Bestop Aluminess, LLC
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619-449-9930

MB SPRINTER BASE UNIT INSTALLATION INSTRUCTIONS

SKU: 210760

IMPORTANT

- APPLY ANTISEIZE TO STAINLESS HARDWARE
  - Stainless steel hardware may bind together when tightening—MUST apply an **anti-seize** lubricant to the threads of each bolt before assembly.
- Maximum load is 200 lbs evenly distributed on the base unit while traveling.

Required Tools

- Standard/Metric Wrenches
- Standard/ Metric Sockets
- Standard Allen Keys
- Torx Bit
- Isopropyl Alcohol
- Liquid Soap
- Spray Bottle
- Clean Rag
- Squeegee OR Plastic Card

Included Hardware		
PN	**DESCRIPTION**	**QUANTITY**
70004	HEX LOCKNUT, 10-32, SS	2
70008	HEX LOCKNUT, 1/4-20, SS	2
70009	FW, 1/4 X 5/8 X .045, SS	2
70060	BHCS, 1/4-20 X 1, SS	4
70079	BHCS, 10-32 X 1/2, SS	4
70111	SW, 5/16, ZINC	6
70124	HHCS M8-1.25 X 40MM, ST, ZINC, GR 8.8	6
70246	ANTI SEIZE	1
70344	BHCS, 5/16-18 X 1, SS, BO	4
70345	FW, 5/16, SS, BO	8
70346	HEX LOCKNUT, 5/16-18, SS, BO	4
70436	FW, 3/8 X 1, CUSHIONING	2
70449	WELD NUT, 1/4-20, SS	2
350747.1	PROTECTIVE TAPE, CENTER	1
350747.2	PROTECTIVE TAPE, LOWER HINGE	1
350747.3	PROTECTIVE TAPE, UPPER HINGE	1
401021	DOOR LIMITING STRAP	1

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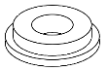
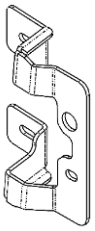
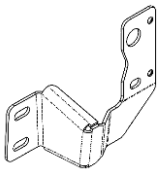
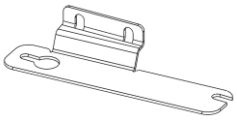
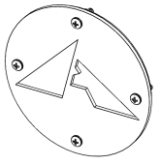
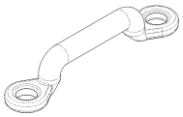
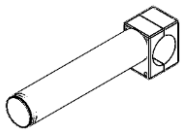
Included Parts/Subassemblies

PN	DESCRIPTION	QUANTITY	PICTURE
301258	M8 Machined Spacer	3	
350638	Hard Stop, Strap Bracket	1	
350650	Upper Hinge Bracket, Pas	1	
350652	Lower Hinge Bracket, Pas	1	
350663	Door Seam Bracket	1	
350676	Hard Stop, Strap Clamp	1	
350852	Emblem Replacement	1	
401022	Webbing Anchor, 1” Webbing	1	
350662	8” Tire Support Post	2	
301877	Logo Shim (2 5/8” X 3/4”)	1	

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Install Instructions

Prep:

1. Remove the Mercedes Emblem from the rear passenger door by unscrewing the torx bolts and peeling the adhesive off.
2. Use the supplied protective tape to protect your paint.

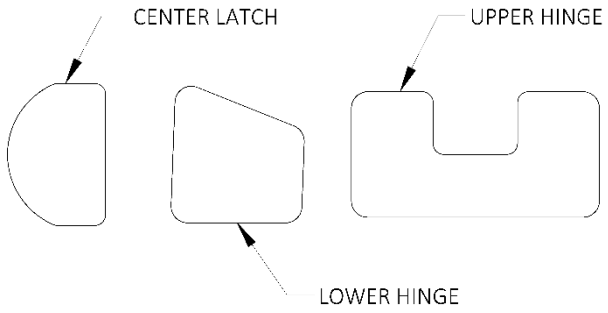

Figure 1: Protective Tape

3. Prepare to apply the protective tape one at a time to each location shown on the passenger side door,
    a. Top hinge
    b. Lower hinge, tape is located directly below the bottom of the hinge
    c. Lower inner door, the tape is located at the same height as the latching mechanism

Figure 2: Protective Tape Vehicle Locations

IMPORTANT: Do not apply in direct sunlight, temperature must be above 60 ˚F, and wash your hands thoroughly before application.

    d. Clean the area around each hinge with isopropyl alcohol and rag.
    e. Create two separate wetting solutions in spray bottles:
        i. Soap and water: 95% water and 5% soap
        ii. Alcohol and water: 75% water and 25% isopropyl alcohol
4. Spray the taping location thoroughly with soap/water solution and do **not** wipe down surface.
5. Remove the liner from the protective tape while spraying the **adhesive side** with soap/water solution.
6. Apply the protective tape to the outside of the door. At the upper and lower hinge location, leaving approximately a ½" of tape overhanging to be wrapped around the edge of the door. Do **not** attach the overhang yet.
7. Use a squeegee or card to press all air bubbles out starting at adhered edge.
8. Use the alcohol/water solution to speed up adhesion at one edge by lifting a section up and spraying the adhesive side as needed.
9. Wrap remaining protective tape around the door underneath hinge as best as possible.

Bracket Install:

10. On the upper hinge bracket, uninstall the lower factory bolt located on the door.
    a. NOTE: Leave the upper bolt installed.

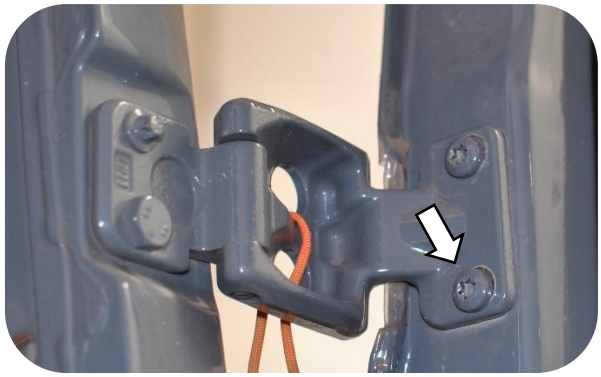

Figure 3: Upper Hinge, Bolt to Remove

11. Fit the upper hinge bracket (350650) over the hinge and rotate into place.

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Figure 4: Fitting Upper Bracket over the Hinge

Figure 5: Rotating Upper Bracket into Position

12. Install a M8-1.25 x 40MM hex head bolt (70124) and 5/16" split washer (70111) into the bottom hole. Tighten the bolt.

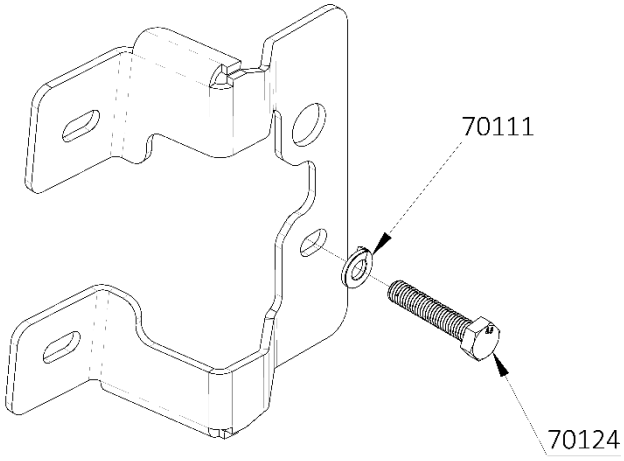

Figure 6: Upper Bracket, Lower Bolt Hardware

Figure 7: Upper Bracket, Installed Lower Bolt

13. Remove upper factory bolt and install a M8 machined spacer (301258), M8-1.25 x 40MM hex head bolt (70124) and 5/16" split washer (70111).

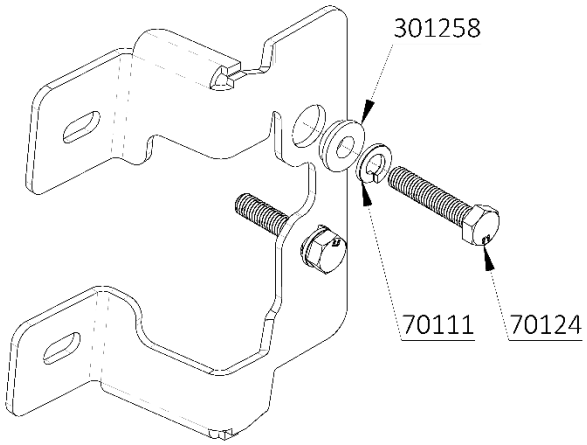

Figure 8: Upper Bracket, Upper Bolt Hardware

Figure 9: Upper Bracket, Installed Upper Bolt

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14. Remove the 2 door plugs closest to the emblem.

Figure 10: Remove Door Plugs

15. Assemble the door seam bracket hardware in this order exactly – ¼”-20 weld nut (projections towards rubber), 3/8” cushioning washer, ¼” ID washer, ¼”-20 x 1” bolt.

Figure 11: Door Seam Mounting Hardware Order

16. Insert the end of the weld nut through the upper of the door seam holes.

Figure 12: Installing the Nut

17. Rotate the weld nut through into to the door seam.
18. Fold the cushioning washer and insert into the hole. Note: trying to remove the washer is likely to destroy washer.

Figure 13: Installing the Cushioned Washer

19. Once inserted, the washer should prevent the assembly from falling through – carefully verify.
20. Repeat with the lower plug hole.
21. Insert door seam bracket over the inserted hardware.

Figure 14: Installing the Door Seam Bracket

22. Slide the bracket down while aligning the holes at the location of the emblem.

Figure 15: Door Seam Orientation with Logo Bolts

23. While applying slight backpressure, tighten the door seam bracket down.

Figure 16: Tightening Hardware

24. Fit the lower hinge bracket (350652) over the hinge by lifting the bracket up from the bottom.
25. Place the bracket over the upper factory bolt and the hole left by the lower bolt.
26. On the lower hinge bracket, uninstall the lower factory bolt located on the door.
    a. NOTE: Leave the upper bolt installed.
27. Install a M8-1.25 x 40MM hex head bolt (70124) and 5/16” split washer (70111) into the bottom hole. Tighten the bolt.

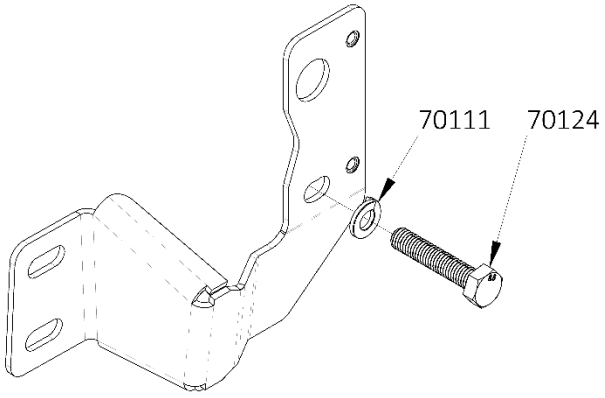

Figure 17: Lower Bracket, Lower Bolt Hardware

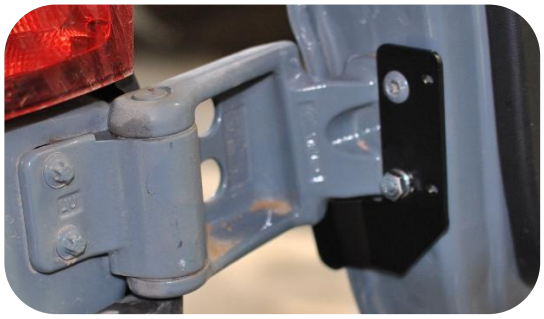

Figure 18: Lower Bracket, Installed Lower Bolt

28. Remove upper factory bolt and install a M8 machined spacer (301258), M8-1.25 x 40MM hex head bolt (70124) and 5/16” split washer (70111).

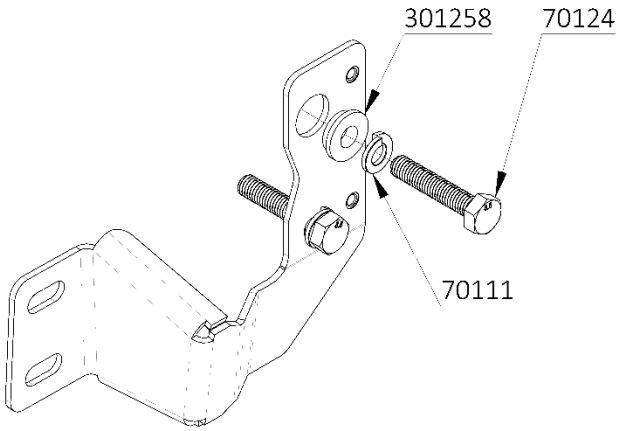

Figure 19: Lower Bracket, Upper Bolt Hardware

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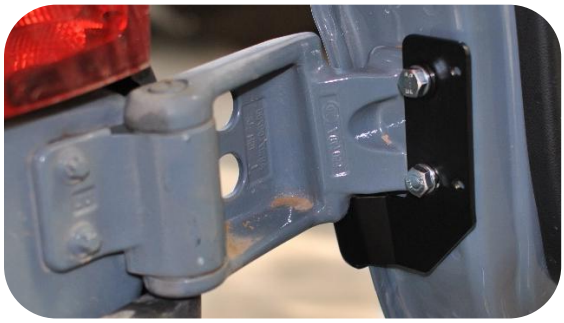

Figure 20: Lower Bracket, Installed Upper Bolt

Limiting Strap Install (optional):

29. Install the smaller eyelet of the strap through the webbing anchor onto the lower hinge bracket using 2X #10-32 x ½" Philips head bolts (70079).
    a. NOTE: PEM nuts included in the bracket.

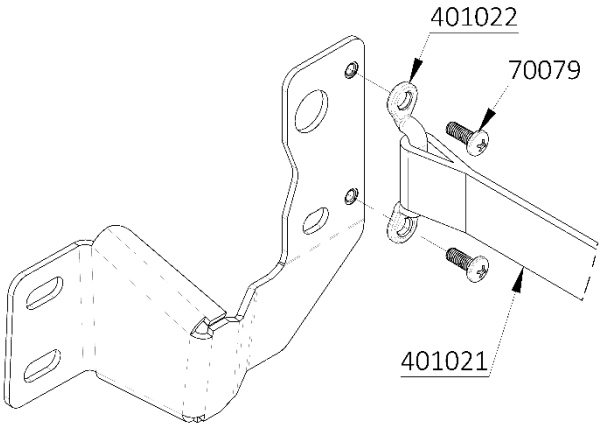

Figure 21: Limiting Strap Install to Lower Hinge

30. Following the same process as the hinges, on the lower hinge where it is connected to the van, remove the lower factory bolt.
    a. NOTE: Leave the upper bolt installed.
31. To install the hard stop clamp (350638), use a M8-1.25 x 40MM hex head bolt (70124) and 5/16" split washer (70111) in the bottom hole. Tighten the bolt.

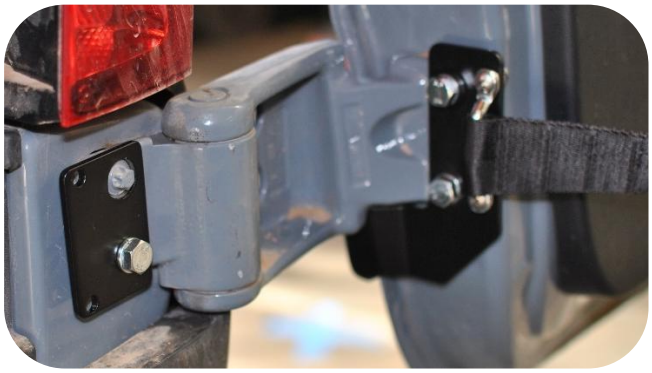

Figure 22: Installing Lower Bolt of Hard Stop

32. Remove upper factory bolt and install a M8 machined spacer (301258), M8-1.25 x 40MM hex head bolt (70124) and 5/16" split washer (70111). Tighten the bolt.

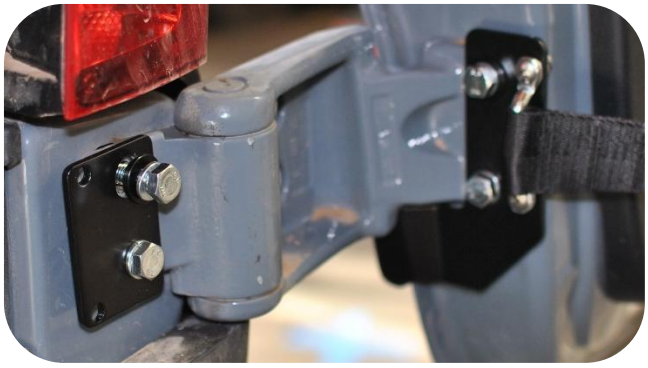

Figure 23: Installing Upper Bolt of Hard Stop

33. Bolt the strap to the hard stop bracket using 2X #10-32 x ½" Philips head bolts (70079), 2X #10-32 nylon-locking nuts (70004). Direct the strap towards the lower hinge when tightening down the clamp.

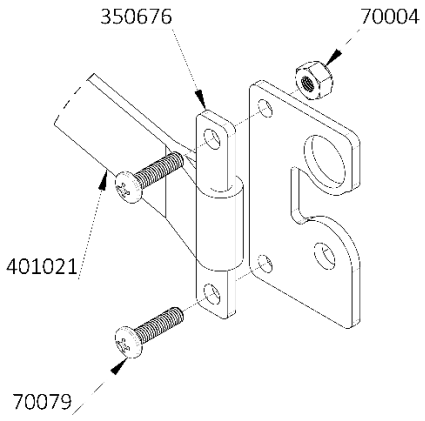

Figure 24: Hard Stop Clamp Hardware

Figure 25: Installed Hard Stop

34. Verify clearances at the fully opened position between the product and the side of the van. Also verify clearances at the lower hinge as the door is slowly closed.

Base Unit Install:

35. Loosely install all bolts through bracket and ladder before tightening.
    a. For the upper hinge use the 5/16 X 1 bolts (2X 70344), the 5/16 nylon locking nuts (2X 70346), and the 5/16 washers (4X 70345).
    b. With the lower hinge use the 5/16 X 1 bolts (2X 70344), the 5/16 nylon locking nuts (2X 70346), and the 5/16 washers (4X 70345).
    c. For the center door seam, place the logo shim (301877) on the outside of the van use the 1/4 X 3/4 bolts (2X 70060), the 1/4 nylon locking nuts (2X 70008), and the 1/4 washers (4X 70009).

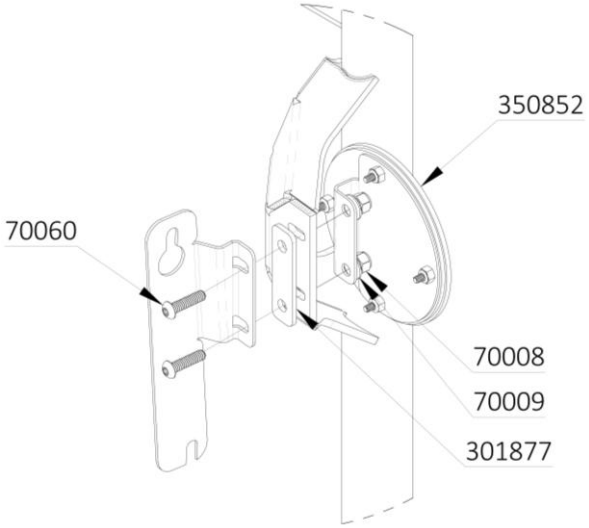

Figure 26: Center Door Seam Hardware

36. Tighten the upper and lower hinge brackets.
37. With all bolts tightened, verify the hinge brackets and inner door brackets have appropriate clearances with the body while slowly opening and closing both rear doors. Adjust as needed.
38. Complete the installation of any additional Aluminess products by following the separately provided instructions.
    a. Vertical Bike Rack System (210551)
    b. Horizontal Bike Rack System (210552)
    c. Box – Use the provided hardware (70038, 70039, and 70040) to bolt through the box supports

Bolt-On Support Install:

39. Unscrew the bolts holding the pipe clamp together and place the posts facing out on the bottom of the pipe of the base unit. Orientate the posts so the side with the top of the clamp flush with the post is on top.

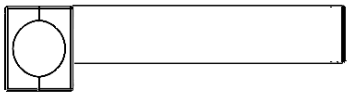

Figure 27: Post Orientation

40. Tighten the pipe clamp support posts down.

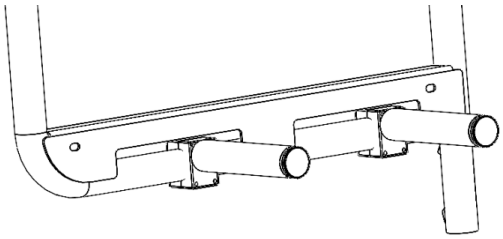

Figure 28: Posts Installed

41. Check mounting hardware after first 100 miles of driving and periodically thereafter. Your new Aluminess base unit is now installed, enjoy!

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TORQUE SPECIFICATIONS			
SIZE (SAE)	18-8 SS	GRADE 5 ZINC PLATED	GRADE 8 ZINC PLATED
6-32 (IN-LBS)	9.6	15.3	21.5
8-32 (IN-LBS)	19.8	29.5	41.7
10-24 (IN-LBS)	22.8	47.0	62.9
10-32 (IN-LBS)	31.7	48.0	68.0
1/4-20 (IN-LBS)	75.2	91	129
5/16-18 (IN-LBS)	132	188	265
3/8-16 (FT-LBS)	20	28	39
7/16-14 (FT-LBS)	31	44	63
1/2-13 (FT-LBS)	43	68	96
9/16-12 (FT-LBS)	57	109	226
SIZE (Metric)	18-8 SS	CLASS 8.8 ZINC PLATED	CLASS 10.9 ZINC PLATED
M5 X 0.8 (IN-LBS)	38.4	46.8	66.0
M6 X 1.0 (IN-LBS)	57.6	79.2	112.8
M8 X 1.25 (IN-LBS)	99.6	192.0	274.8
M10 X 1.5 (FT-LBS)	13.8	31.6	45.2
M12 X 1.75 (FT-LBS)	21.0	55.1	78.9
M14 X 2.0 (FT-LBS)	29.4	88.1	126.1

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Aluminess Products, Inc. (Aluminess) Warranty

1. Lifetime Warranty. Aluminess provides a lifetime warranty of its products to the original retail purchaser provided such products are installed correctly according to the official Aluminess installation instructions. Any modification to the original product design, function or use of any Aluminess products will void the Aluminess warranty. Aluminess will have sole discretion to determine warranty eligibility for any and all Aluminess products sold to any purchaser.
2. Limited Remedies. Subject to any limitations and exclusions described herein, and subject to Aluminess' determination of warranty eligibility, Aluminess will remedy defects in product materials and/or workmanship of any product by repairing or replacing such defective product, which shall be within Aluminess' sole discretion, without charge for parts or labor. Aluminess may elect in its sole discretion not to replace a defective product and issue the purchaser a refund equal to the purchase price of any defective product or purchaser may elect to receive a credit (equal to such refund) toward the purchase of new Aluminess products. Repair or replacement of a defective product or providing a refund or credit to purchaser will be purchaser's exclusive remedy under this warranty. Damage to a purchaser's vehicle, cargo and/or any other person or property is expressly excluded from the Aluminess warranty.
3. Modification. Aluminess products are designed to be mounted to factory equipped vehicles. Aftermarket additions to such vehicle may or may not require modification of an Aluminess product. The Aluminess warranty does not extend to any Aluminess products that are modified to fit around other otherwise accommodate or be compatible with any aftermarket vehicle accessories or alterations. Aluminess does not guarantee fitment with any other aftermarket accessories or modified vehicle, and it is up to purchaser to determine fitment prior to purchasing any Aluminess product.
4. Damage. Damage to Aluminess products due to normal wear and tear, including, but not limited to, cosmetic issues and superficial scratches, or structural damage to an Aluminess product in connection with any vehicle collisions or other structural degradation in connection with the use of such vehicle (on road or off road) will not be covered by the Aluminess warranty. Additionally, any product user's misuse, neglect, overloading, improper maintenance or improper installation or repair of any Aluminess products are not covered under the Aluminess warranty.
5. Use of the Products. Aluminess products are designed for off road vehicle use. Installing Aluminess products on a vehicle may exceed the factory designed capabilities of such vehicle and could potentially lead to vehicle damage. Aluminess will not be responsible for any damage caused to a purchaser or user's vehicle or any vehicle accessories caused by the use of any Aluminess products. It is to the sole responsibility of purchaser to inspect and ensure that the intended vehicle and Aluminess products are suitable and compatible for travel on road and off road. No seller nor any manufacturer of Aluminess products will be liable for any loss, damage or injury directly or indirectly arising from the use of any Aluminess products. Before using any Aluminess products, the purchaser or user will determine the suitability of the product(s) for their intended use(s) and the purchaser or user shall assume all responsibility and risk in connection therewith.
6. DISCLAIMER. THE ALUMINESS WARRANTY IS EXPRESSLY MADE IN LIEU OF ANY AND ALL OTHER WARRANTIES, AND EXCEPT FOR THE ALUMINESS WARRANTY SET FORTH HEREIN, ALUMINESS MAKES NO WARRANTY WHATSOEVER WITH RESPECT TO ANY ALUMINESS PRODUCT, INCLUDING ANY WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WHETHER EXPRESS OR IMPLIED BY LAW, COURSE OF DEALING, COURSE OF PERFORMANCE, USAGE OF TRADE, OR OTHERWISE. EXCEPT FOR PURCHASER'S LIMITED REMEDIES SET FORTH HEREIN, IN NO EVENT WILL ALUMINESS BE LIABLE FOR ANY LOST PROFITS, LOST SALES, OR FOR ANY CONSEQUENTIAL, DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY OR PUNITIVE DAMAGES OR FOR ANY OTHER DAMAGES OF ANY KIND OR NATURE.
7. Compliance. Aluminess cannot guarantee that its products comply with all Federal, State, and/or local laws. Purchaser is advised to review local vehicle codes for compatibility prior to purchase to ensure that the installation and use of any Aluminess products does not violate any applicable laws.
8. Warranty Claim Submission. Purchaser will responsible for returning any defective product to Aluminess for warranty consideration and purchaser may be responsible for all costs associated with shipping the product to and from Aluminess. Prior to returning any product for warranty, purchaser must contact Aluminess Products Inc. for proper authorization.