



Practical guide

# MOS PRODUCTS





# MOS UPLIFT™

Let's Buddy Up



Adventure is now within reach. Accessing your favorite activities safely has never been easier than with the MOS UpLift™, a load-assisted lifting mechanism designed to simplify the lives of sports and outdoor enthusiasts.

The MOS UpLift™ is a multi-sport roof rack compatible with all racks and attachment accessories for bikes, kayaks, skis and roof boxes. It allows the lowering of equipment 2 feet (61 cm) lower than the roof rack crossbars, on the side of the car. Accessibility is key.

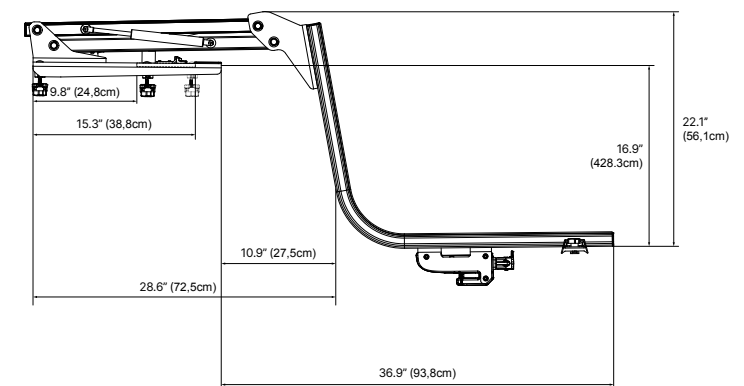
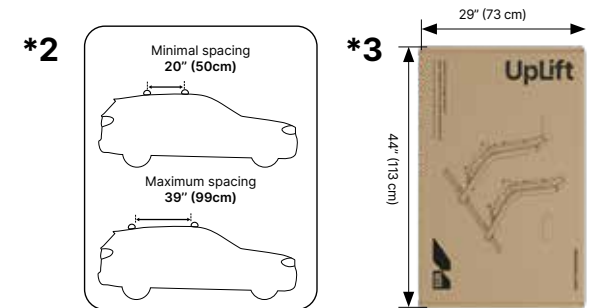
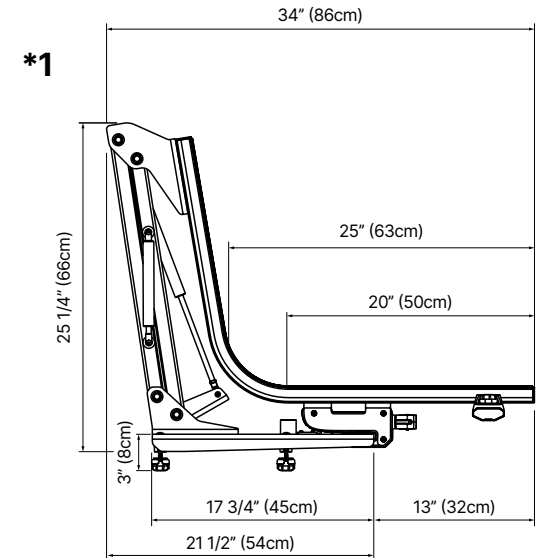
The MOS UpLift™, **one system, countless uses.**

UPC : 628942224317 | SKU : MOS-MR12-SC-DTC

# Features

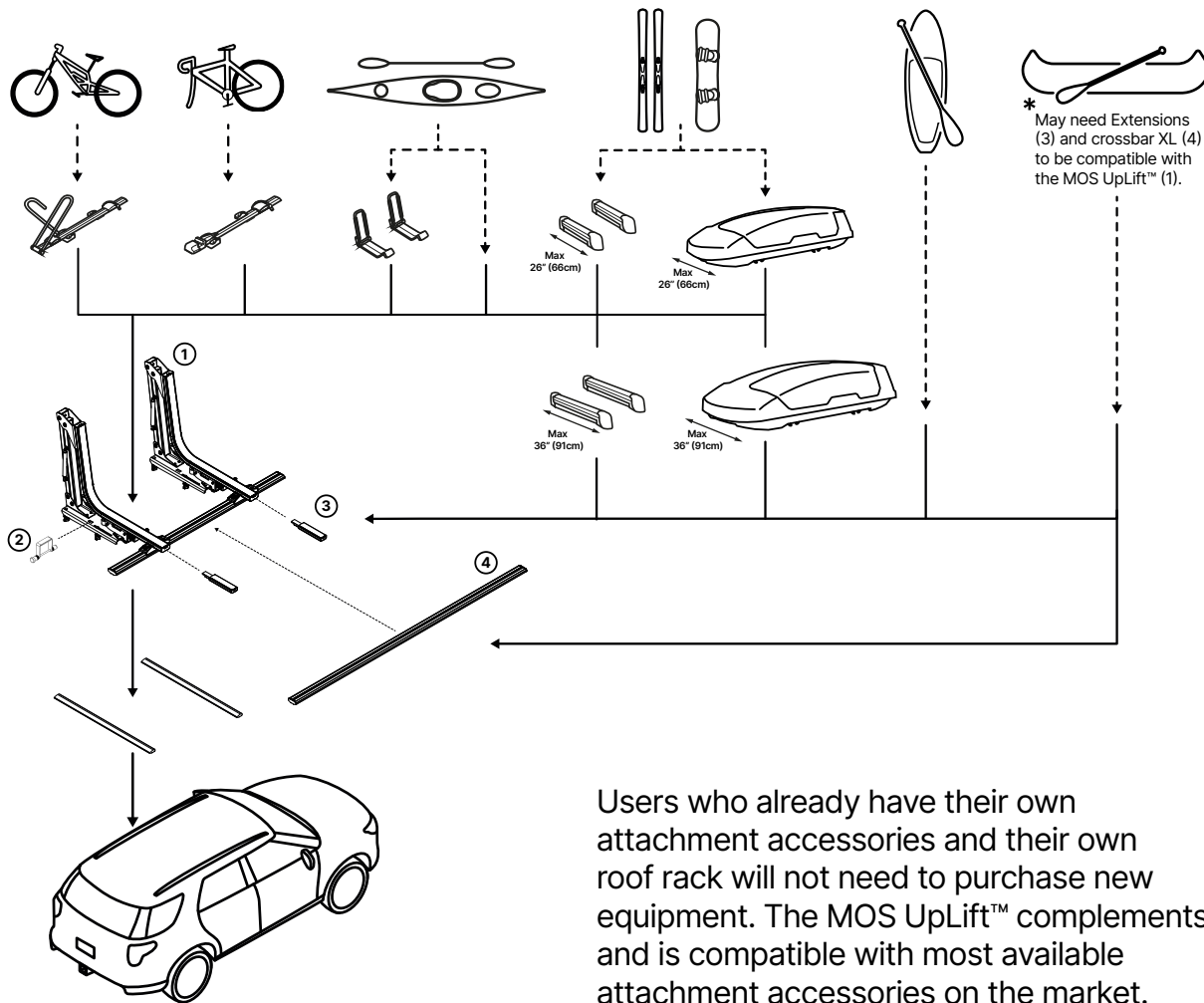
<b>Loading capacity</b>	Max 125 lb (56 kg)
<b>Lift assistance</b>	With 60 lb (27 kg): 70-75% lift assist (feels like lifting ≈17 lb) With 80 lb (36kg): 45-50% lift assist (feels like lifting ≈42 lb) With 125 lb (57kg): 35-40% lift assist (feels like lifting ≈78 lb)*
<b>Requirements</b>	Mount the MOS UpLift™ on heavy-duty crossbars (>165 lb/75 kg rating). Ensure total load stays within accessories (e.g.: bike rack), roof rack cross bars, and car roof capacity.
<b>Product weight</b>	33 lb (15 kg)
<b>Structure height (*1)</b>	25.25" (66 cm)
<b>Adjustable width (*2)</b>	Minimum 20" (51 cm), maximum 39" (99 cm)
<b>Materials and finish</b>	Powder-coated aluminum and nylon structural parts. Stainless steel hardware.
<b>Color</b>	Matte black
<b>Locking system</b>	Sold separately
<b>Possibility to install two MOS UpLift™</b>	Yes
<b>Packaging dimensions (*3)</b>	44" × 9" × 29" (113 cm x 22 cm x 73 cm)
<b>Compatible accessories</b>	Roof box maximum width 66 cm (26 in), ski rack maximum width 66 cm (26 in), 2 x bike rack with or without front wheels, 1 x kayak carrier
<b>Mounting of the MOS UpLift</b>	Clamped-on

\*Assistance varies throughout the lifting motion. You will need to support the full weight during the first 5° of lift. For ergonomic use, we recommend using your leg to initiate the first push of the MOS UpLift™. Alternatively, ask a friend to assist you.





# Compatibility



## MOS Products

- ① MOS UpLift™
- ② MOS UpLift™ : Lock
- ③ MOS UpLift™ : J-Extensions
- ④ MOS UpLift™ : XL-Crossbar

## Compatibility

### Accessories

T-bolt 20mm

Wrap around brackets  
(width ≥ 2.75" (7 cm))



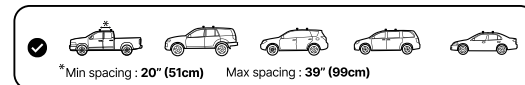
### Roof Bars

Minimum capacity 165lb (75kg)

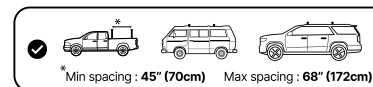


### Vehicle

Regular crossbar



XL crossbar















Users who already have their own attachment accessories and their own roof rack will not need to purchase new equipment. The MOS UpLift™ complements and is compatible with most available attachment accessories on the market.








# Tested and approved accessories

Last update : 2023-11-13

\*This is a non-exhaustive list, several other items can and will be compatible with the MOS UpLift™, those items are products the MOS Team has tested and prefers.

Bar roof rack				
Brand	Model	Product	#Part	Loading capacity
Thule	EvoWing		711500	100 kg (220lb)
	AeroBlade		957601	75kg (165lb)
Rhino	Vortex		VA126B	75kg (165lb)
Tesla			N/A	68-75kg (150-165lb)

Bike			
Brand	Model	Product	#Part
Thule	UpRide		599000
	ProRide		598004
	TopRide		568005
	FastRide		564005
Rhino	Hybrid		RBC050
	Road warrior		RBC036
	Mountain trail		RBC035
Ski & board			
Thule	Snowpack M		732401

Cargo box			
Brand	Model	Product	#Part
Thule	Force XT Sport		635601
	Pulse Alpine		616100
	Side kick		682100
Yakima	SkyBox 12 Carbonite		8007334
Sports-Rack	Horizon Alpine		SR7011
Kayak			
Thule	DockGlide		896001
Rhino	Nautic 581		581

All racks that can be mounted in T-Tracks will be compatible with the MOS UpLift™



T-bolts inserted in T-Tracks (20 × 20 mm),

The majority of racks that can be mounted with clamp-on fixtures will be compatible with the MOS UpLift™.



Wrapped around bars

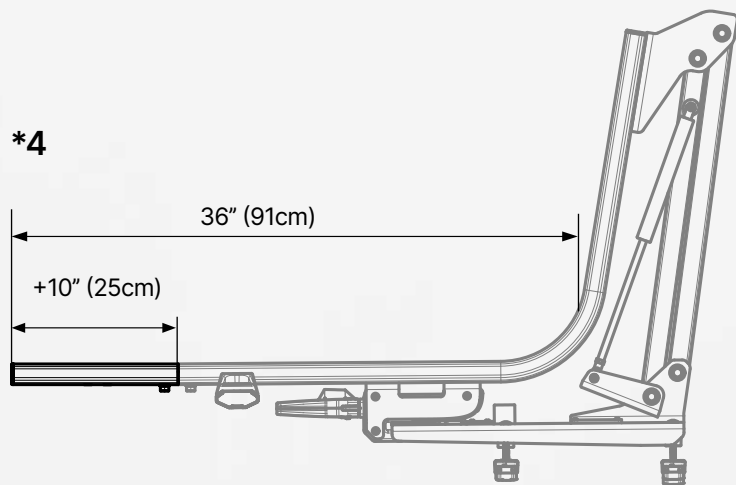
# MOS UPLIFT™ : J-EXTENSIONS

## Stretching Further

Add 10 extra inches (25 cm) to your mounting surface and enhance the versatility of the MOS UpLift™.

Each unit covers one MOS UpLift™ — you'll receive two pieces, one for each arm.

<b>Added length (*4)</b>	10" (25 cm)
<b>Package dimension</b>	14" x 3" x 3"
<b>Product Weight</b>	2.5 lb (1.1 kg) (2 pieces)
<b>Material and finish</b>	Powder-coated aluminum & stainless steel hardware
<b>Loading capacity</b>	125lb (56kg)
<b>Color</b>	Matte black



UPC : 628942224287 | SKU : MOS-MR12-J-EXT

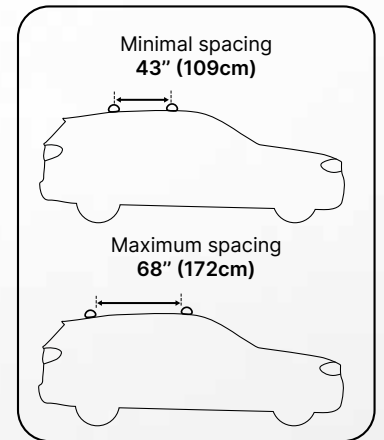
# MOS UPLIFT™ : XL-CROSSBAR

## Wider Horizons

Allows installation of the MOS UpLift™ on roof rack crossbars and truck bed crossbars that are spaced farther apart, increasing installation options, especially for trucks, minivans, and large SUVs.

<b>Overall Length (*5)</b>	74" (187 cm)
<b>Packaging Dimensions</b>	75" x 3" x 1.5"
<b>Product Weight</b>	5 lb (2.25 kg)
<b>Material and Finish</b>	Powder-coated aluminum
<b>Adjustable Width (*6)</b>	Minimum 45" (70 cm), maximum 68" (172 cm)
<b>Color</b>	Matte black

\*6



UPC : 628942224294 | SKU : MOS-MR12-XL-CROSS

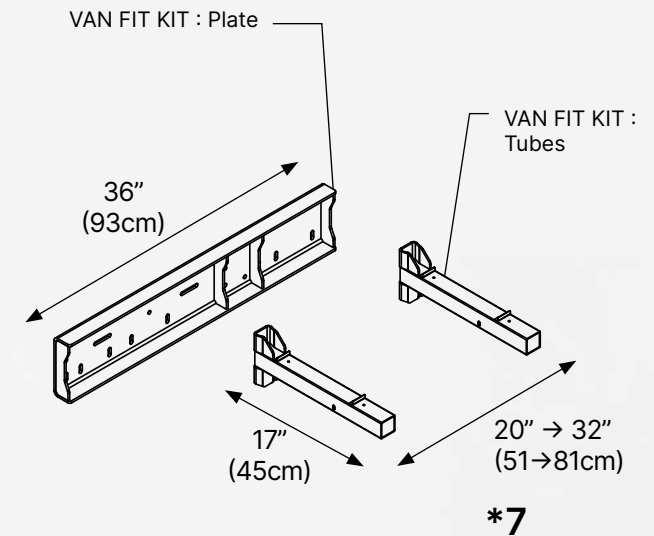
# MOS UPLIFT™ : VAN FIT KIT

Van life, elevated

The MOS UpLift™ : Van Fit Kit is available in two separate components—the “Tubes” and the “Plate”—allowing you to customize your setup based on your needs and the equipment you transport. The “Tubes” mount onto the rear door rack, serving as the base for the system, while the “Plate” can be added to center your gear for optimal balance and security. Whether you’re carrying bikes, skis, or camping gear, this modular adaptor ensures seamless integration and convenient access to your equipment.

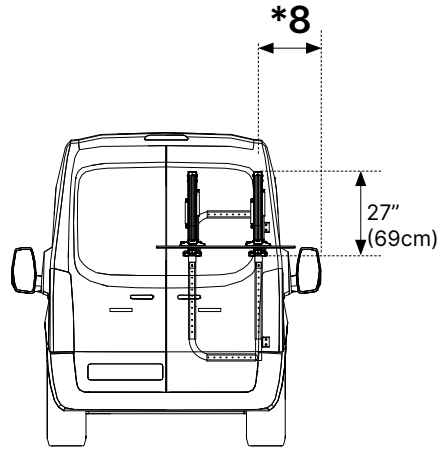
<b>Loading capacity</b>	125 lb (56 kg)
<b>Requirements</b>	Has to be installed on heavy-duty rear door carrier with a minimum load capacity of 100 lb (45 kg)
<b>Weight*</b>	Tubes : 5 lb (2kg) (for 2 pieces)   Plate : 8 lb (3.5kg)
<b>Height (with the MOS UpLift™) (*7)</b>	31" (79 cm)
<b>Adjustable width (*8)</b>	Minimum 20" (51 cm), maximum 32" (81 cm)
<b>Materials and finish</b>	Powder-coated aluminum and nylon structural parts. Stainless steel hardware.
<b>MOS UpLift™</b>	Sold separately
<b>Locking system</b>	Sold separately
<b>Packaging dimensions</b>	42" × 6" × 11" (107 cm x 15 cm x 28 cm)
<b>Color</b>	Matte black

UPC : 628942224300 | SKU : MOS-MR-VAN-TUBES  
 UPC : 628942224348 | SKU: MOS-MR-VAN-PLATE



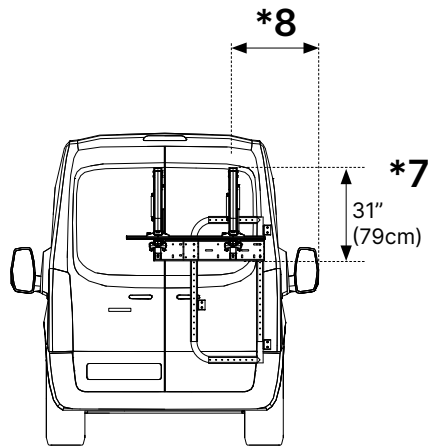
# Compatibility chart

## Van Fit Kit Tubes



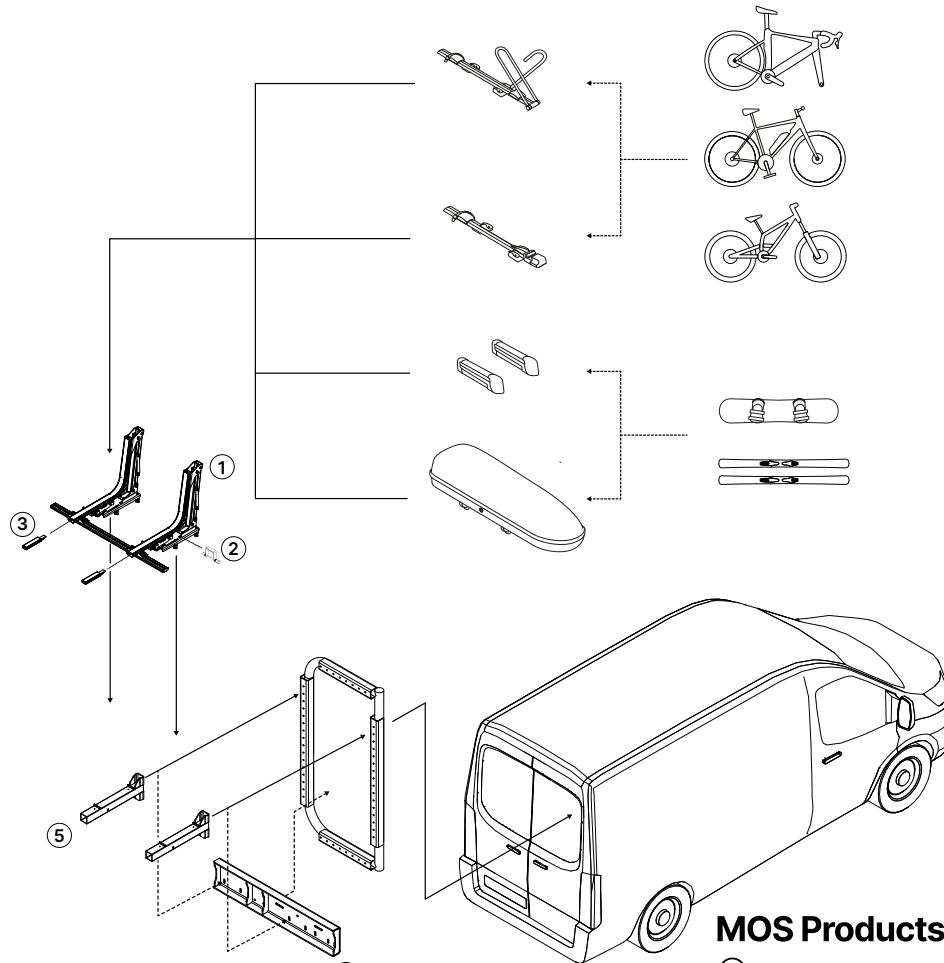
The **Tubes**, mount directly to the van's rear door rack and act as the base for the MOS UpLift™ system.

## Van Fit Kit Tubes + Plate



The **Plate** recenters the system toward the middle of the van, improving weight distribution and aesthetics—especially when carrying wider loads.

**\*8** Recenters the system by approximately 6–9 inches (15–22 cm) toward the middle of the van.



## MOS Products

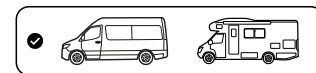
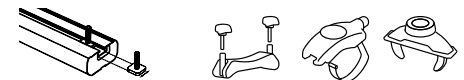
- ① MOS UpLift™
- ② MOS UpLift™ : Lock
- ③ MOS UpLift™ : J-Extensions
- ⑤ MOS UpLift™ : Van Fit Kit - Tubes
- ⑥ MOS UpLift™ : Van Fit Kit - Plate

## Compatibility

### Accessories







T-bolt 20mm

Wrap around brackets  
(width ≥ 2.75" (7 cm))



# Tested and approved by MOS

\*This is a non-exhaustive list, several other items can and will be compatible with the MOS UpLift™, contact us for assistance.

Rear door rack			
Brand	Model	Product	Capacity
Owl	B2 Classic		90 kg (200lb)
	B2 Pro		90kg (200lb)
	B2-Transit		68kg (150lb)
Aluminess	BackPAC Rear Door Plate		90kg (200lb)
Van d'ici	VDICI Sprinter VS30 2019+		90kg (200lb)
PHLÖ System	Support Proto Universel		90kg (200lb)



# MOS LOCK

Pack securely, lock confidently

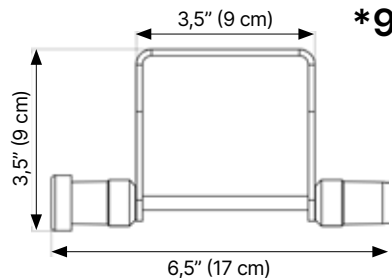


Going on an adventure with peace of mind has never been easier than with the MOS Lock, a padlock designed to secure the MOS UpLift™ to the crossbars of the roof rack.

The MOS Lock, a sturdy stainless steel padlock, is specifically designed to be compatible with the MOS UpLift™. The U-shaped insert fits directly into slots on the base plate to allow for secure locking of the MOS UpLift™ to the car's roof rack crossbars.

<b>Overall length (*9)</b>	6.6" (17 cm)
<b>Package dimensions</b>	9.4" x 4.7" x 1.5" (24 cm x 12 cm x 4 cm)
<b>Product Weight</b>	1 lb (336 g)
<b>Materials and finish</b>	Stainless steel, rubber, powder-coated aluminum.
<b>Number of keys included</b>	2
<b>Color</b>	Black and silver

Only one MOS Lock padlock is required to secure your MOS UpLift™ on the roof crossbars of your car and on the MOS UpLift™: Van Fit Kit.



UPC : 628942224270 | SKU : MOS-MR12-LOCK



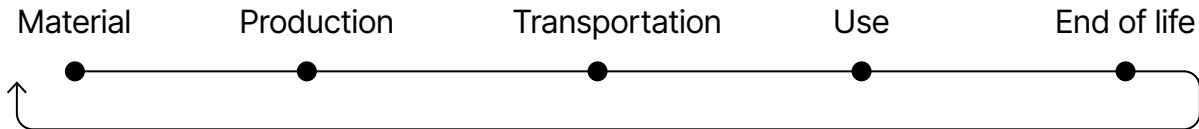
Van Fit Kit

Roof Rack

# Design for Sustainability

Because we are committed to understanding and reducing the environmental impact of our products designed in Canada, we conducted a Life Cycle Assessment (LCA) to identify the most critical elements to consider in our eco-design approach.

## Life Cycle and Environmental Impact Analysis (LCA)



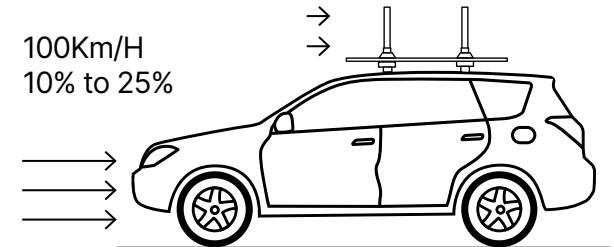
From highest impact to lowest impact

Cycle Stage	Key Observations	Actions done by the MOS team to reduce impact
Use	Added weight and aerodynamic drag increase fuel consumption during transportation.	<ul style="list-style-type: none"> <li>Lightened product weight. Compact design.</li> <li>Easy to install/remove to minimize rooftop time</li> <li>Reduction of aerodynamic drag.</li> <li>User guidelines to optimized use.</li> </ul>
End of Life	Difficulty of recycling multi-material product.	<ul style="list-style-type: none"> <li>Maximize use of mono-material components.</li> <li>Integrated recyclability consideration from design stage.</li> </ul>
Distribution	Transportation emission for shipping product.	<ul style="list-style-type: none"> <li>Optimized packaging to reduce volume and weight.</li> <li>Selected logistics partners focus on lower carbon transport when possible.</li> </ul>
Production	Energy use and waste during manufacturing.	<ul style="list-style-type: none"> <li>Improved production efficiency.</li> <li>Durable product design to extend service life.</li> </ul>
Materials	Extraction and processing of raw materials.	<ul style="list-style-type: none"> <li>Material reduction strategies.</li> <li>Selected materials with higher efficiency.</li> </ul>

## Increased fuel consumption

50Km/H  
5% to 10%

100Km/H  
10% to 25%



### Advices from MOS : Best Practices for Sustainable Use

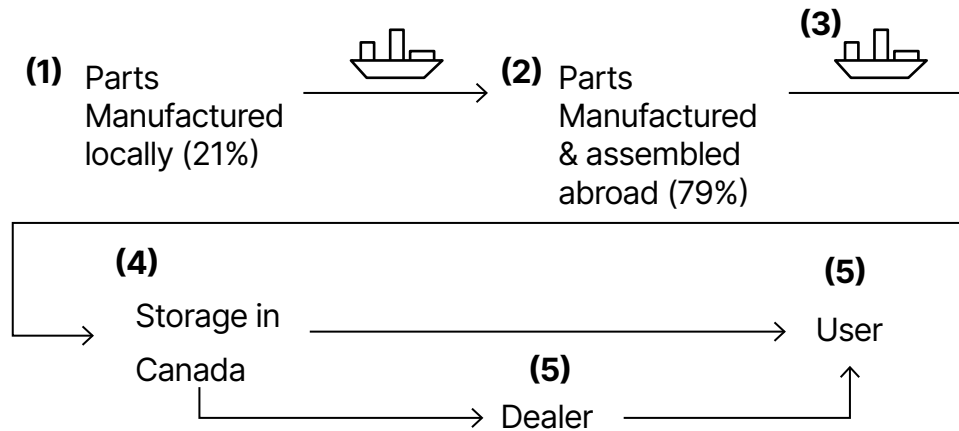
1. Remove the MOS UpLift™ when not in use.
2. Adjust your speed to reduce aerodynamic resistance.
3. Choose alternative transportation when possible.
4. Maintain your mounts and racks regularly.
5. Optimize your load for better fuel efficiency.

# Performance & Durability Testing

Conducted in a specialized laboratory using destructive test benches, these tests assessed the robustness of the MOS UpLift™ under extreme conditions.

- 1. Mechanical strength** validated through 8 types of tests (vibration, braking, lateral and vertical loads): up to 936 N (~200 lb) over 30,000 cycles, with no breakage or deformation.  
→ Safety factor: 1.7
- 2. Coating** tested for 1000 hours in a salt spray corrosion chamber.  
→ Proven durability of 10+ years in humid and saline environments.
- 3. Coating thickness** measured between 91.9 and 108 µm, with hardness  $\geq$  2H.  
→ Hard enough to resist abrasion from repeated loading of kayaks and bike racks, yet flexible enough to absorb impacts without cracking.
- 4. Gloss level** of 56.8 GU (satin finish).  
→ No discoloration after 10 years of exposure to sun, water, and salt.

**Manufacturing:** We prioritize quality and responsibility at every step of our process.



## Advices from MOS

1. Check the knob tightening once every 600 km (375 miles).
2. Ensure the rack is not overloaded. We recommend not exceeding 125 lb (56 kg), with optimal performance under 85 lb per MOS UpLift™.





## Warranty

All MOS products are covered by a **limited 2-year warranty** for the original purchaser of the product, provided that the product is used according to the manufacturer's instructions. A warranty claim must be properly completed by filling out our warranty form on our website. MOS will handle the warranty process.

### Repair and replacement of subassemblies

In case of damage, the purchase and replacement of subassemblies outside the warranty cannot be carried out by a retailer. MOS wishes to take 100% responsibility for all repairs and part replacement on its products. Contact MOS customer service at [support@mosracks.com](mailto:support@mosracks.com) or by calling 1-877-980-6258 to schedule a repair.

More details at [mosrack.com](https://mosrack.com)

# Additional resources

[User guide - MOS UpLift™ :](#)

[Installation videos :](#)

[Augmented reality viewer :](#)



# CONTACT

**MOS**

info@mosracks.com  
1-877-980-6258  
mosracks.com

**Sales representative**

