Bestop Aluminess, LLC
info@aluminess.com
(619) 449-9930

ALR POWERLIFT V2 INSTALLATION INSTRUCTIONS

SKU: 210824



IMPORTANT

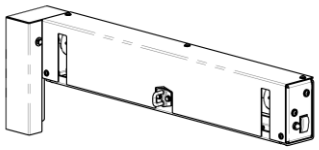
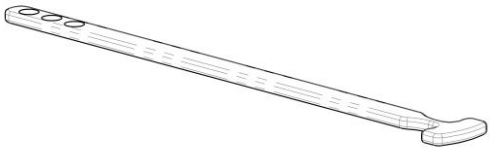
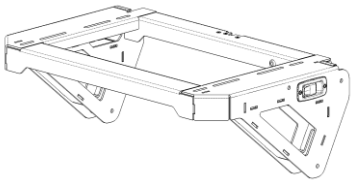
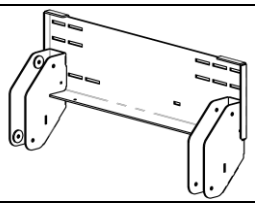
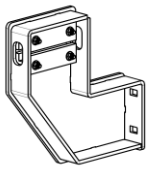
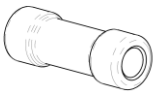
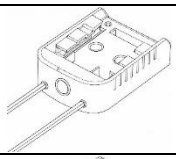
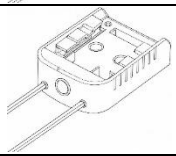
- Install vehicle specific mounting before proceeding with these instructions.
- Weight Capacity
  - Upper Tray – 175 lbs
  - Lower Tray – 100 lbs

Required Tools

- Ratchet with extension, sockets, and wrenches. Sizes: 3/8”, 7/16”, 9/16”
- Hex Bit. Size: 1/8”
- Torx. Size: T27

HARDWARE (600002)		
PART NO.	***QTY.***	***DESCRIPTION***
70383	10	FLNGD HHCS, 3/8-16 X 3 1/4, GR 8, BLK PHOS
70384	10	FLNGD HEX NUT, 3/8-16, GR 8, BLK PHOS
70750	1	THREAD LOCKER, BLUE

Bestop Aluminess, LLC
info@aluminess.com
(619) 449-9930

ADDITIONAL PARTS			
PART NO.	**DESCRIPTION**	**QTY.**	**PICTURE**
352010	POWERBOX	1	
352019	PULL HANDLE ANODIZED	1	
352020	UPPER TRAY	1	
352022	LOWER TRAY	1	
352023	CONTROL ARM	4	
352025	HANDLE BRACKET	1	
301949	STRAP RETAINER	2	
401284	BATTERY ADAPTER, DEWALT	1	
401285	BATTERY ADAPTER, MILWAUKEE	1	

Bestop Aluminess, LLC
info@aluminess.com
(619) 449-9930

Adapter Install

1. Remove the cover from the POWERBOX [352010] using a T27. **See Figure 1.**

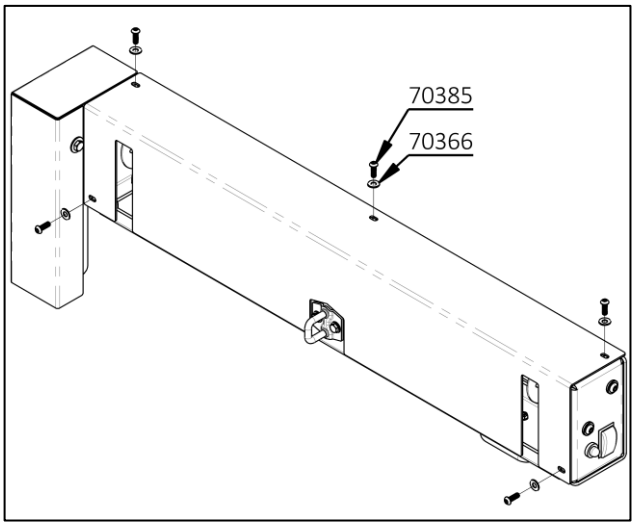


Figure 1: PowerBox Cover Removal

2. Uninstall the (2) BHCS installed on the bottom of the POWERBOX [352010] next to the grommet. Install your adapter (yellow is Dewalt and red is Milwaukee), reinstall the hardware, be sure to not overtighten. **See Figure 2.**

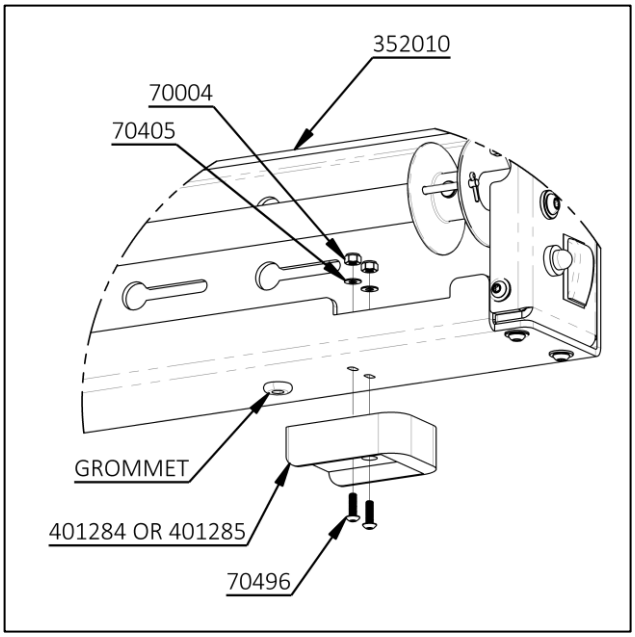


Figure 2: Adapter Installation

3. Feed both wires from the adapter into the POWERBOX [352010] through the grommet called out in **Figure 2.**
4. Connect red adapter wire to red switch wire and black adapter wire to black switch wire with the in-line wire connector. **See Figure 3.**

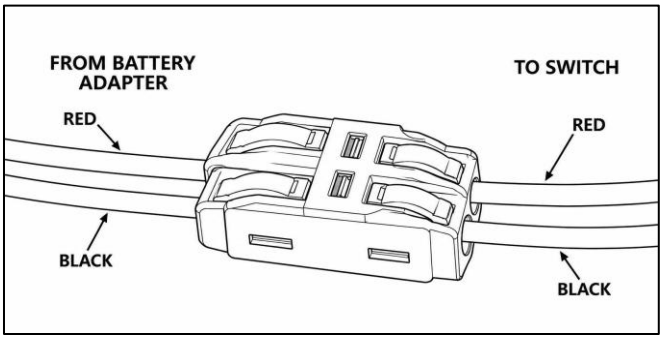


Figure 3: Battery Adapter Wiring

5. Connect battery (sold separately) on the adapter and press the button (the light should turn green). Then press up ▲ on the rocker switch and ensure the shaft rotates clockwise when facing the control panel.
    a. If counterclockwise, switch wire ring terminals on motor.

Bestop Aluminess, LLC
info@aluminess.com
(619) 449-9930

PowerLift V2 Install

NOTE: Install vehicle specific mounting before proceeding with these instructions.

6. Install the CONTROL ARMS [352023] into the LOWER TRAY [352022]. Ensure bumpers are oriented facing the other arm in the clevis and alternate bumper positions. Use (4) 3/8" flange bolts [70383] and nuts [70384]. Apply thread locker to the threads and torque to 30 ft-lbs. **See Figure 4 and Figure 5.**

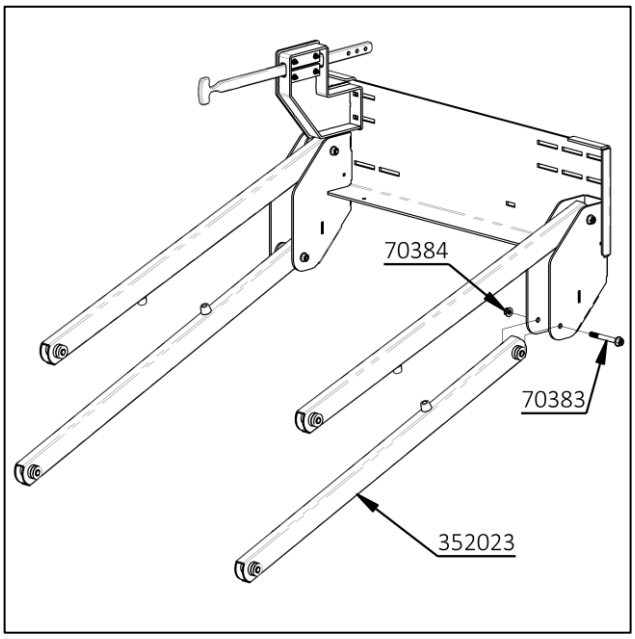


Figure 4: Control Arm Installation

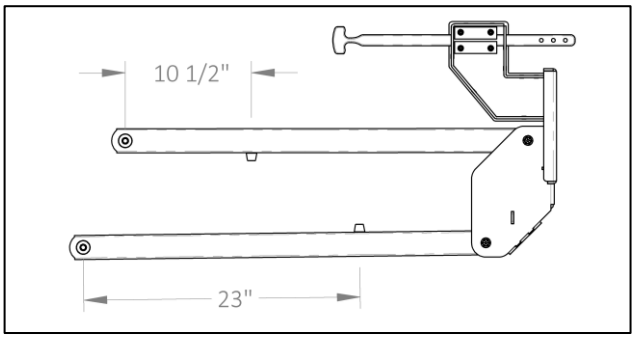


Figure 5: Center of Bushing to Center of Bumper Distances

7. To install the UPPER TRAY [352020], locate the arms into the clevises of the UPPER TRAY. Install the (4) 3/8" flange bolts [70383] and nuts [70384], apply thread locker to the threads and torque to 30 ft-lbs. **See Figure 6.**

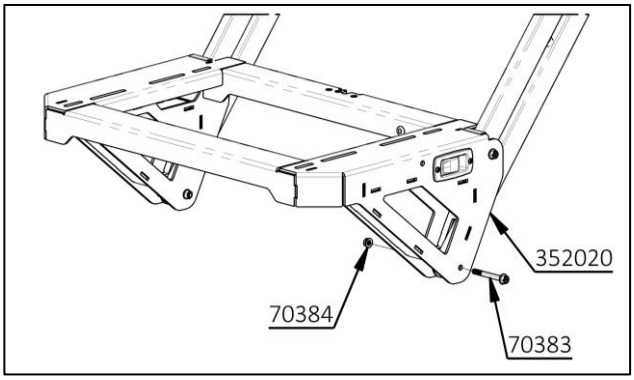


Figure 6: Installing the Upper Tray

8. Finalize the position of the POWERBOX [352010] using the UPPER TRAY [352020]. Carefully latch the UPPER TRAY into the POWERBOX. Adjust the POWERBOX so that the latch in the UPPER TRAY is centered on the striker in the POWERBOX and not touching the UPPER TRAY. Torque all 5/16" hardware in the POWERBOX to the torque specifications. **See Figure 7.**
    a. NOTE: Additional adjustment of the striker can be made by loosening the 1/4 HHCS using a 7/16 wrench.

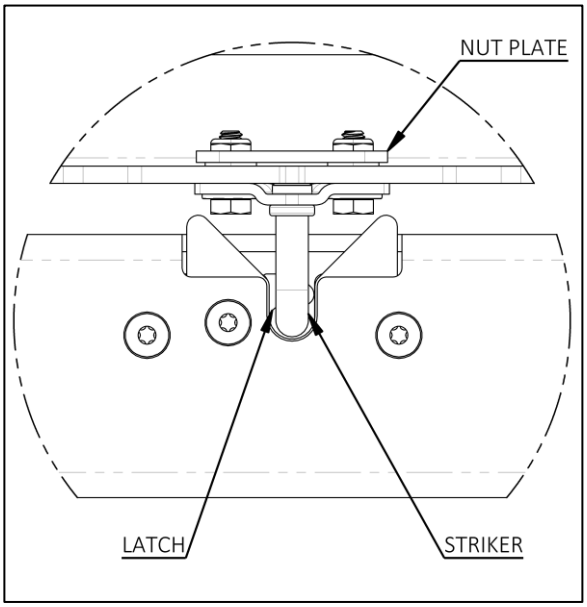


Figure 7: Locating PowerBox, Top View

9. On the right side, feed the STRAP over the CONTROL ARMS into the opening on UPPER TRAY and pass over the release handle/cable. Then on the farthest loop of the STRAP, insert the STRAP RETAINER [301949] through the loop using the cutouts on the inside of the UPPER TRAY.
    a. More loops provided for future adjustment in leveling as needed.
10. Fasten the STRAP RETAINER with a 3/8" flange bolt [70383] and nut [70384]. Apply thread locker on the threads. Torque to 30 ft-lbs. Repeat on the left side. **See Figure 8 and Figure 9.**

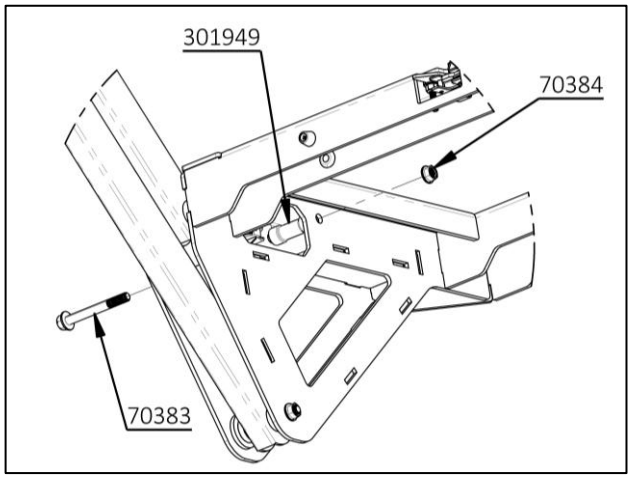


Figure 8: Installing Strap and Strap Retainer

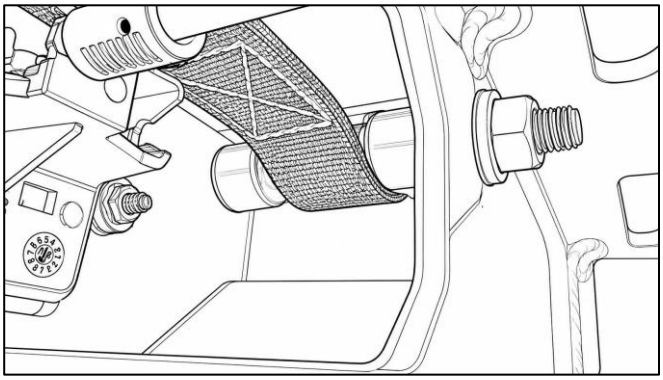


Figure 9: Installed Strap

11. Reinstall the POWERBOX cover using the provided hardware removed at the beginning of the vehicle specific installation using a T27. Torque to 60 in-lbs. **See Figure 10.**

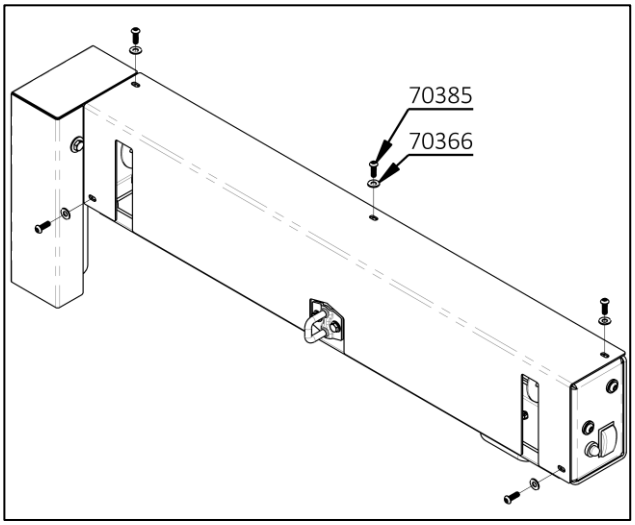


Figure 10: Cover Installation

NOTE: When installing an ALB 185, ensure the strap or bolts do not interfere with the POWERLIFT before finalizing its location.

WARNING

1. Keep clear of the CONTROL ARMS and UPPER TRAY during operation.
2. The max weight on the UPPER TRAY is 175 lbs and on the LOWER TRAY it is 100 lbs.
3. Verify the UPPER TRAY is locked into place before driving.

Bestop Aluminess, LLC
info@aluminess.com
(619) 449-9930

How to Operate

1. Each time a battery is installed into the adapter, press the button on the left side of the adapter, once the button is green the POWERLIFT will be operational.
2. Press the rocker switch up ▲ to move the UPPER TRAY into the fully upright and latched position. Immediately stop pressing up ▲ when the latch engages
3. To move the UPPER TRAY down, pull the release latch and press the rocker switch down ▼ at the same time.
    a. NOTE: if it does not move after 2 seconds, do not continue to press the rocker switch until it has been released.
4. At the bottom of the travel, release the rocker switch down ▼.

NOTE: The adapter has a voltage and amperage detector and will turn off once your battery is running out of power or if the up ▲ on the rocker switch is held too long.

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

Bestop Aluminess, LLC
info@aluminess.com
(619) 449-9930

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.