

Kit PN 18838-R – ELECTRIC BED DUMP ACTUATOR Standard Cab

Kit PN 19160-R – ELECTRIC BED DUMP ACTUATOR Crew Cab

19149 Installation Guide, Bed Lift Package

SPECIAL REQUIREMENTS: This Guide covers Standard Cab and Crew Cab

TOOLS REQUIRED		ESTIMATED INSTALL TIME	RECOMMENDED SKILL LEVEL
9/16" Wrench	1/2" Wrench	2 Hours	Intermediate
9/16" Socket & Ratchet	1/2" Socket		
4 mm Allen Wrench			

Before you begin, check the contents of the kit against the parts list below. Immediately contact American Landmaster with any questions or discrepancies. American Landmaster cannot assume responsibility for any damage or injury resulting from incorrect installation of parts. American Landmaster suggests that accessory kits be installed by an authorized American Landmaster dealer or service center.

!! WARNING !!

Serious Injury or death could occur!

- Use proper personal protective equipment during installation of this kit. Use safety glasses.

PARTS LIST FOR AMERICAN LANDMASTER ACCESSORY KIT

- | | | | | |
|---------------------------|----------------------------|-------------|---------------------|--------------|
| (1) Linear Actuator Motor | (2) 3/8" clevis pin w/clip | (1) Harness | (1) Bed Lift Switch | (6) Zip Ties |
| (1) Fender Cover | | | | |



Figure 1 –Kit contents – 18838-R Bed Lift

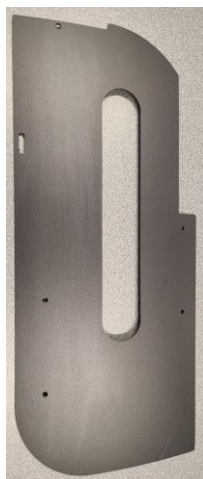


Figure 2: Bed Lift Extension in Crew Cab Kit

ASSEMBLY INSTRUCTIONS:

Here is the instructional video: In Process

Preliminary Dis-Assembly Instructions:

- 1- Remove the hood. Remove three screws from each front fender and two screws from the front hood using the 4 mm Allen wrench. Lift the hood off and set aside. If the vehicle has turn signals, disconnect the amber lights by depressing the release tab on each turn signal lamp connector and pull apart. Set the hood aside where it will not be damaged.



Figure 3: Removing Three Fender Fasteners



Figure 4: Removing Two Hood Fasteners

- 2- Remove the Black Instrument panel cover. Unscrew each stainless steel fastener that holds down the black instrument panel cover using a 4 millimeter Allen wrench. Place the fasteners in a small container so they do not get lost. Lift the cover straight up and off the panel. Set the cover aside where it will not get damaged.



Black Instrument
Panel cover

Figure 5: Removing Black Instrument Panel Cover

- 3- Remove the tunnel cover. Remove 6 bolts from the cab top side. Clamp nuts are used for easy removal and installation. If you have a crew cab, remove the rear tunnel cover as well.



Figure 6: Tunnel Cover Installed



Figure 6: Tunnel Cover Removed

- 4- Remove the driver seat.

Lift up on the rear of the seat to remove. Lift the seat up and out of the vehicle. Set it aside in a safe place. Do not place the seat next to sharp surfaces that could puncture the covering.

- 5- Remove bed latch bolt on both sides of the vehicle using 9/16" wrench and socket. The retaining nut is on the opposite side of the frame tube as shown below. Refer to figure 7.



Fig 7 – Latch Bolt Removal

Bed Lift Switch Installation:

- 1- Remove an available switch blank from the bank of the seven switches plate. Push the blank out from the back of the plate.
- 2- Insert the BED LIFT rocker switch into the open spot. Push the switch into the hole until it clicks into position.



Figure 8: Seven Switch Plate in Instrument Panel



Figure 9: Seven Switch Plate with Bed Lift Switch Added

Bed Lift Harness Installation for the Standard Cab: (See the section labeled Bed Lift Harness Installation for Crew Cab if applicable)

- 1- Start the harness installation by laying the harness on the front cab tunnel with the gray four pin connector positioned forward toward the dash panel.
- 2- First, route the two pin connector rearward through the tunnel and exit on the driver side in the seat frame area.
- 3- Continue the installation of the bed lift harness by continuing to route the remaining portion around the driver's seat frame as shown below.
- 4- Tie wrap the harness to the seat frame at each major tube structure.
- 5- Route the harness up to the side seat frame tube and tie wrap.
- 6- Tie wrap the harness a few inches lower from the seat frame top near the front corner to keep it clear from the seat retainer hook.
- 7- The two pin harness connector should end near the bed lift motor.



Figure 10: Area to route Bed Lift Harness



Figure 11: Bed Lift Harness Tie Wrapped in Place

- 8- Feed the other end of the harness with the gray four pin connector up through the hole in dash panel in the tunnel area.
- 9- Locate one of the gray four pin connector mates for the bed lift harness in the instrument panel harness.

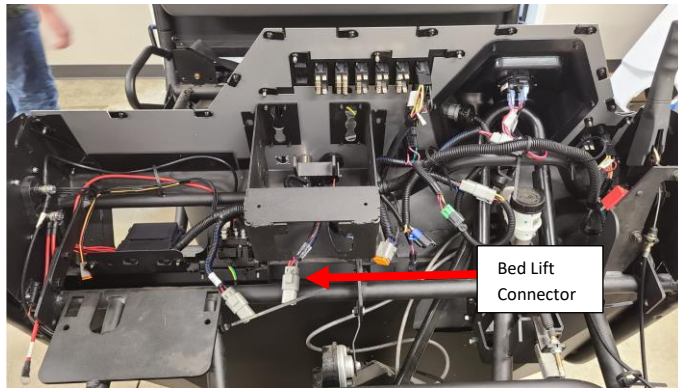


Figure 12: Bed Lift Connector with Cap

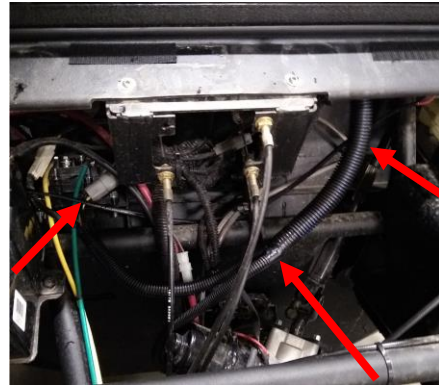


Figure 13: Bed Lift Harness Attached to the Instrument Panel

- 10- Remove the connector cap by depressing the release tab on the cap and pull off of the harness. **DO NOT PULL OFF THE CAP BY PULLING ON THE WIRES.** Use one hand on each connector half.
- 11- Connect the bed lift harness connector to the instrument panel harness connector until you hear a click.
- 12- Find the black 10 pin switch connector labeled BED LIFT and attach it to the bed lift switch.
- 13- Be sure to install the switch in the correct orientation. Line up the hook on the switch with the latch on the harness connector. The hook is on the bottom side of the switch. Place one hand on the front of the switch while installing the harness connector on the rear. A rocking motion will make installing the harness connector easier. Ensure that the connector is lined up with the switch and do not bend the switch pins. Do not force the connection. Push the harness connector onto the switch until the two meet with no gap between them.

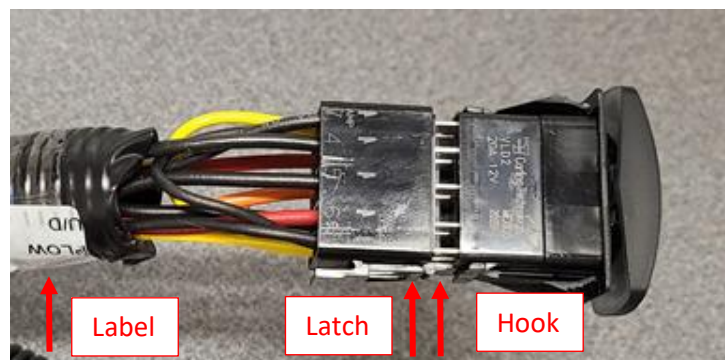


Figure 14: Ensuring Switch Orientation with the Harness Connector

- 14- Tie wrap the bed lift harness to the engine harness in the front dash panel area.



Bed Lift Harness Installation for the Crew Cab

- 1- Start the harness installation by laying the harness on the front cab tunnel with the gray four pin connector positioned forward toward the dash panel.
- 2- Take the two wire extension harness from the kit and attach it to the gray two pin connector on the main harness.



Figure 15: Extension Harness for Crew Cab

- 3- First, route the two pin connector rearward through the tunnel and on through to the rear seat tunnel and exit on the driver side of the rear seat frame area.
- 4- Continue the installation of the bed lift harness by continuing to route the remaining portion around the seat frame as shown below.
- 5- Tie wrap the harness to the seat frame at each major tube structure.
- 6- Route the harness up to the side seat frame tube and tie wrap.
- 7- The two pin harness connector should end near the bed lift motor.



Figure 16: Area to route Bed Lift Harness



Figure 17: Bed Lift Harness Tie Wrapped in Place

- 8- Feed the other end of the harness with the four pin connector up through the hole in dash panel by the tunnel.
- 9- Locate one of the gray four pin connector mates for the bed lift harness in the instrument panel harness.

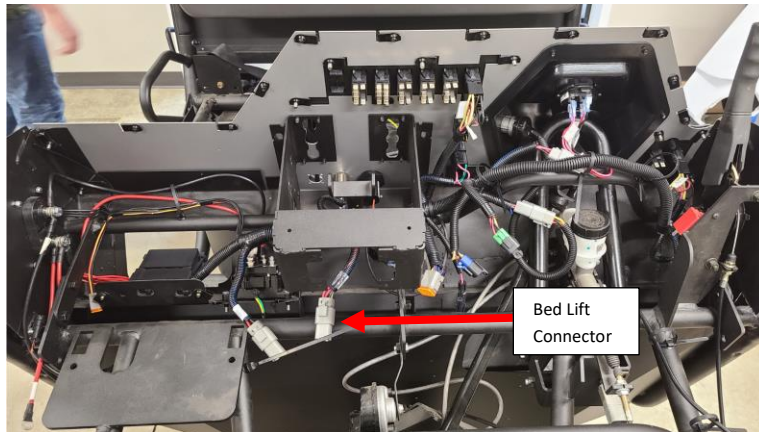


Figure 18: Bed Lift Connector with Cap

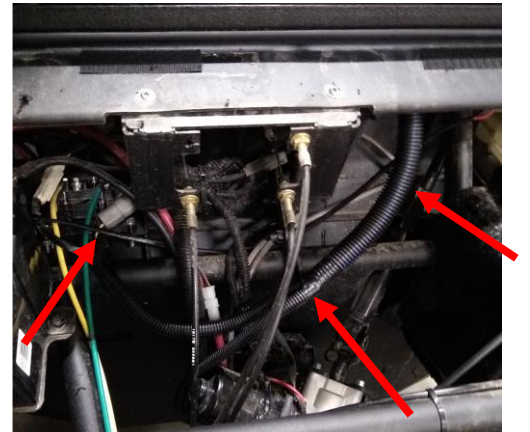


Figure 19: Bed Lift Harness Attached to the Instrument Panel

- 10- Remove the connector cap by depressing the release tab on the cap and pull off of the harness. **DO NOT PULL OFF THE CAP BY PULLING ON THE WIRES.** Use one hand on each connector half to separate.
- 11- Connect the bed lift harness connector to the instrument panel harness connector until you hear a click.
- 12- Find the black 10 pin switch connector labeled BED LIFT and attach it to the bed lift switch.
- 13- Be sure to install the switch in the correct orientation. Line up the hook on the switch with the latch on the harness connector. The hook is on the bottom side of the switch. Place one hand on the front of the switch while installing the harness connector on the rear. A rocking motion will make installing the harness connector easier. Ensure that the connector is lined up with the switch and do not bend the switch pins. Do not force the connection. Push the harness connector onto the switch until the two meet with no gap between them.

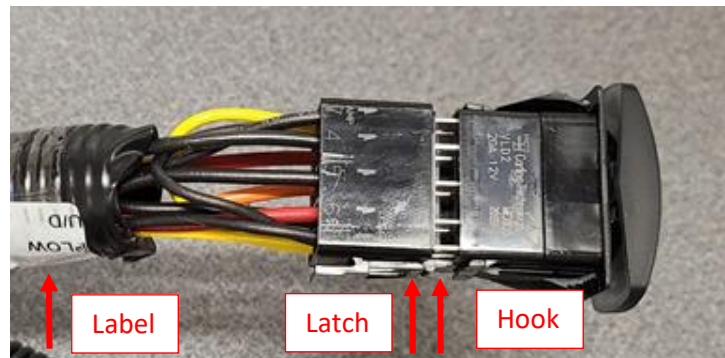


Figure 14: Ensuring Switch Orientation with the Harness Connector

- 14- Tie wrap the bed lift harness to the engine harness in the front dash panel area.

Bed Lift Motor Installation:

- 1- Attach linear actuator motor end to the lower bracket as shown in Figure 20 using the supplied clevis pin. Ensure that actuator is attached such that motor will be oriented in Figure 21. Motor actuator should be facing away from the engine. Install the retaining clip once the clevis pin is inserted.
- 2- Mate the harness connector to the motor connector together. See figure 22.
- 3- Tie wrap up the connector set to the bed lift motor bracket.



Figure 20: Lower Bed Lift Bracket

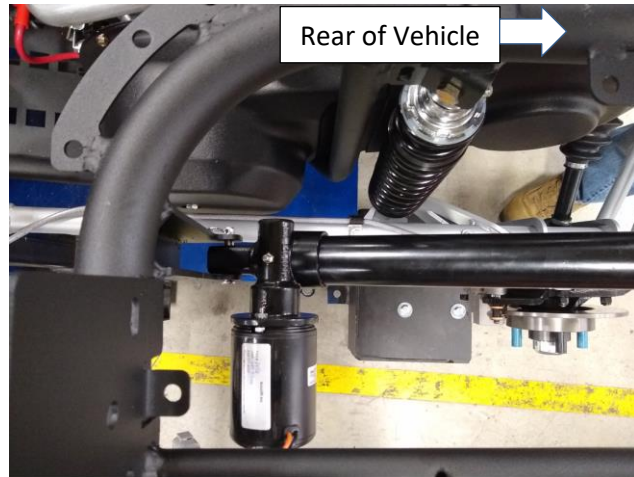


Figure 21: Motor/actuator is installed on lower bracket



Figure 22: Mating the harness connector to the bed lift motor



- 4- Remove the driver side top fender cover and replace with the new fender cover with the slot cut in it provided in the kit. This replacement will first require removal of the back of cab trim panel. Remove the bolt in the top center of the panel. Pull on the central region of the panel so that it deflects out and comes away from the frame.



Figure 23: Original Fender Cover



Figure 24: Bed Lift Fender Cover

- 5- Attach the cylindrical shaft portion of the linear actuator to the upper bracket on the bed using the supplied clevis pin as shown in Figure 26. You may have to actuate the BED UP switch to extend the actuator enough to easily reach the bed.
- 6- Install the hair pin retaining clip in the clevis pin.

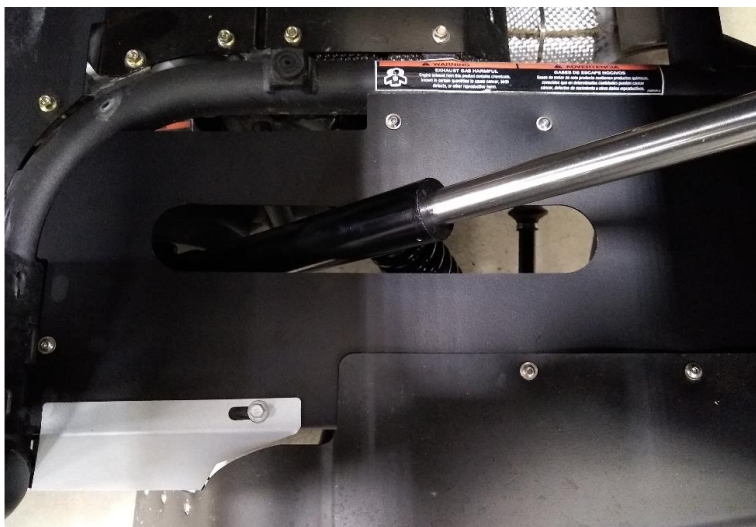


Figure 25: Bed Actuator Projecting through the fender cover



Figure 26: Actuator connected to the bed



Testing the Bed Lift:

- 1- The bed lift feature works with the ignition key off.
- 2- Push the BED UP portion of the switch.
- 3- The body will raise as long as the switch is depressed.
- 4- Push the BED DOWN portion of the switch.
- 5- The bed will lower as long as the switch is depressed.
- 6- The bed travel will cease in both directions once the travel limit is reached,
- 7- Turn on the ignition key.
- 8- Turn on the head lights.
- 9- Verify that the switch backlights illuminate.

Reassembly:

- 1- Reinstall the seat.
- 2- Reinstall the back of cab trim panel.
- 3- Reinstall the tunnel cover(s).
- 4- Reinstall the black instrument panel cover.
- 5- Reinstall the hood. Be sure to hook up the front turns signals, if equipped.