



INA445/446

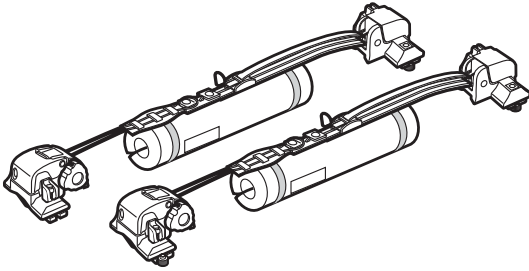
SUP / KAYAK / CANOE
LOCKER

Installation
Instructions

EN

Thank you for purchasing this INNO product.

- Read these instructions carefully before using this product.
- Do not discard these instructions.
- For inquiries, contact our service center listed at the end of these instructions.



WARNING Falling carrier parts or loads may cause potentially serious accidents involving vehicles and individuals following behind may result in severe injury or death.

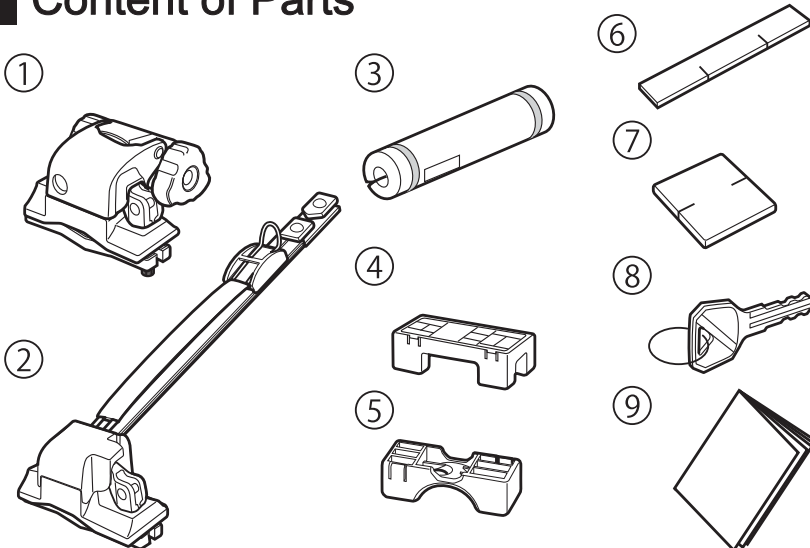
- Confirm the stability and strength of the carrier base onto which this product is to be installed, and attach it securely.
- Maintain a distance of 24" (60 cm) or more between the front and rear carriers / crossbars.
- Assure that neither knobs nor wires are loose before driving.
- Do not alter this product.
- Do not carry items other than SUP, canoes, kayaks, surfboards, and sailboards with this product.
- Exercise due care when driving while using this carrier.
- Lock securely while driving.



CAUTION May cause injury to individuals or damage to the product, vehicle and loads being carried.

- This product is not theft-proof. Therefore, do not leave equipment on this product unattended for long time.

1 Content of Parts



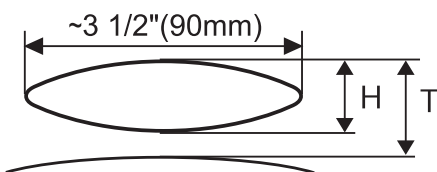
No.	Part	Qty
①	Main Ratchet Unit	2
②	Main Crane Unit	2
③	Pad (INA446 only)	2
④	Square Bar Adaptor	4
⑤	Round Bar Adaptor	4
⑥	Rubber Sheet S (70 x 10mm)	8
⑦	Rubber Sheet L (70 x 14mm)	4
⑧	Key	2
⑨	Installation Instructions	1

2 Attaching to the Carrier Base

This product can be installed onto square bars, round bars (diameter 1 1/8 inch) and most factory cross bars. (*1) When installing on a commercially produced carrier base, attach securely according to the instructions provided by the product manufacturer.

*1 Some factory cross bars require ISF722 long bolts kit (sold separately).

MAXIMUM CROSSBAR SIZE

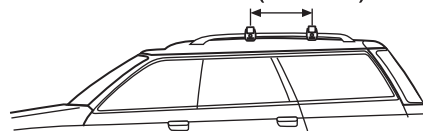


H: ~1 1/8" (~30mm) [Without option]
1 1/8"~2" (30~50mm) [Needs ISF722]
T: Distance to Roof : Min2 3/8" (60mm)



- Check vehicle or carrier base product instructions to confirm that the carrier base to which this product is to be installed has sufficient strength to support this product. If the carrier base does not have sufficient strength to support this product, do not install.
- Maintain a distance of 24" (60 cm) or more between the front and rear carriers. If adjustment of the distance is possible, keep as much distance as possible in order to increase load stability.

At least
24" (60 cm)

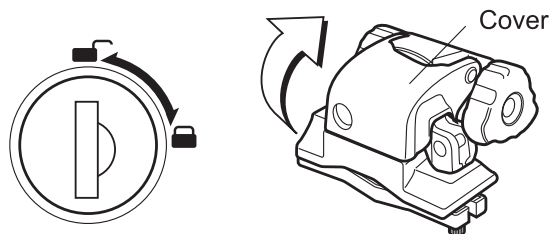


3 Install Main Ratchet Unit

Turn the key of the main ratchet unit to open. Open the cover.

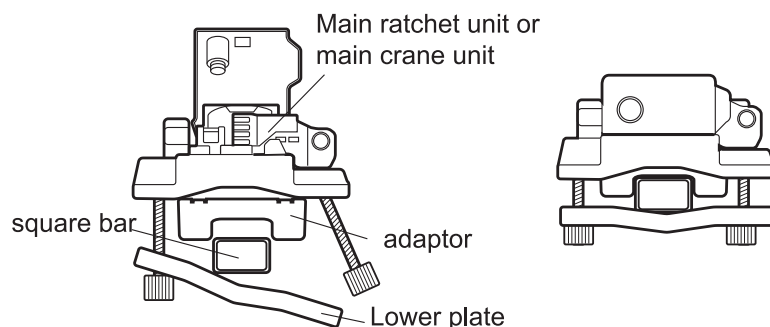
CAUTION

Do not use the key as a handle to close/open the cover, it may cause damage to the key.



For a square bar:

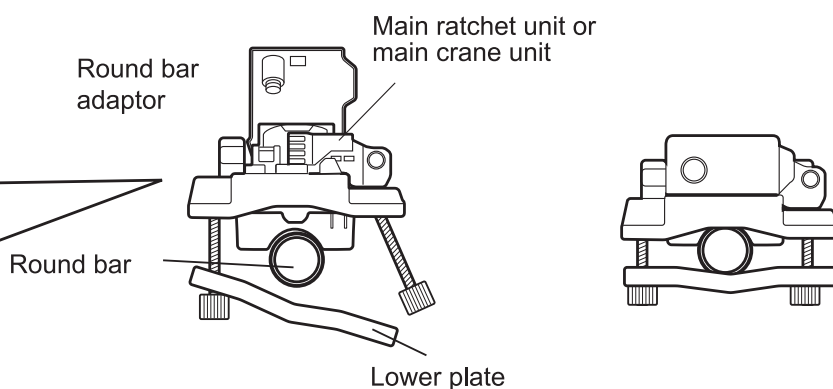
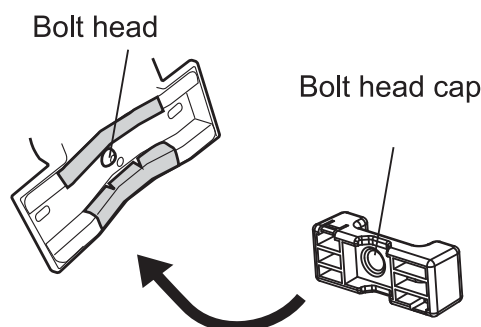
When installing on square or elliptical bars, use the adaptor provided with this product.



For a round bar:

When installing on round bars, use the adaptor provided with this product. Make sure the bolt head cap on round bar adaptor is over the bolt head.

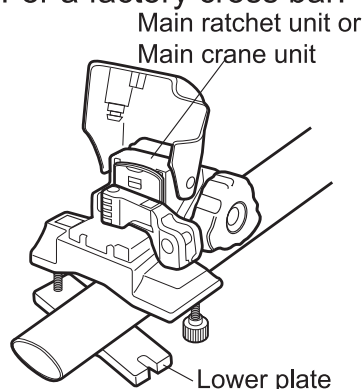
Install bolts so that they do not come into contact with other surfaces.



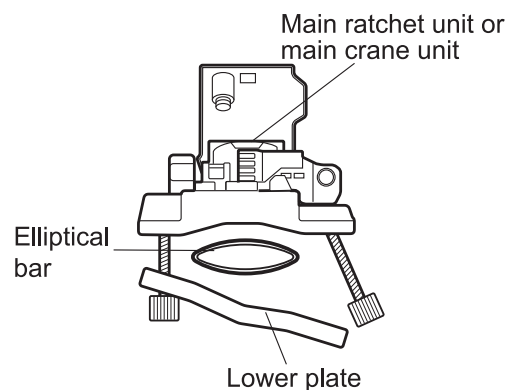
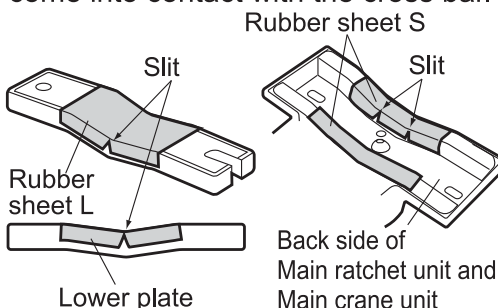
Preparation for Installation of Attachments to Factory cross bars

When installing on factory cross bars or elliptical bars, use a rubber sheet instead of the adaptor.

For a factory cross bar:

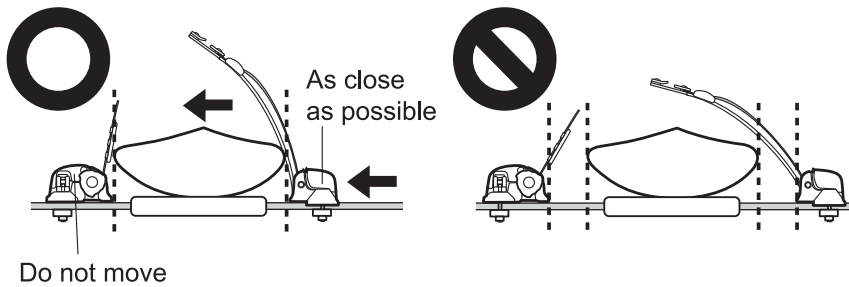


The rubber sheet should be glued onto the surface of the parts that come into contact with the cross bar.

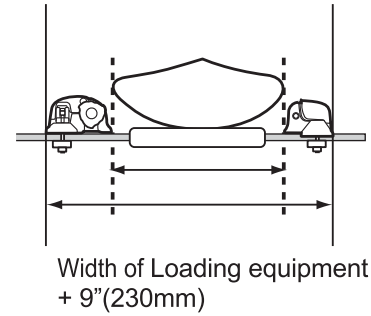


4 Setting the Main Crane Unit by Adjusting According to the Width of the loading equipment

Adjust the crane position so that the main ratchet unit and the main crane unit are as close to the loading equipment as possible, and fix the main crane unit securely. If the main ratchet unit and main crane unit are away from the loading equipment, it cannot be fixed securely.



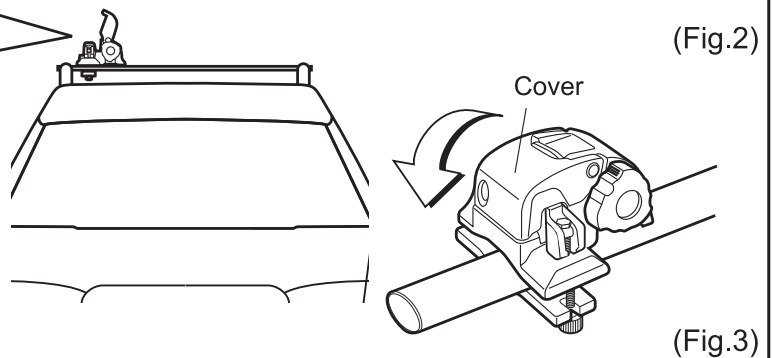
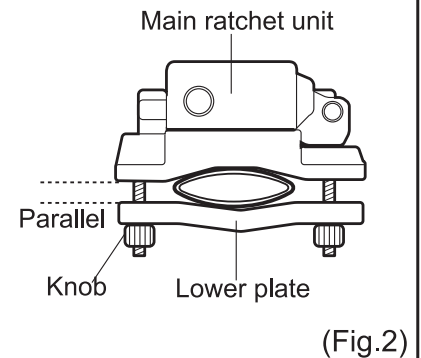
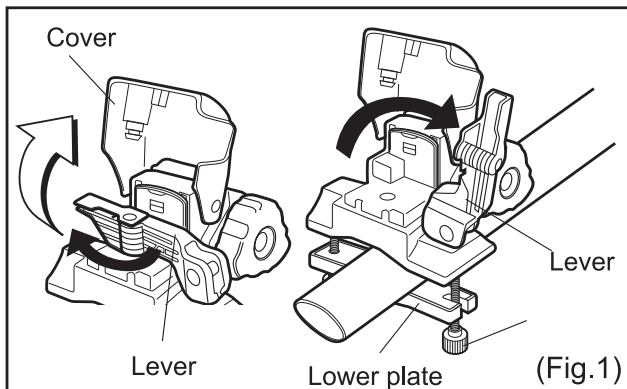
REQUIRED BAR SPACE



WARNING Position of the attachment must be adequate to the width of the loading equipment.

5 Installation of Main Ratchet Unit

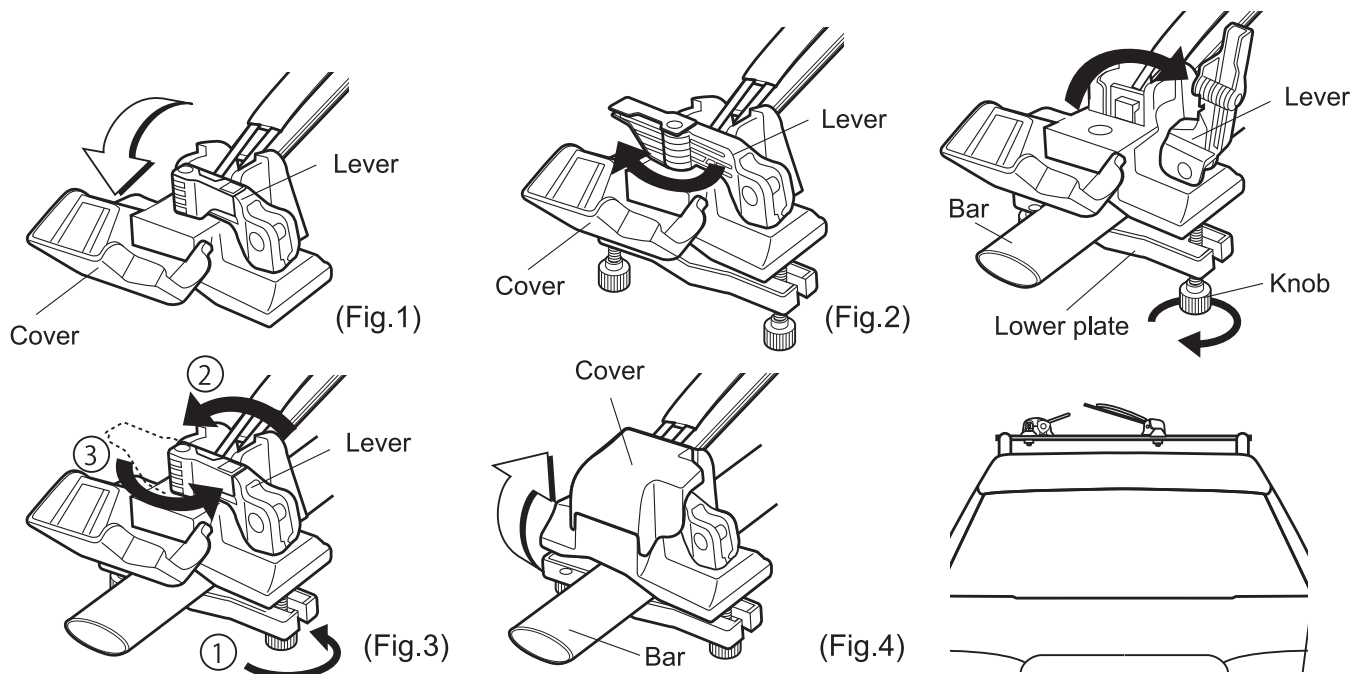
- Open the lever. Lift the lever to release the knob. (Fig.1)
- Loosen the both side of knobs adequately, then place the main ratchet unit on the bar.
- Reassemble lower plate and knob, then tighten the knob.
- Hold down the lever to fix the main crane unit on the bar.
- Make sure that the lower plate is parallel to the upper unit. (Fig.2)
- Close the cover. (Fig.3)



6 Installation of Main Crane Unit

- Open the cover of the main crane unit. (Fig.1)
- Open the lever. Lift the lever to release the knob. (Fig.2)
- Loosen the both side of knobs adequately, then place the main crane unit on the bar.
- Put back the knob in the lower plate, then tighten the knob.
- Hold down the lever to fix the main crane unit on the bar. (Fig.3)
- Make sure that the lower plate is parallel to the upper unit.
- Close the cover. (Fig.4)

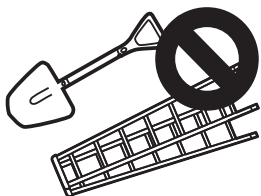
*If the wire is tensioned, the cover is locked automatically. Make sure is the wire is free of tension, then close the cover.



7 Maximum Load Capacity

The maximum load capacity of this product is as follows:

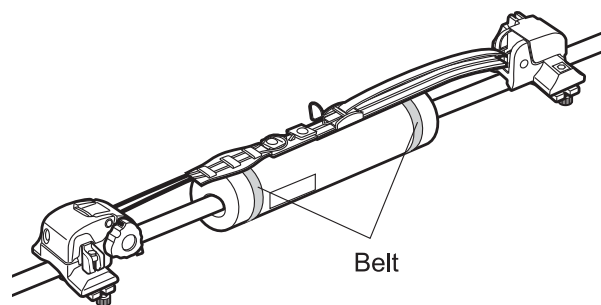
SUP/Sail board.....	2
Canoe / kayak.....	1
Short surfboard.....	3
Long surfboard.....	2



- Do not carry items other than SUP, canoe, kayak, surfboards and windsurf boards.
- Be sure to comply with the maximum load capacity limit.
- Check vehicle or carrier base product instructions to confirm that the carrier base to which this product is to be installed has sufficient strength to support this product.

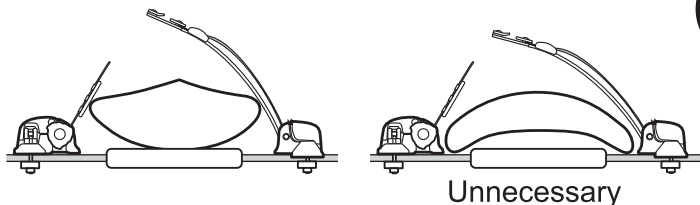
8 Installing Pad

Install the pad on the crossbars.

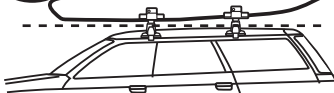
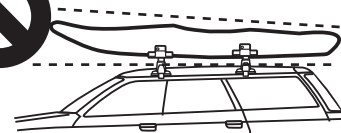


9 Loading a Kayak

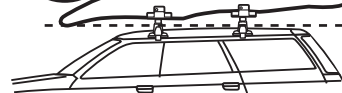
Load a kayak so that it is well-balanced. The kayak can be loaded either right side up or upside down. Depending on the kayak shape, the pad may not fit. In such cases, use of the pad is unnecessary.



WARNING



Load kayak / canoe as the rear side of the car gets higher. Making the front side higher is dangerous due to air resistance.

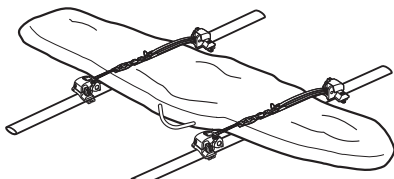


10 For Loading SUP, Surfboards or Sailboards

-Follow the same instructions as for loading a kayak when loading SUP, surfboards or sailboards.
The pad must be used for loading.

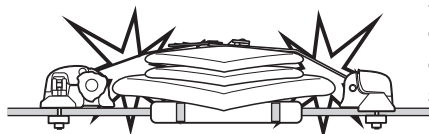
-Remove the corner pad when the ratchet is not rolled up enough.

! WARNING



Do not load sail boards or long boards in bag. Only short boards can be loaded in bag.

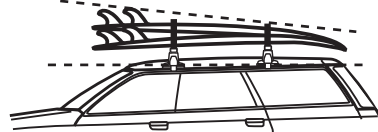
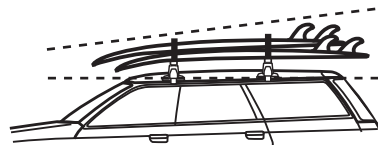
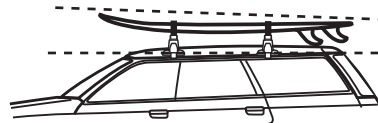
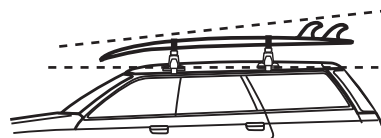
! WARNING



If multiple bare boards are stacked, do not allow cables to contact boards. cables may scratch board surface.

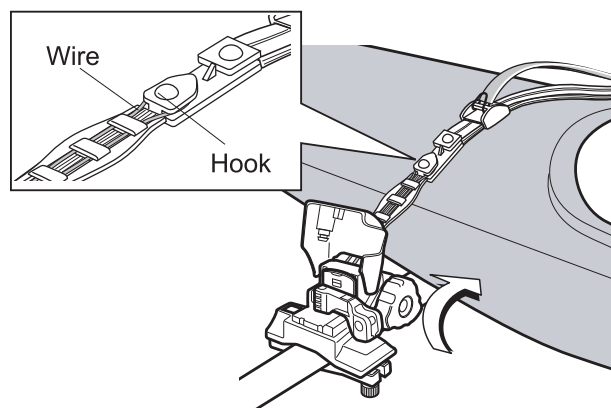
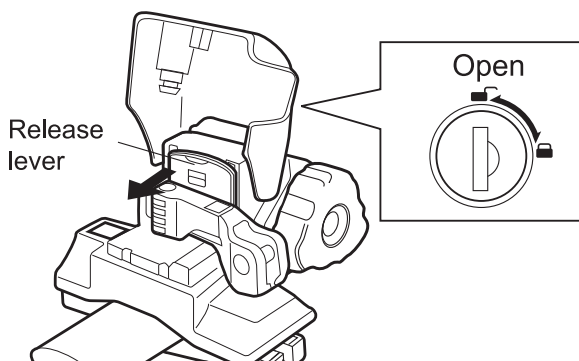
! WARNING

Load equipments as the rear side of the car gets higher.
Making the front side higher is dangerous due to air resistance.

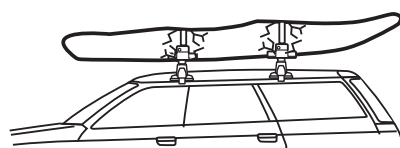


11 Tightening the Ratchet

Open the lock, lift the cover, push up the release lever and release the wire.
Attach the wire to the hook of the crane and turn the ratchet with both hands to tighten it.
Roll up the ratchet not to bend the wire.



! WARNING



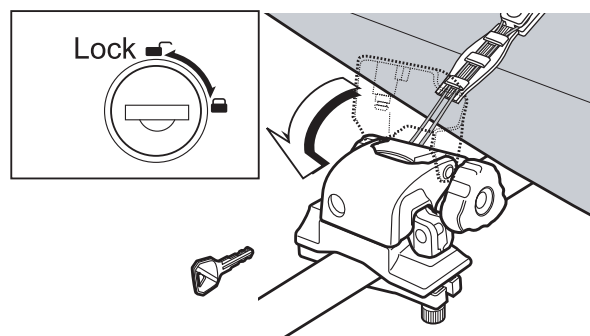
Do not overtighten the wire.
Polypropylene boat can be wired up tightly secured in a short term. However, when it is wired up for a long period of time, the shape will not be restored.
FRP boat can be broken when it is overtightened.

12 Close and Lock the Cover

Be sure to lock cover with key before driving.

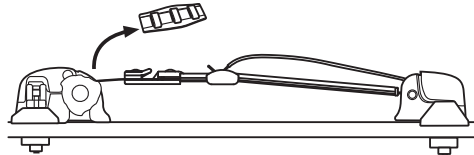
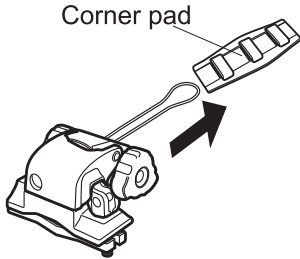
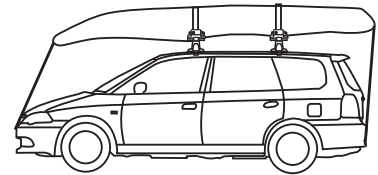
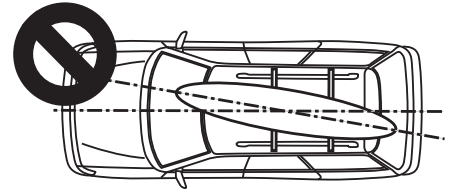
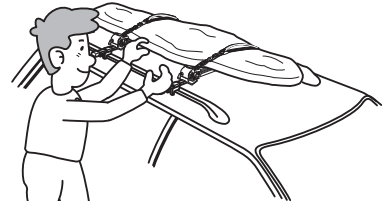
! WARNING

If cover is not locked, release lever may open accidentally causing equipment to drop.
This system is a theft deterrent.
Equipment should not be left unattended for long periods of time.



13 Driving

- Before driving, shake the carrier and equipment load in order to confirm that they are set securely. If there is any looseness, tighten the bolts and ratchet again.
- When loading a kayak/canoe longer than 13'1" (4 m), secure the front and back to the car body with belts.
- Load equipment straight.
- When driving without using the attachment, remove the pad and fix the crane by ratchet.
- Remove the corner pad when the ratchet is not rolled up enough.
- This product is not theft-proof. Therefore, do not leave equipment on this product unattended for an extended period of time.



! WARNING



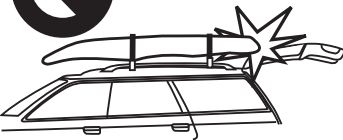
Obey all posted speed limits. Drive slower under strong winds or on rough roads.

! WARNING



Do not drive your carrier through a car wash. Always remove the carrier system before running your car through a car wash.

! WARNING



Be careful not to hit the surfboards or sailboards with the vehicle's tailgate or trunk lid. In case your gear is accidentally hit by the tailgate or trunk lid, be sure to check the carrier's mounting condition.

! WARNING



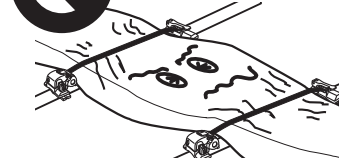
Do not make hard starts, unnecessary sharp turns, abrupt maneuvers or sudden stops. In case you have to perform such a maneuver, always check afterwards to see that the carrier and cargo remain secure.

! WARNING



Avoid flapping. When you load the shortboard in a case, make sure to tighten securely, so that the case is not flapping. If the case is flapping while driving, wind pressure might cause boards to fly off.

! CAUTION

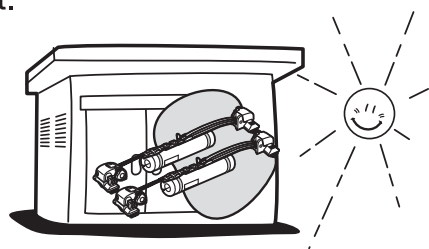


Tighten the ratchet securely, but avoid denting the board. Excessive tightening may cause damage to the board.

14 Care and storage

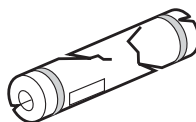
When the carrier is not in use, remove from the vehicle.

Store in a covered, dry location away from sunlight.



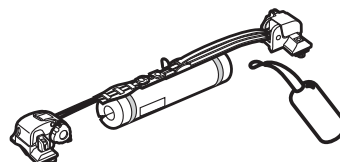
⚠ WARNING

- Pad is expendable.
- Remove from carrier when not in use.
- Replace when there is deep scratch or crack.



⚠ WARNING

- DO NOT lubricate Key and Bolts.
- DO NOT apply thinner and/or solvent as they may damage plastics.



Genuine INNO Replacement Parts

The following genuine replacement parts are available for this Inno carrier system component.

Note

Specifications and appearance of the carrier system and genuine replacement parts are subject to change without prior notice in the interest of product improvement.

