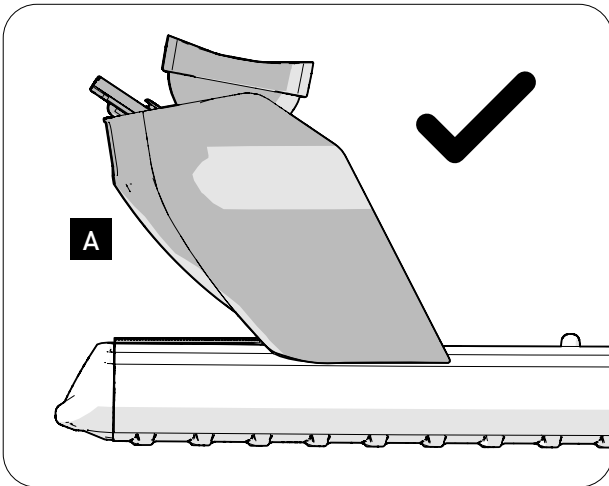
10



Step continues to the next page.

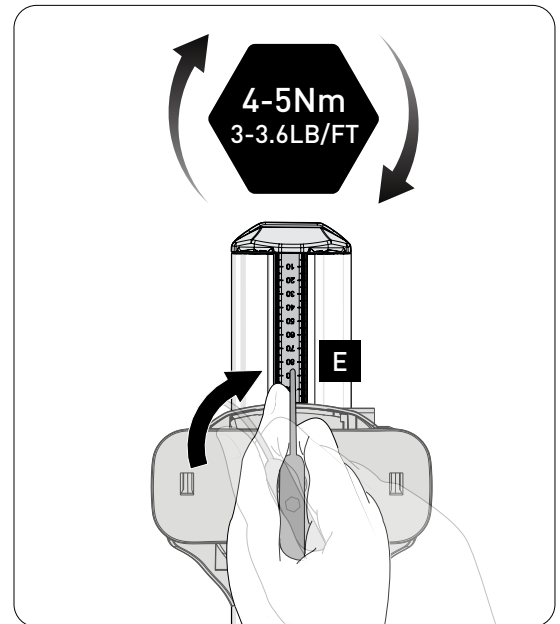
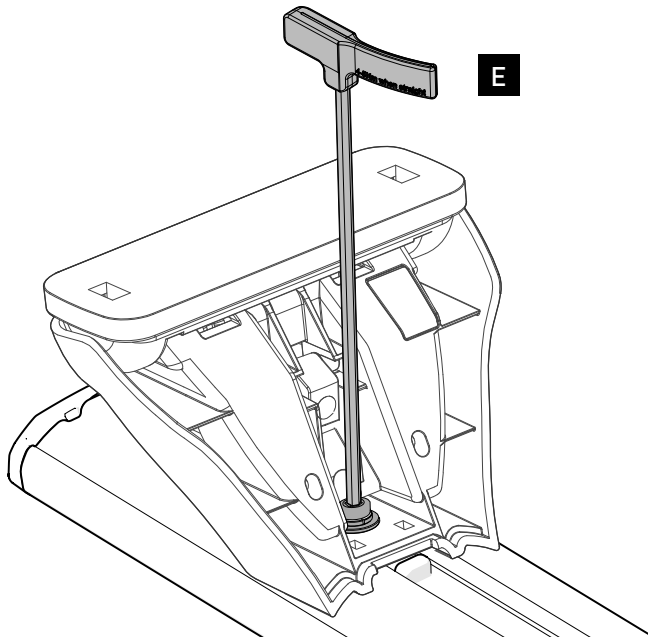




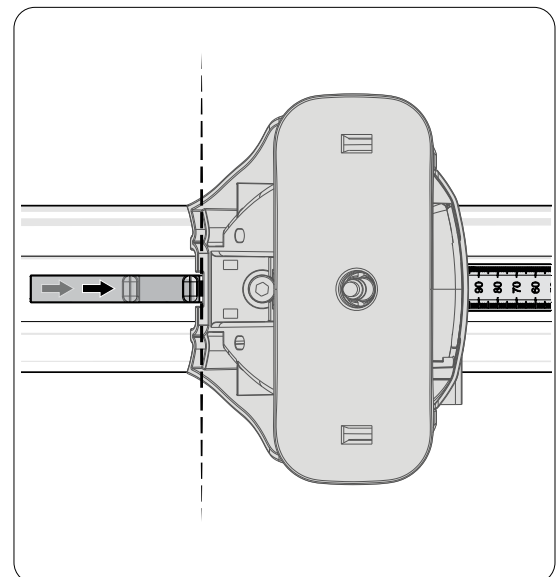
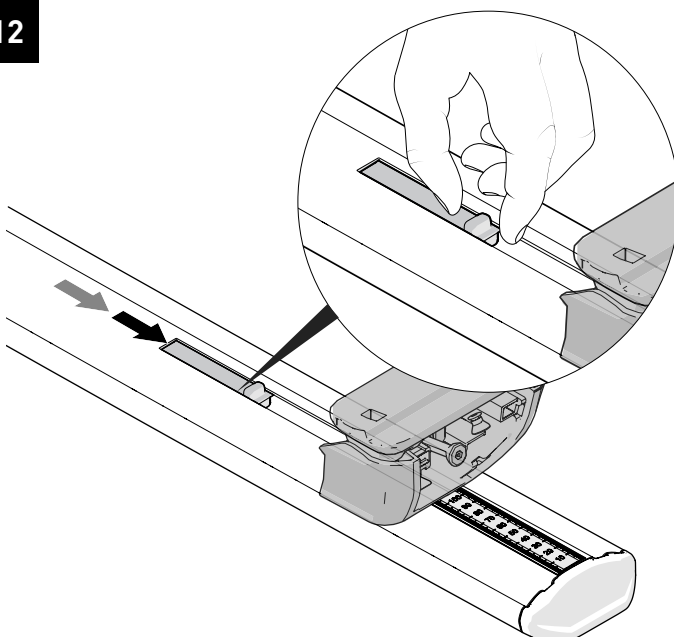


Ensure the legs ( **A** ) **DO NOT** sit on top of the *measuring strip*.

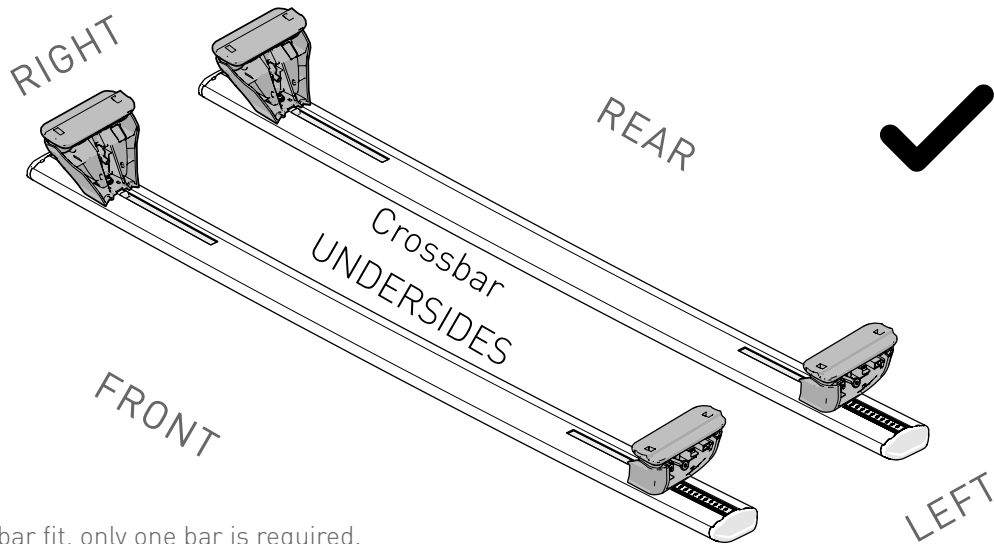
11



12

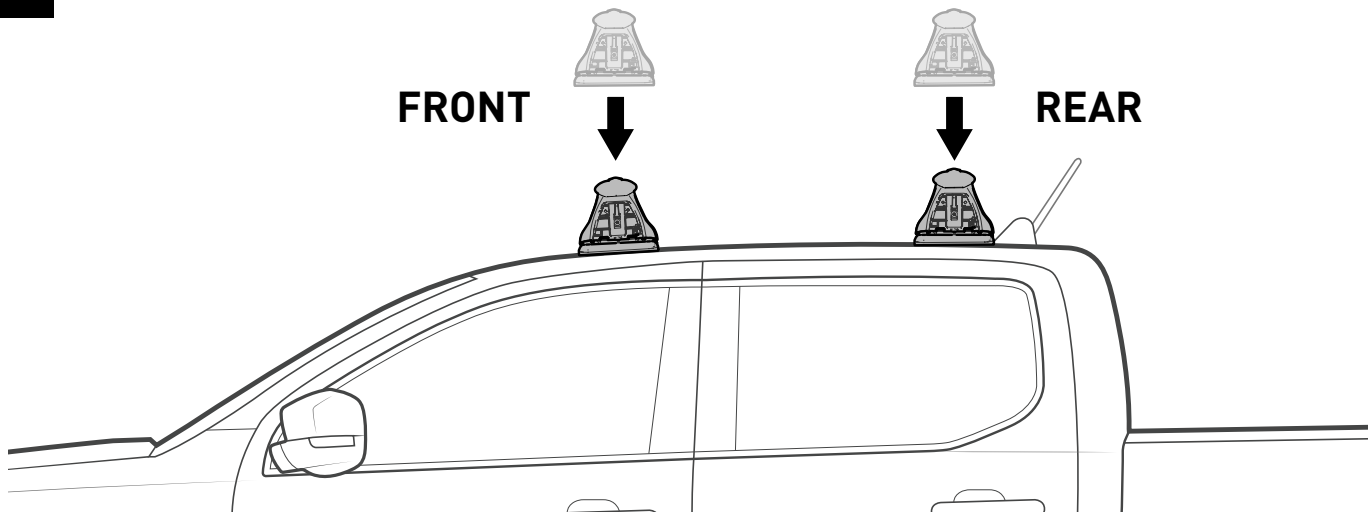


13



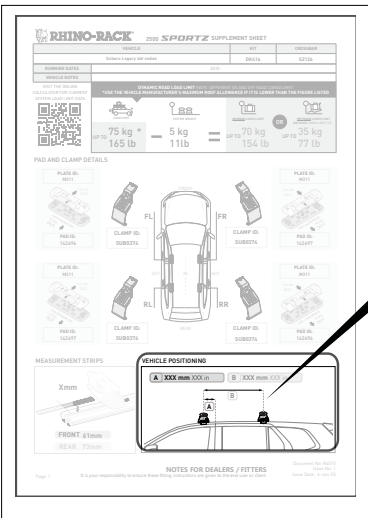
Note: If a single bar fit, only one bar is required.

14



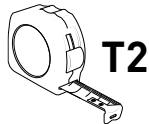
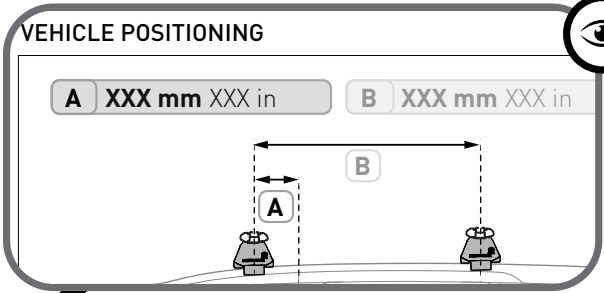
15

EXAMPLE



VEHICLE POSITIONING

A XXX mm XXX in B XXX mm XXX in

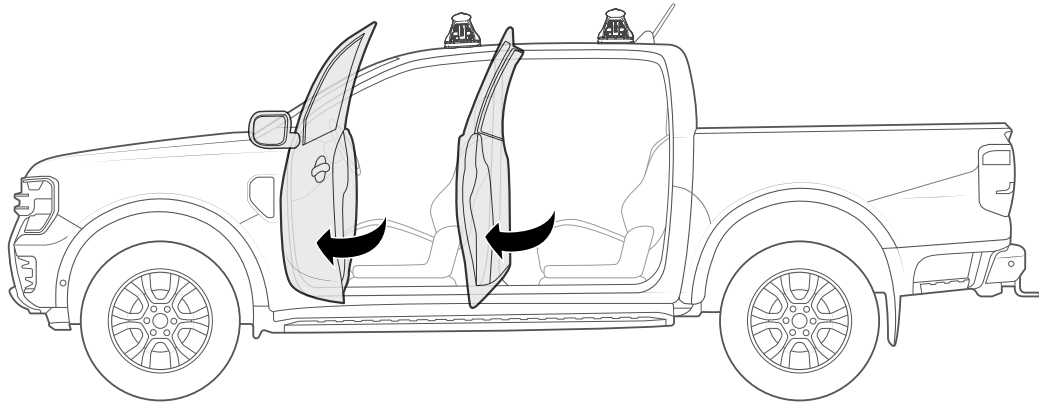


B



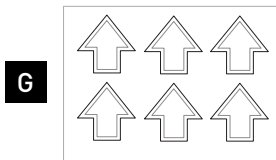
REFER TO ONLINE FITTING  
SUPPLEMENT SHEET

16



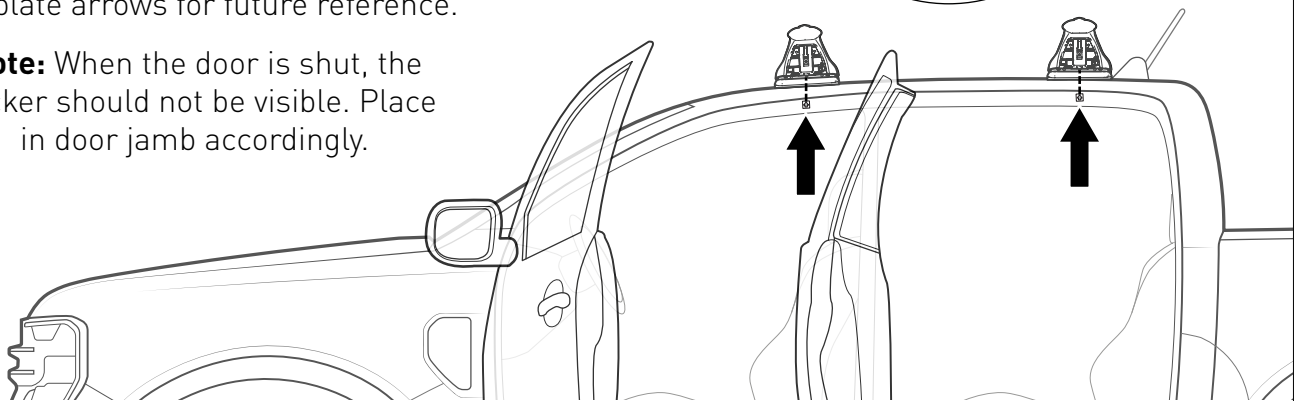
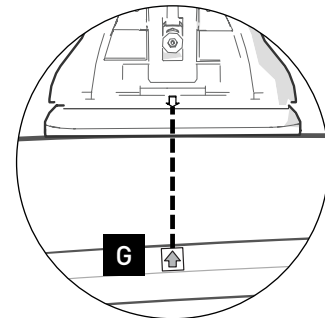
17

### LEG POSITION DECALS

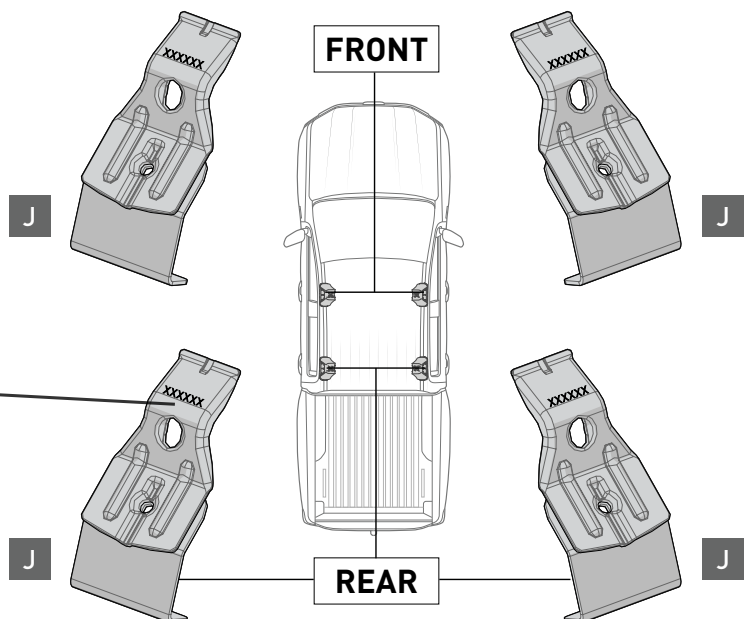
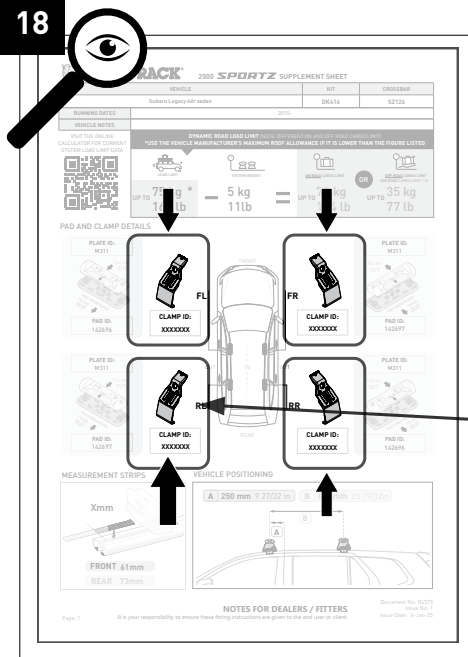


Adhere the arrow decals in line with foot plate arrows for future reference.

**Note:** When the door is shut, the sticker should not be visible. Place in door jamb accordingly.



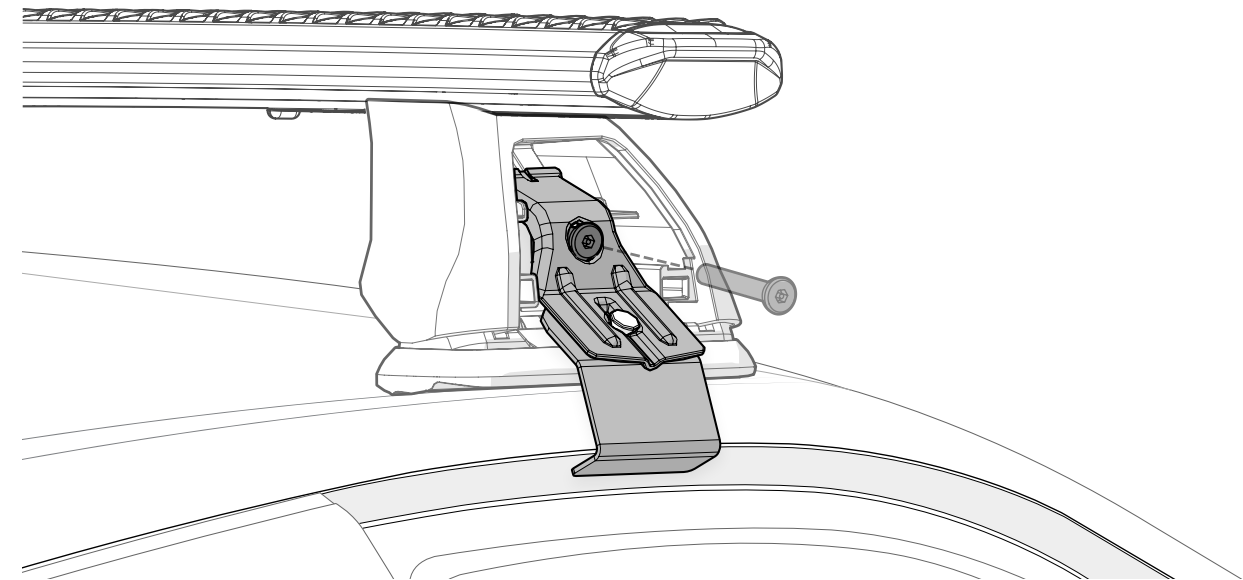
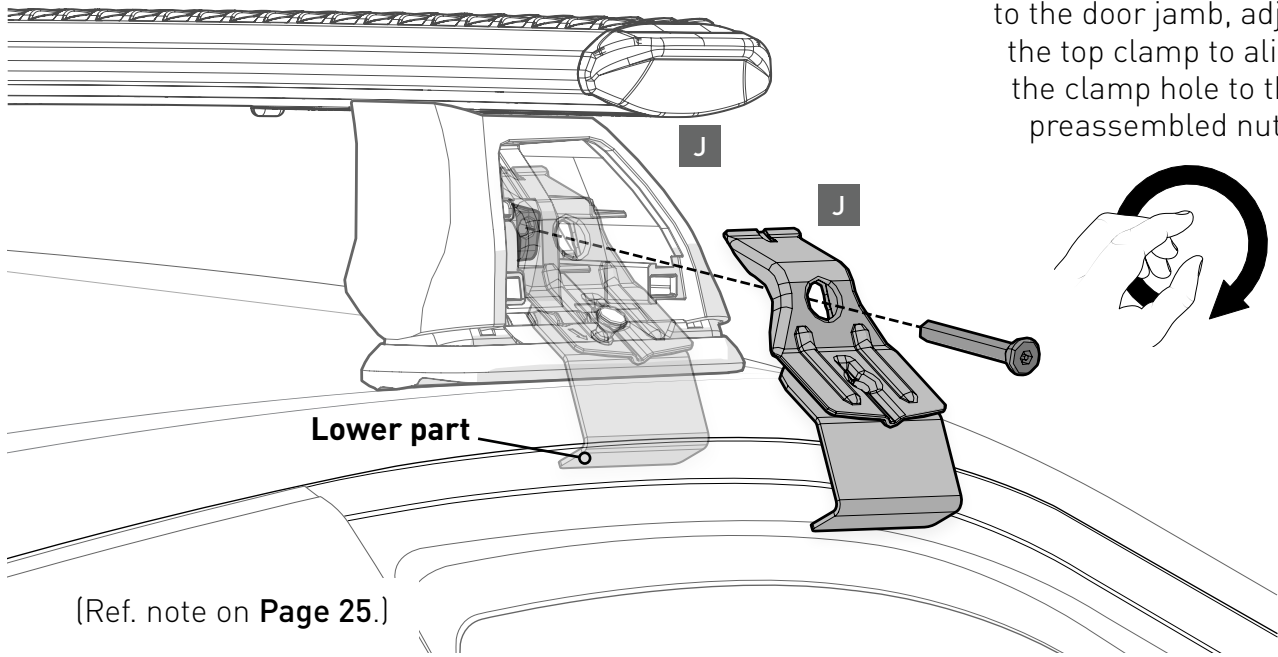
18



EXAMPLE

19

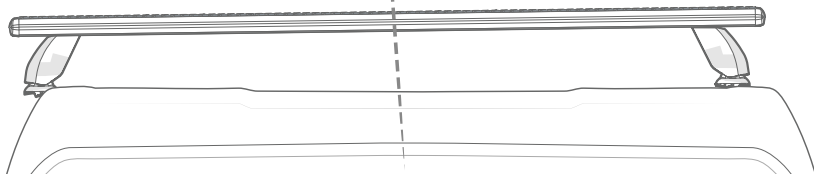
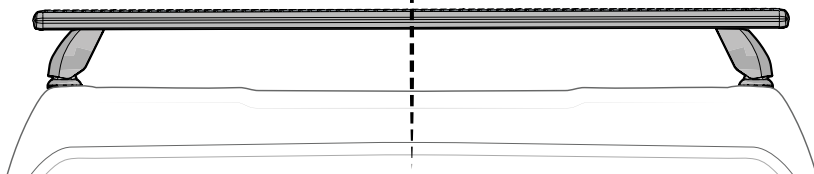
Hook the lower part of **J** to the door jamb, adjust the top clamp to align the clamp hole to the preassembled nut.



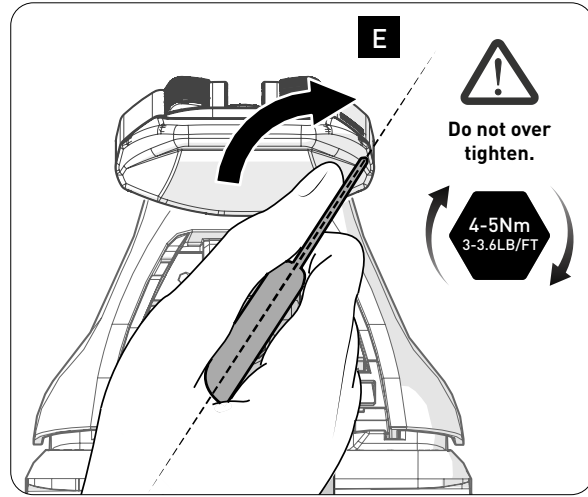
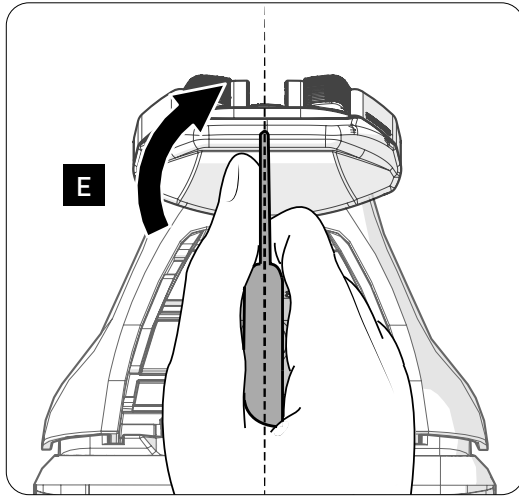
20

Visually inspect and ensure that the pads are correctly seated against the body of the vehicle.

FRONT VIEW



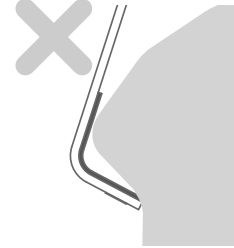
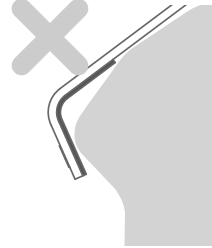
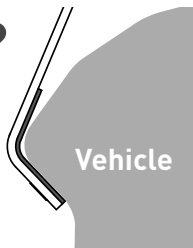
- 21** Tighten bolts **incrementally** and **evenly** on each side of the vehicle to avoid pulling the rack to one side.



**SIDE VIEW**  
The clamp must have full contact along its face.

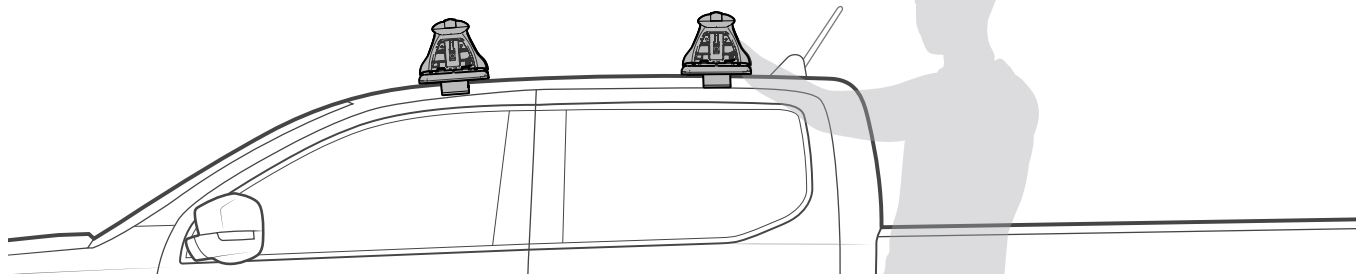
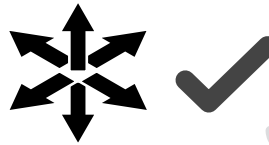


Clamp

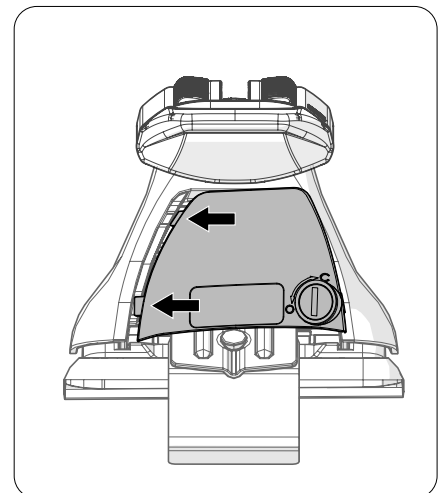
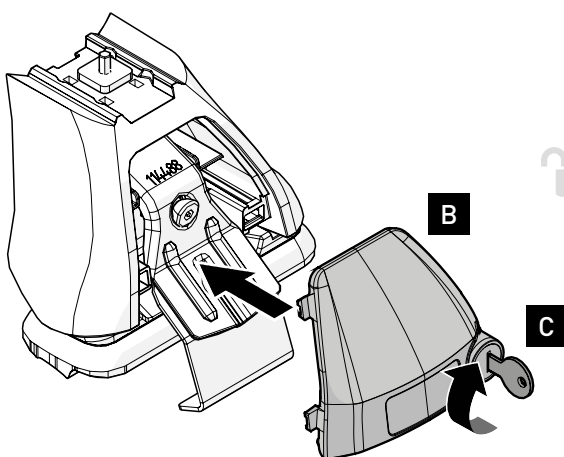


**22**

Check fitment is secure



**23**

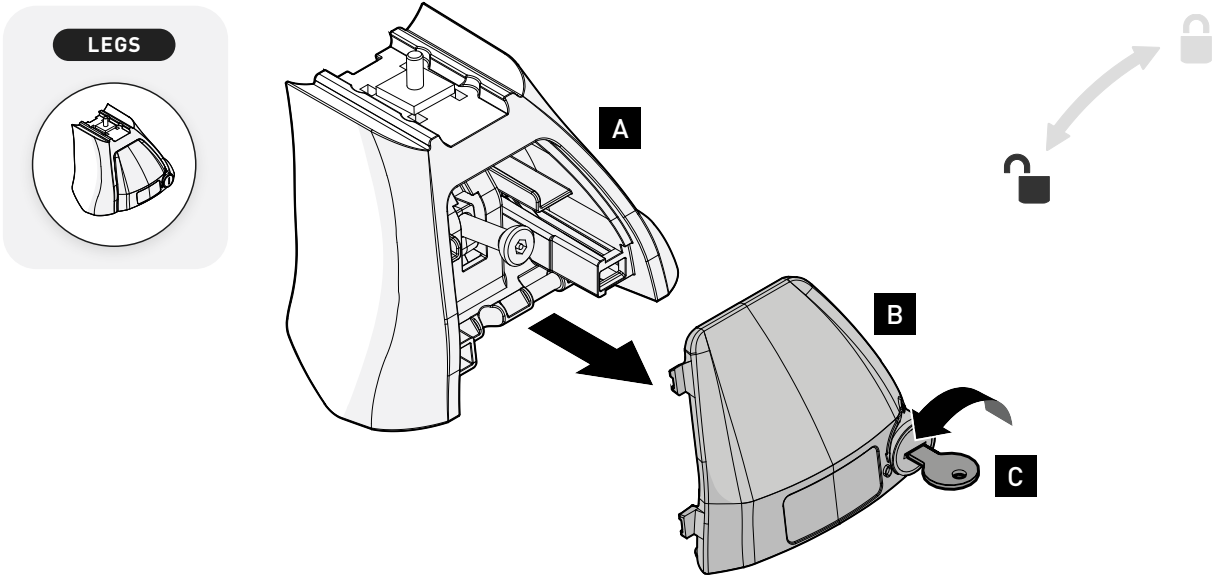


**SPORTZ** Bar Installation Complete.

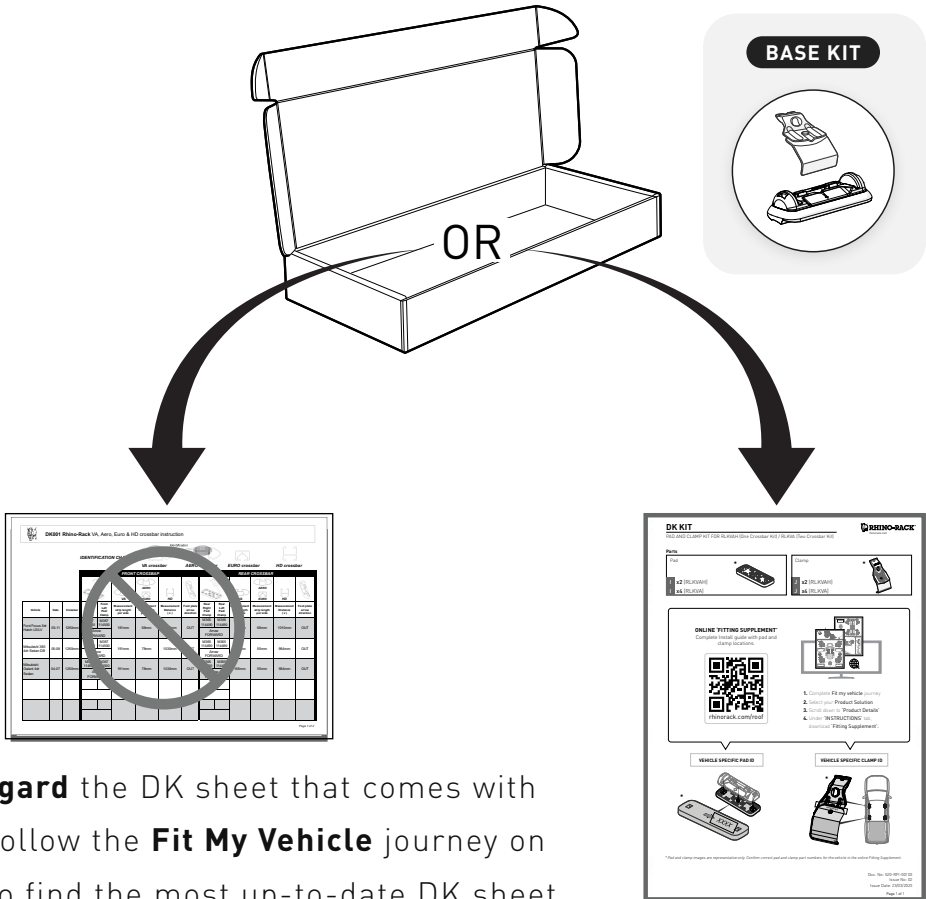


FOR VORTEX BAR INSTALLATION

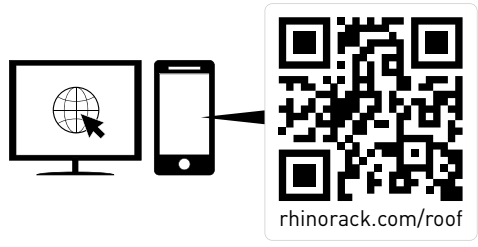
24



25




**NOTE: Disregard** the DK sheet that comes with the DK kit. Follow the **Fit My Vehicle** journey on our website to find the most up-to-date DK sheet specific to your vehicle.



A circular diagram representing a foot plate. It is divided into a grid by a horizontal line and a vertical line. The top-left quadrant is labeled "Foot plate" and "arrow direction". The bottom-right quadrant is labeled "OUT". An arrow points from the top-left quadrant towards the right, passing through the vertical line.

D

1



Front  
Left  
Pad/  
Clamp

M365

Arrow  
FORWARD

D



**FL**

## FORWARD

FR

OUT

IN

OUT

REAR

# RL

RR

[illegible]

OR REFER TO ONLINE  
FITTING INSTRUCTION

## LEGS



D

1

**BASE KIT**



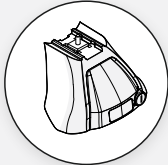
D



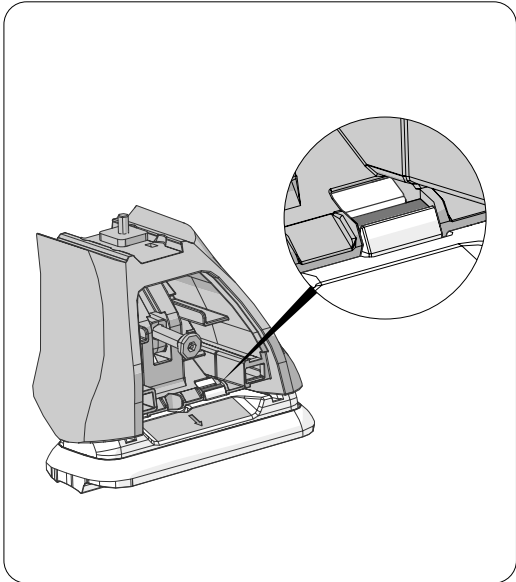
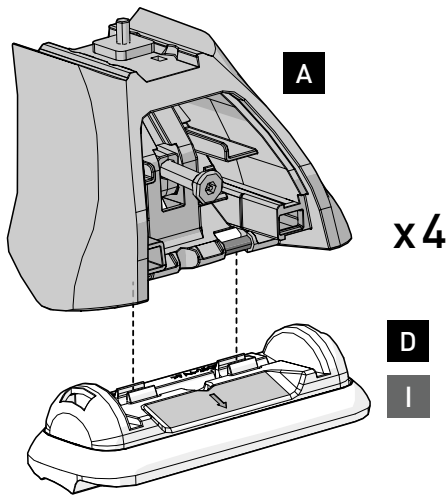


27

LEGS



BASE KIT



28

FL



RL

FRONT

OUTSIDE - LEFT

RR



FR

OUTSIDE - RIGHT

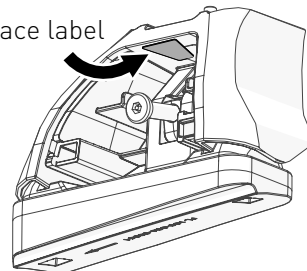
FRONT

LEG LOCATION LABELS F



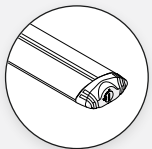
Place labels to help identify the leg's location on the vehicle roof when re-fitting crossbars.

Place label

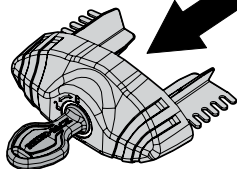


29

BARS



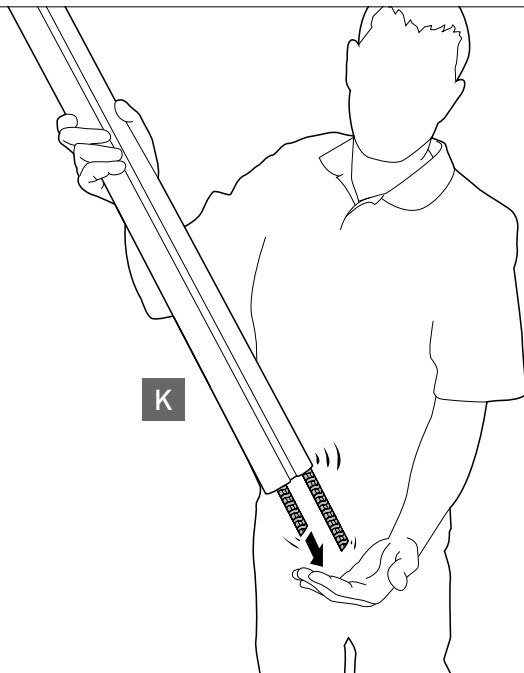
K



x2



30





Xmm

**BARS**

FACE THIS END TOWARDS  
CENTRE OF CROSSBAR

CHECK UNDERSIDE OF MEASUREMENT  
STRIP FOR ORIENTATION:

## T1

## Xmm

**“0mm”**  
Centre of Bar

Crossbar  
UNDERSIDE

31

RR

RIGHT

FR

L

REAR

Crossbar  
UNDERSIDES

FRONT

FL

LEFT

RL

**LOOSEN**

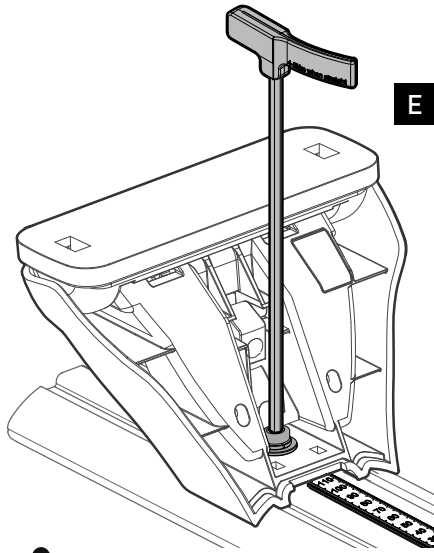
BOTTOM VIEW:

Channel nut slides into **underbar** channel.

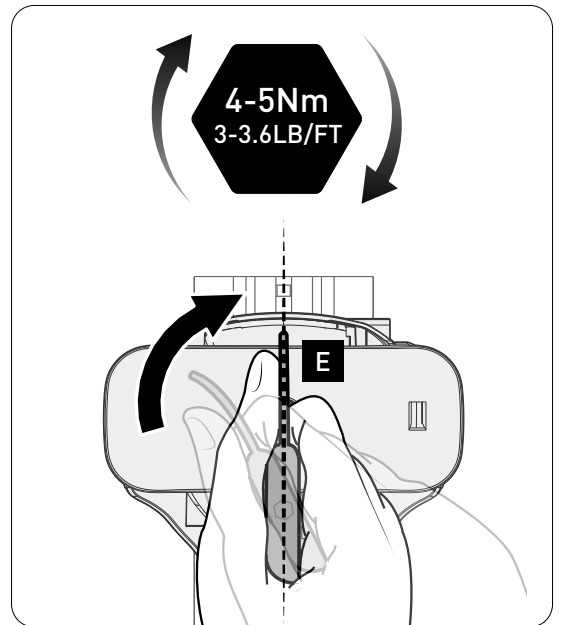
A

Ensure that the **Inner Strip** is in place.

33

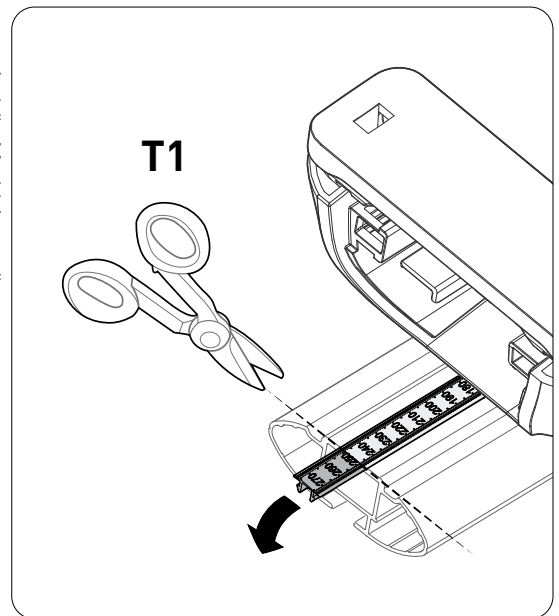
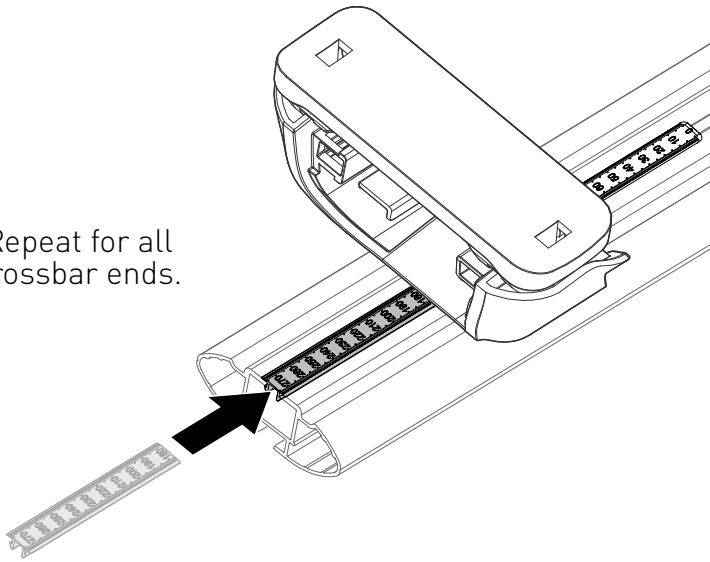


Ensure the measuring strip sits flush against the leg. Do not push the leg over the strip.

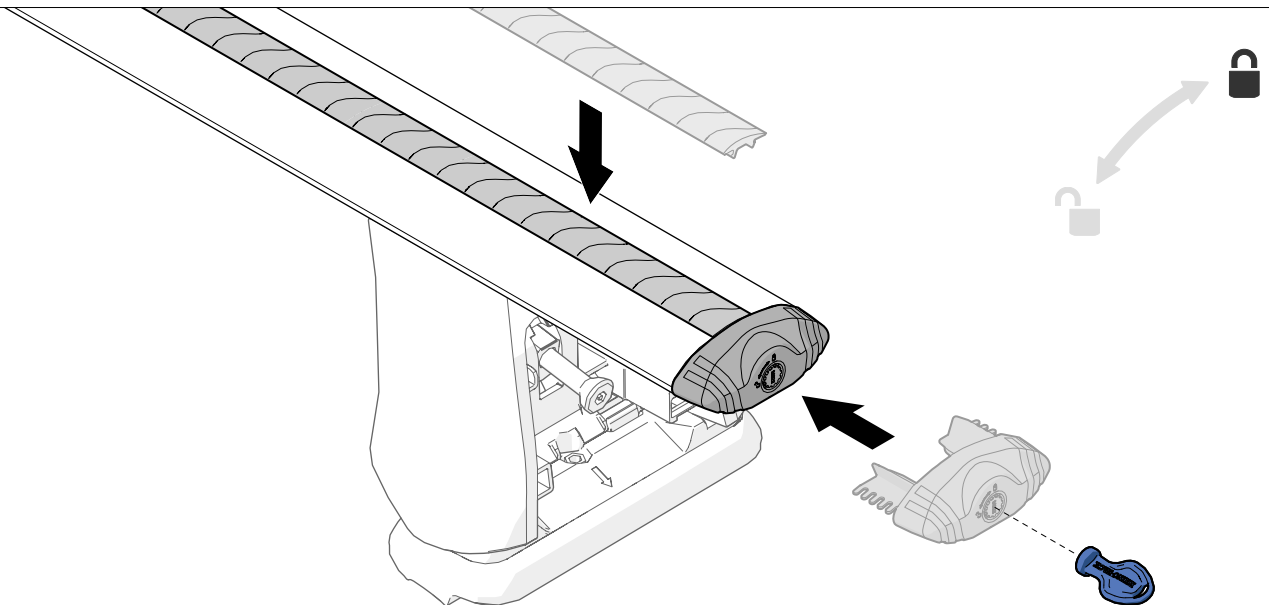


34

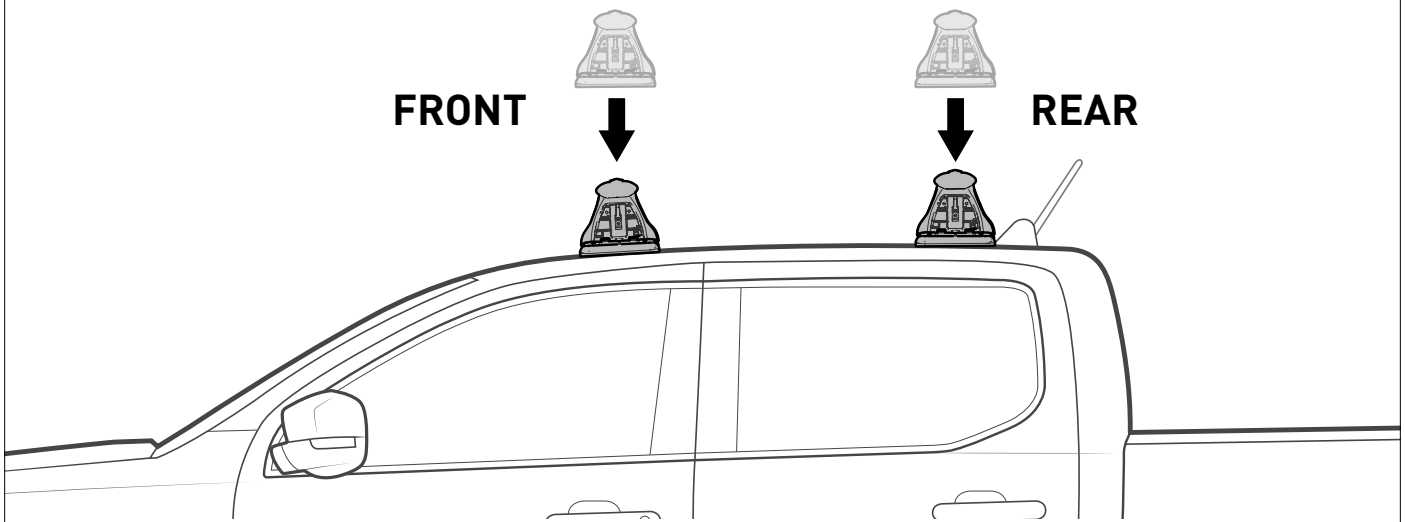
Repeat for all crossbar ends.



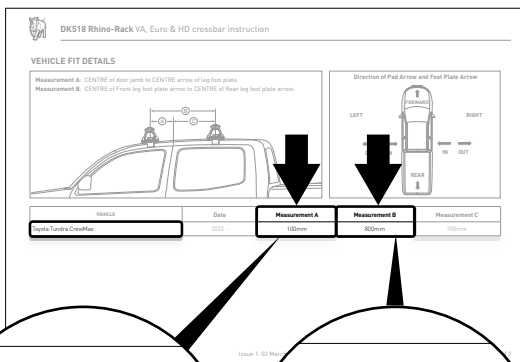
35



36



37



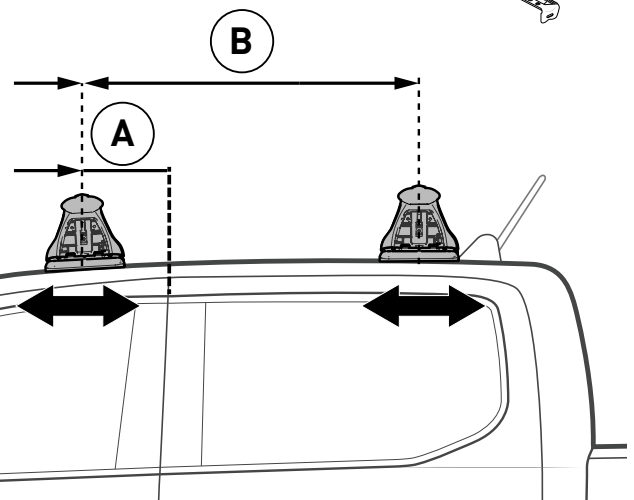
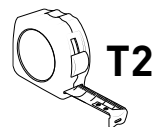
Measurement A

XXmm

Measurement B

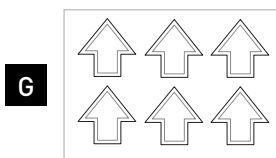
XXmm

EXAMPLE



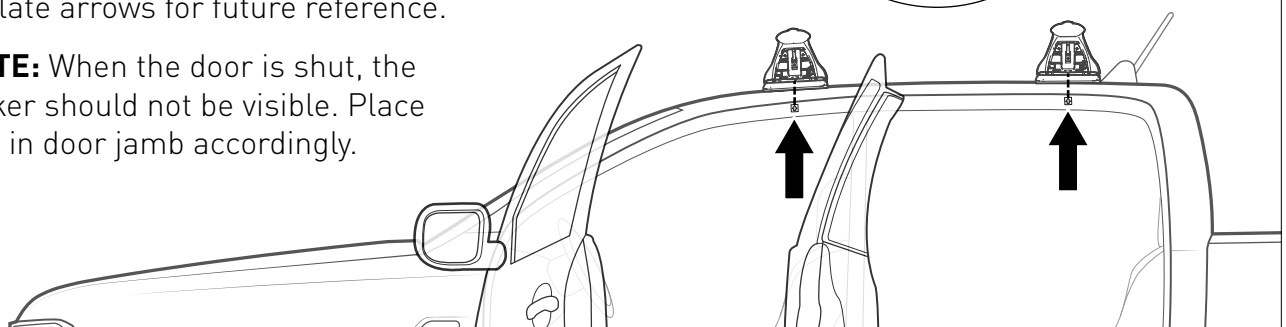
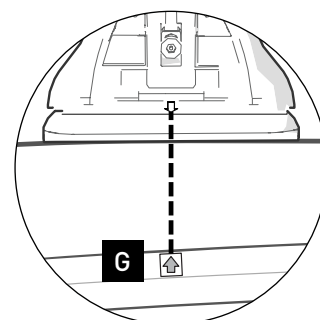
38

### LEG POSITION DECALS



Adhere the arrow decals in line with foot plate arrows for future reference.

**NOTE:** When the door is shut, the sticker should not be visible. Place in door jamb accordingly.



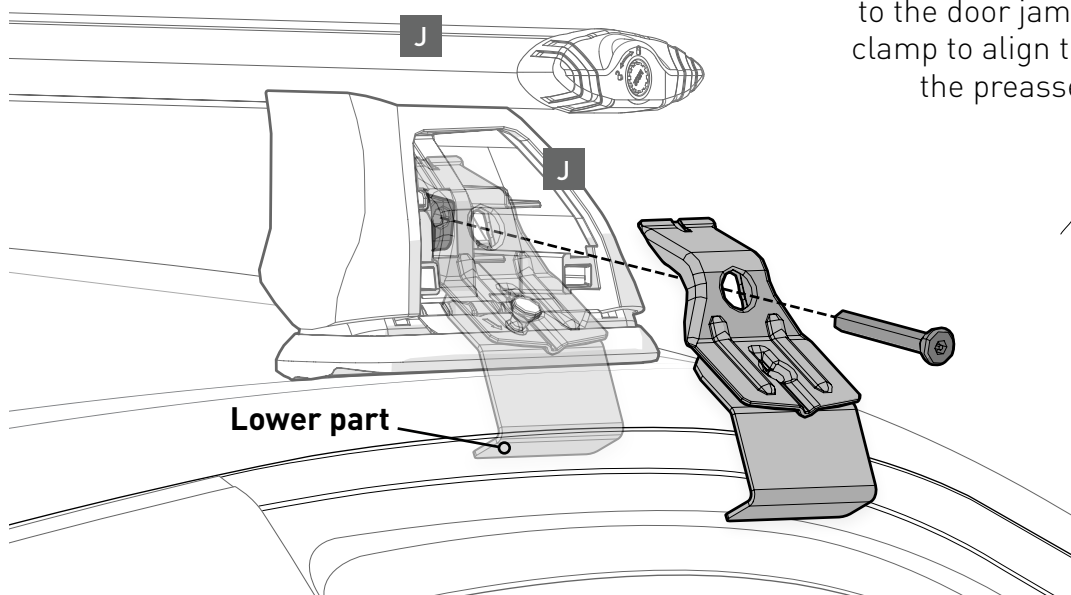
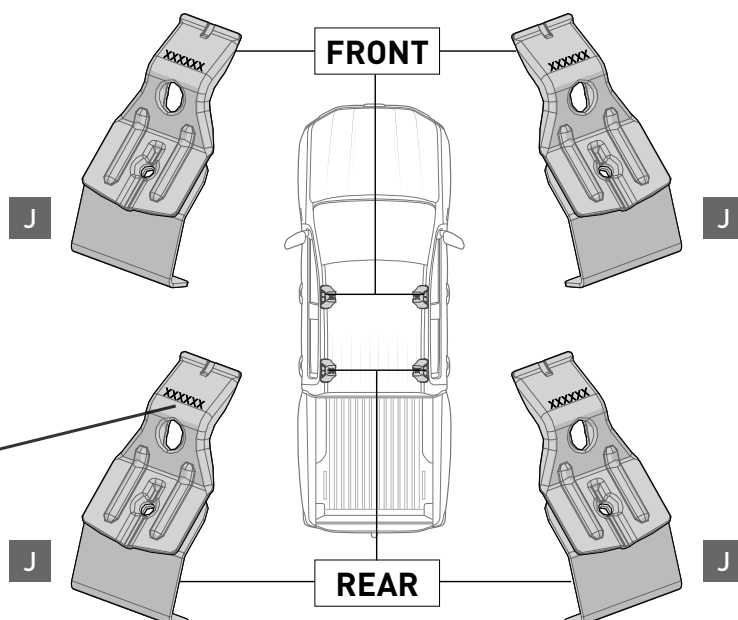



**Rear  
Right  
Pad/  
Clamp**

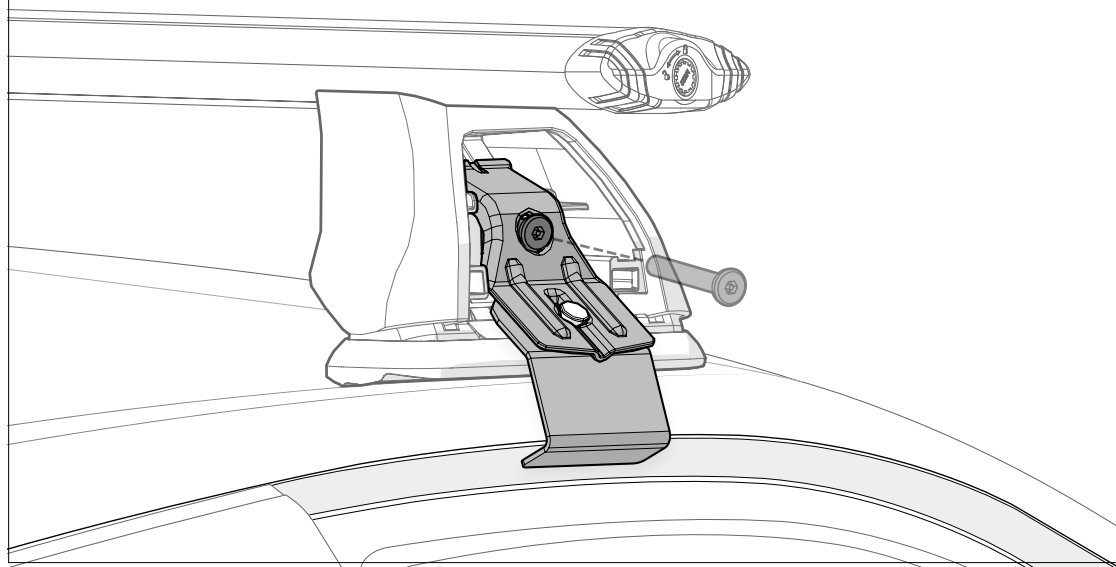
**Rear  
Left  
Pad/  
Clamp**

####

####

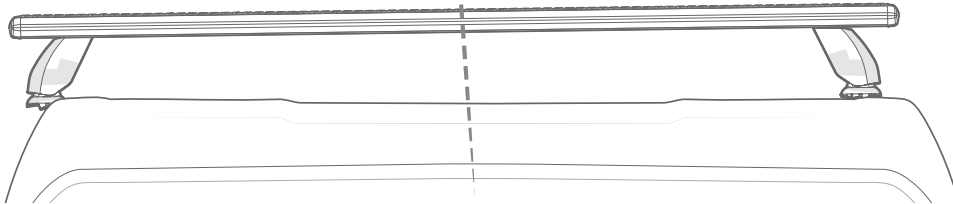
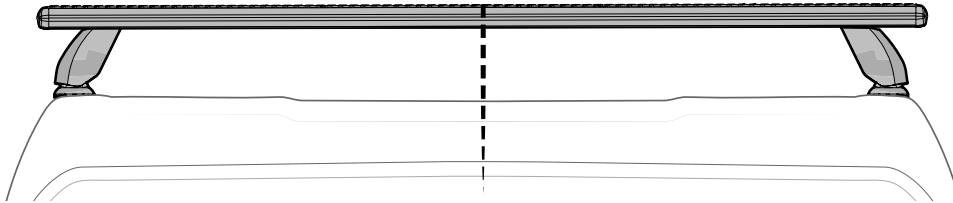


Hook the lower part of  to the door jamb, adjust the top clamp to align the clamp hole to the preassembled nut.



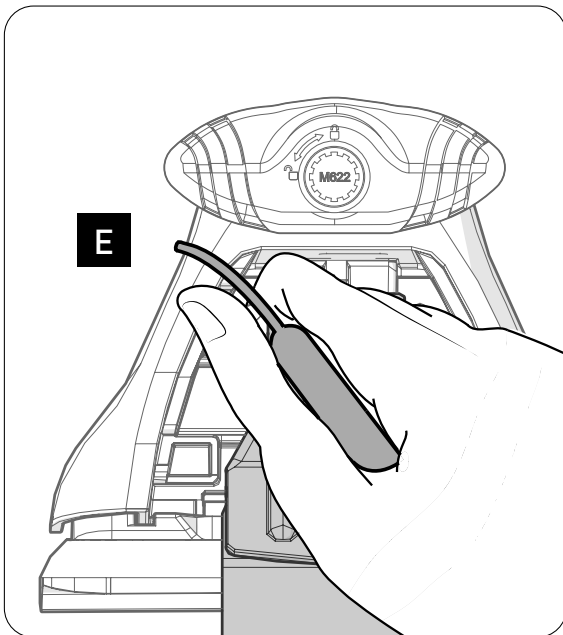
- 41** Visually inspect and ensure that the pads are correctly seated against the body of the vehicle.

FRONT VIEW

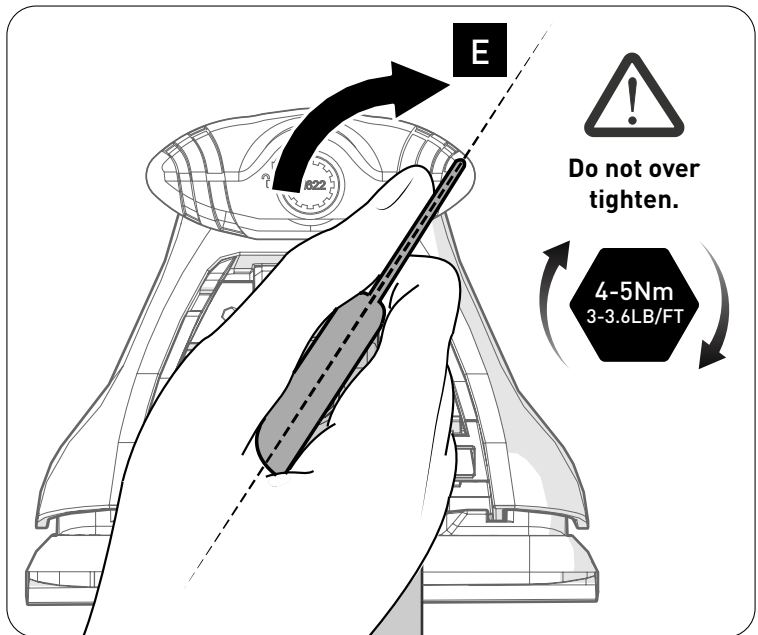


- 42** Tighten bolts **incrementally** and **evenly** on each side of the vehicle to avoid pulling the rack to one side.

E



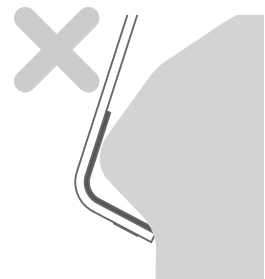
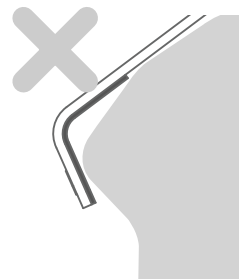
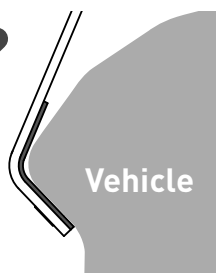
E



**SIDE VIEW**  
The clamp must have full contact along its face.

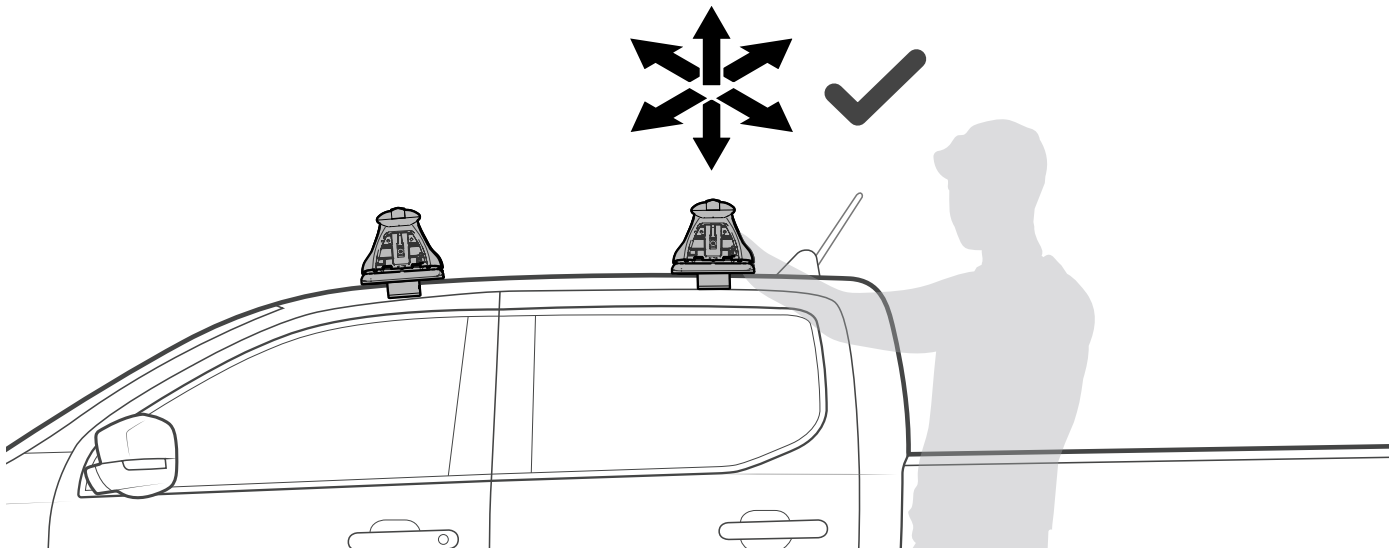


Clamp

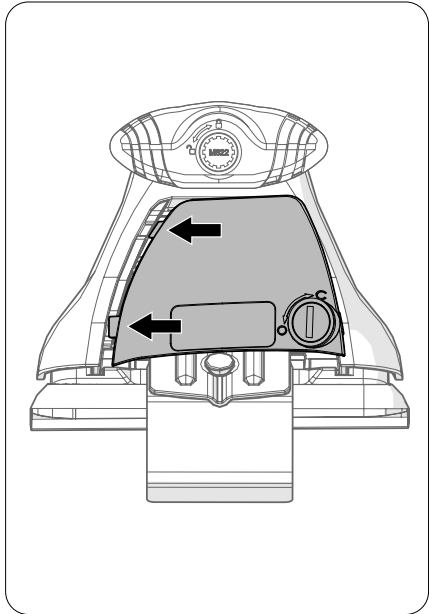
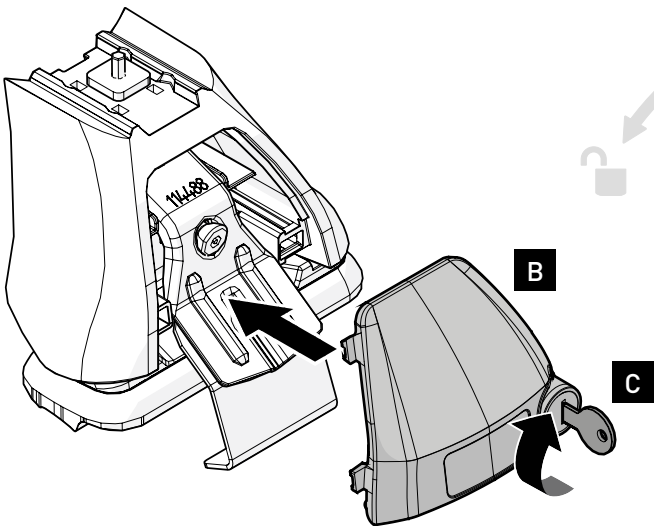


43

Check fitment is secure

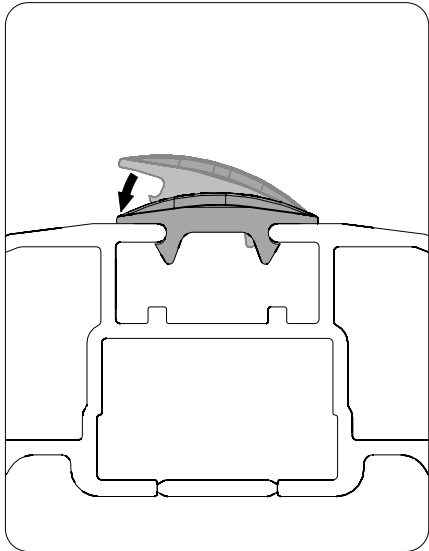
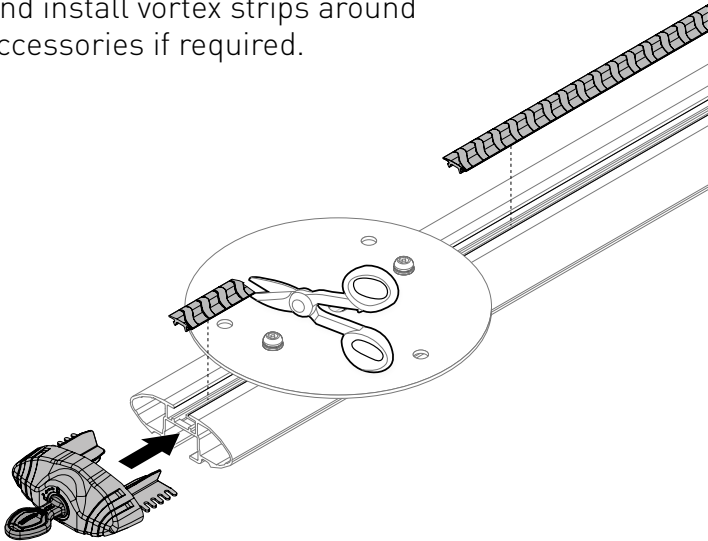


44



**NOTE**

Cut and install vortex strips around the accessories if required.

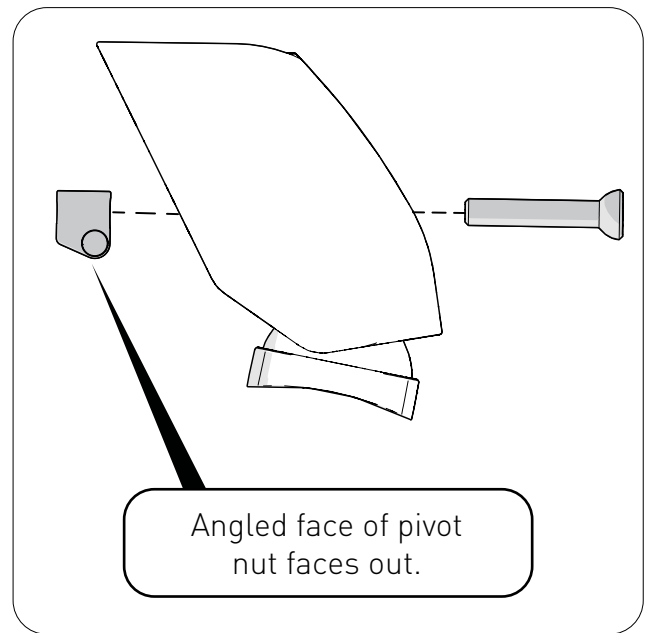
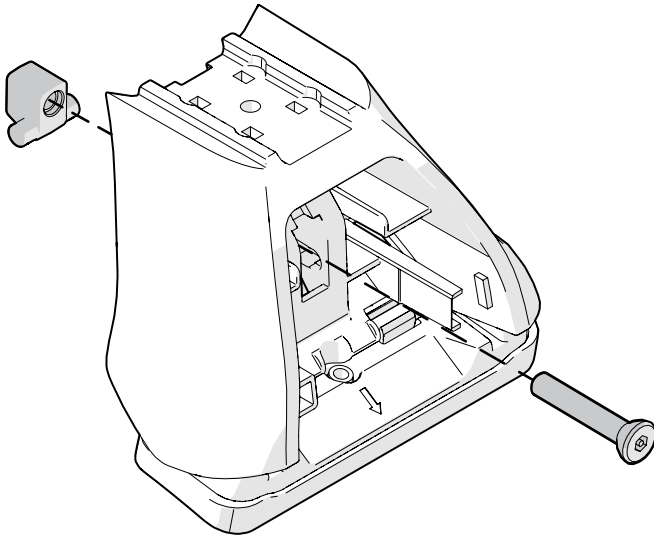


**Vortex Bar Installation Complete.**



**NOTE**

The RLKVA Legs will come with hardware assembled, however if the Pivot Nut is not attached to the leg, install as shown with the angled face of the nut facing outwards (as below).



# NOTES

---

---

---

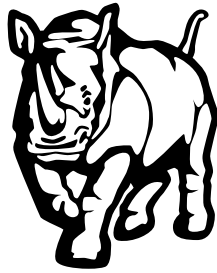
---

---

---



# NOTES



**RHINO-RACK®**

MAKE SPACE FOR ADVENTURE

**RHINORACK.COM**

**Rhino-Rack AUSTRALIA**

22A Hanson Pl,  
Eastern Creek, NSW, 2766

**Rhino-Rack USA**

19822 E 22nd Ave,  
Aurora, CO, 80011