

Apline ACE-1

Apline ACE-1 Roof Rack Bars for Fiat Idea 2003-2012 Instruction Manual

Model: ACE-1 | Brand: Apline

1. PRODUCT OVERVIEW

The Apline ACE-1 roof rack bars are a vehicle-specific roof transport system designed for cars with raised roof rails (a gap between the roof rail and the vehicle body). These bars provide a balanced, robust, and durable load capacity for transporting various items. The design ensures compatibility with the vehicle's roof rail position and angle, promoting even load distribution, enhanced driving stability, and reduced vibrations.

Constructed from high-strength, corrosion-resistant aluminum and UV-resistant PA6 GF30 connecting components, the ACE-1 bars are built for reliable, long-lasting use in diverse weather conditions. Elastomer seals on the bar surfaces minimize load movement and reduce friction-induced noise.



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Image 1.1: Apline ACE-1 Roof Rack Bars installed on a Fiat Idea (2003-2012 model). This image highlights the product's appearance, the vehicle compatibility, and the integrated locking mechanism for security.



Image 1.2: Overview of Apline roof rack series, with the ACE-1 model prominently featured. This illustrates the specific design of the ACE-1 system.

2. SAFETY INFORMATION

- Ensure the roof rack bars are securely installed before each use.
- Do not exceed the maximum load capacity specified for the roof rack bars or your vehicle's roof.
- Distribute the load evenly across the bars. Secure all cargo properly to prevent shifting during transit.
- Remove roof rack systems when not in use to reduce air resistance, fuel consumption, and wind noise.
- Always check local traffic laws and regulations regarding roof-mounted cargo.
- Be aware of increased vehicle height and potential changes in driving dynamics when carrying cargo on the roof.

3. COMPATIBILITY AND COMPONENTS

The ACE-1 roof rack bars are specifically designed for vehicles with raised roof rails. This product is not suitable for

vehicles without roof rails or with flush-mounted roof rails. Always verify that your vehicle (make, model, year) matches the product title and images before installation.



Image 3.1: Visual guide for roof rail compatibility. The ACE-1 system is compatible only with vehicles featuring raised roof rails, as indicated by the green checkmark.

3.1. Package Contents

- Aluminum Roof Bars (quantity as per order, e.g., 3 bars)
- Vehicle-specific Mounting Kit
- Keys for Locking Mechanism

3.2. Material Specifications



Image 3.2: Detailed view of the ACE-1 components, highlighting the 6063 T5 Aluminum bars and PA6 GF30 plastic parts. It also shows the temperature resistance from -40°C to +80°C and aerodynamic design features.

- **Bars:** High-strength 6063 T5 Aluminum
- **Connecting Components:** UV-resistant PA6 GF30 plastic
- **Temperature Resistance:** -40°C to +80°C (-40°F to +175°F)
- **Security:** Integrated locking mechanism

4. SETUP AND INSTALLATION

Installation of the ACE-1 roof rack bars typically takes 15-25 minutes and does not require professional assistance. Follow these steps carefully:

1. **Identify Bar Lengths:** On some vehicles, the roof dimensions may decrease from front to rear. In such cases, mount the longer bar at the front and the shorter bar at the rear. For vehicles with equal front and rear roof dimensions, bar lengths may be identical.
2. **Assemble Components:** Attach the connecting components to the aluminum bars as shown in the diagrams.

Ensure all parts are correctly oriented.

3. **Position Bars:** Place the assembled bars onto your vehicle's raised roof rails. The fixing structure is designed to adapt to the position and angle of the roof rails.
4. **Secure Bars:** Use the provided mounting kit to firmly secure the bars to the roof rails. Tighten all fasteners according to the instructions in the mounting kit.
5. **Lock Mechanism:** Engage the integrated locking mechanism on each bar using the provided keys to deter unauthorized removal.
6. **Final Check:** Before driving, gently pull and push on each bar to ensure it is securely fastened and does not move.

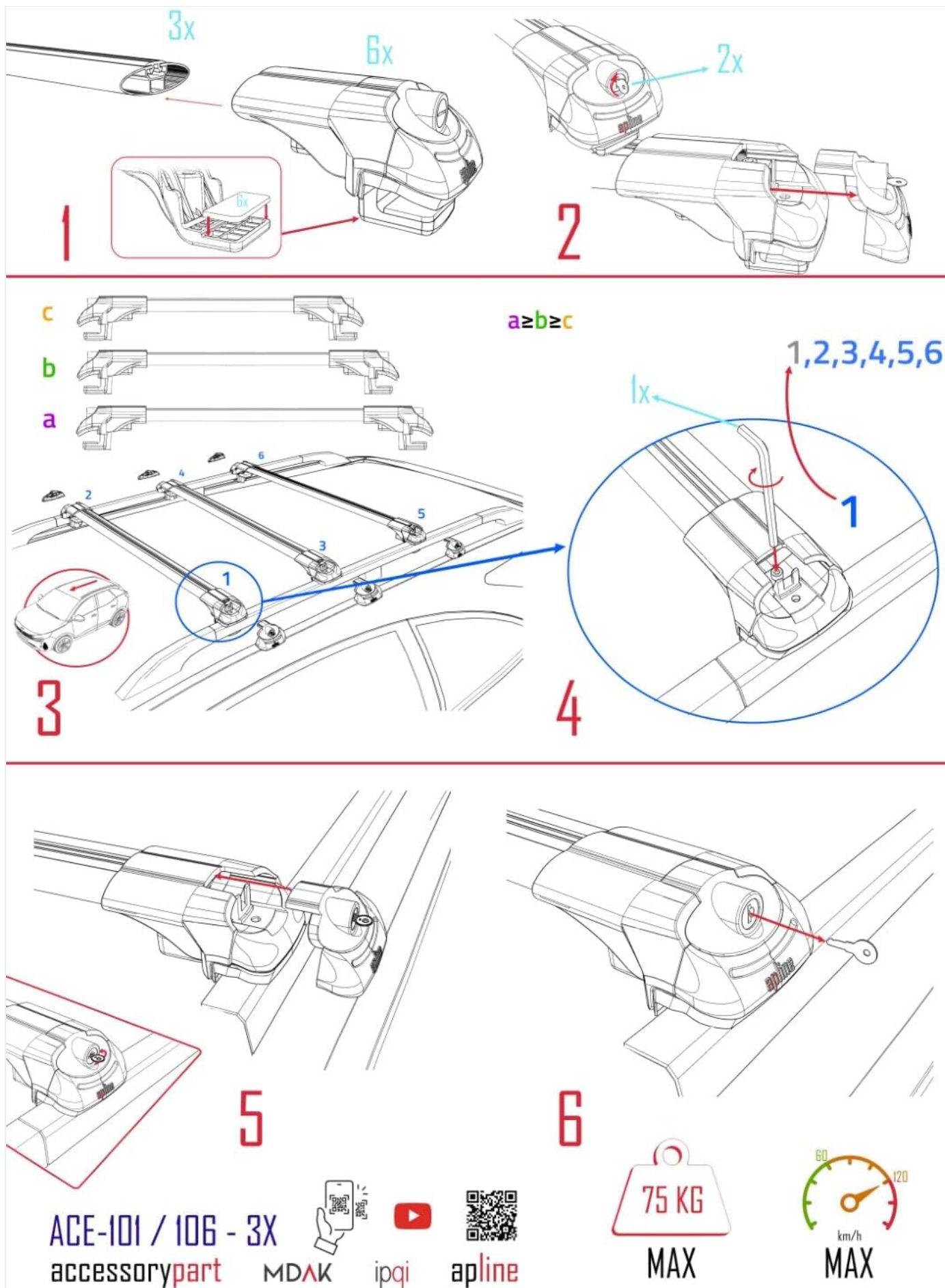


Image 4.1: Installation guide showing the sequence of attaching the end caps, positioning the bars on the roof rails, and securing them with the locking mechanism. Steps 1 through 6 are visually depicted.



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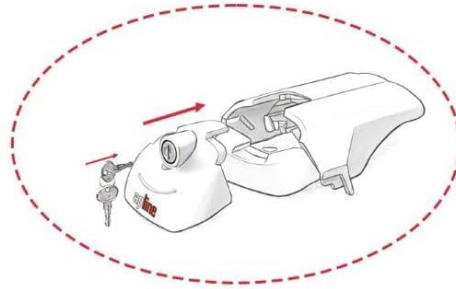
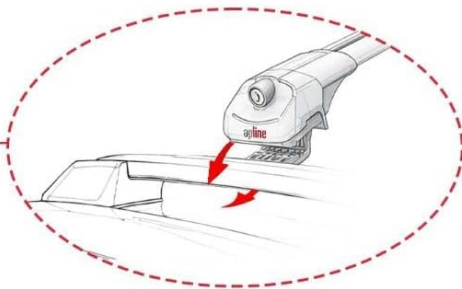


Image 4.2: Detail of the locking mechanism, demonstrating how the key is used to secure and release the roof rack end cap, providing anti-theft protection.

5. OPERATING AND LOAD CAPACITY

The ACE-1 roof rack bars are compatible with various standard accessories such as bike carriers, canoe supports, and ski carriers. They also allow for the installation of roof boxes to create additional luggage space.

5.1. Load Capacity

- **While Driving:** The aluminum bars can transport up to 75 kg (165 lbs) of evenly distributed load.
- **While Parked (Static Load):**
 - With 2 bars: Up to 150 kg (330 lbs)
 - With 3 bars: Up to 225 kg (496 lbs)
 - With 4 bars: Up to 300 kg (661 lbs)

These static load capacities make the ACE-1 suitable for roof tents and other camping equipment when the vehicle is stationary.

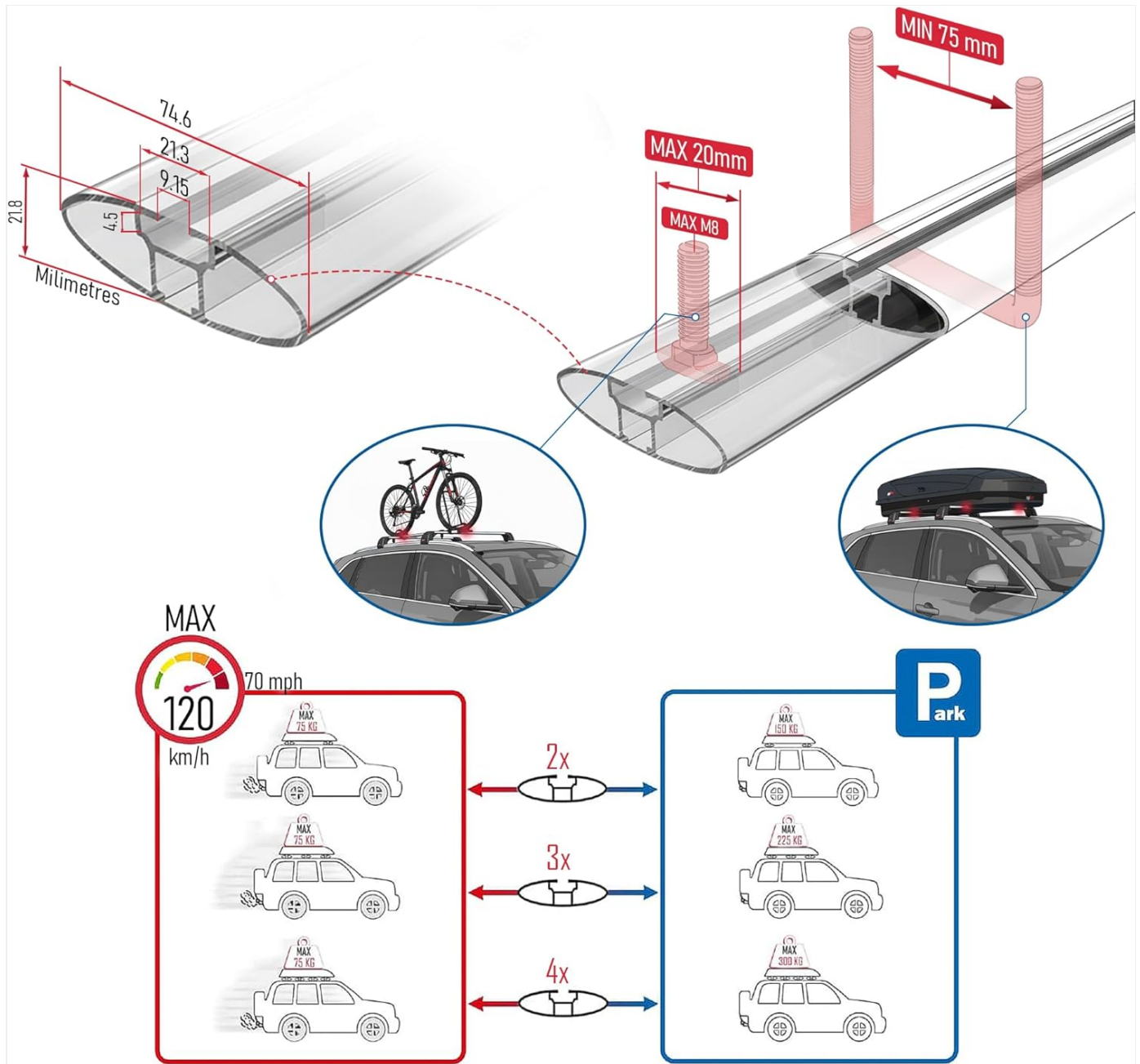


Image 5.1: Load capacity guidelines. This image details the maximum dynamic load of 75 kg per bar (up to 120 km/h) and static load limits (150 kg for 2 bars, 225 kg for 3 bars, 300 kg for 4 bars when parked). It also shows compatibility with T-Bolt (max 20mm width, 4mm height, M8 bolt) and U-Type accessories.

5.2. Accessory Compatibility

- **T-Bolt Systems:** The aluminum bars feature a channel structure compatible with T-Bolt fixing systems. Maximum compatible T-Bolt dimensions: 20 mm channel width, 4 mm channel height, M8 bolt.
- **U-Type Fixings:** The aluminum bars, with a width of 75 mm and height of 22 mm, are also compatible with U-Type fixings. If using U-Type fixings, verify the compatibility of your accessories.

6. MAINTENANCE

- Regularly inspect all components for signs of wear, damage, or corrosion.
- Ensure all fasteners are tight and secure, especially after initial installation and before long journeys.
- Clean the bars and connecting components with mild soap and water. Avoid abrasive cleaners or solvents that could damage the materials.
- Lubricate locking mechanisms periodically to ensure smooth operation.

- If any part is damaged, replace it immediately with genuine Apline spare parts.

7. TROUBLESHOOTING

- **Excessive Wind Noise:** Ensure bars are correctly installed and all components are tight. Remove the roof rack when not in use to eliminate wind noise.
- **Loose Bars:** Re-tighten all mounting bolts. If the issue persists, re-check installation steps and ensure compatibility with your vehicle's roof rails.
- **Difficulty Locking/Unlocking:** Apply a small amount of graphite lubricant to the key and lock cylinder. Ensure no debris is obstructing the mechanism.
- **Cargo Shifting:** Re-secure cargo using appropriate tie-downs and ensure even weight distribution. Verify that elastomer seals are intact.

8. SPECIFICATIONS

Brand	Apline
Model Number	U01-UN-35-00-S_AC1-419-3lu*APEU
Product Dimensions (LxWxH)	102 x 20 x 5 cm (40.16 x 7.87 x 1.97 inches)
Item Weight	3 Kilograms (6.61 lbs)
Installation Type	Vehicle Specific (for raised roof rails)
Foldable	No
Country of Origin	Turkey
Max Dynamic Load Capacity	75 kg (165 lbs)
Max Static Load Capacity (2 bars)	150 kg (330 lbs)
Max Static Load Capacity (3 bars)	225 kg (496 lbs)
Max Static Load Capacity (4 bars)	300 kg (661 lbs)
T-Bolt Channel Dimensions	Width: 20 mm, Height: 4 mm, Bolt: M8
Bar Dimensions (for U-Type)	Width: 75 mm, Height: 22 mm

9. WARRANTY INFORMATION

The manufacturer's warranty description is not provided in the product details. Please refer to your purchase documentation or contact the seller for specific warranty terms and conditions.

10. SUPPORT

For further assistance, questions regarding installation, or troubleshooting, please contact the seller directly through the platform where the product was purchased. Ensure you have your product model number (ACE-1) and purchase details available.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question