Electric Bed Lift <u>Assembly Instructions</u>



Treker 4200/4400 ST / NT & 4210/4410 ST Series

Manual No. 701-055M

Before You Start



When you see this symbol, the subsequent instructions and warnings are serious - follow without exception. Your life and the lives of others depend on it!

These optional assembly instructions contain only information required to assemble the Electric Bed Lift to the ST and NT Series Treker. A detailed Operator's Manual was supplied with the Treker. Refer to the Operator's Manual for additional specific information especially information relating to safety concerns. Also included in the Operator's Manual is important information on operation, adjustment, troubleshooting, and maintenance for this attachment (some manual sections do not apply to all options).

A separate Parts Manual for replacement parts can be purchased from your dealer or available free of charge at www.landpride.com. Have model and serial numbers handy when placing an order.

Manual Part Numbers:

- Operator's Manual (All NT & ST Series) .. 700-108M
- Parts Manual (4200/4400 NT/ST Series). . 700-108P
- Parts Manual (4210/4410 ST Series). 700-109P

General Information

Instructions for 4210ST & 4410ST Trekers begin on page 1. Instructions for 4200/4400 NT & ST Trekers with serial number 418339 and up begin on page 7. Instructions for 4200/4400 NT & ST Trekers with serial number 418338 and below begin on page 11.

These assembly instructions apply to the Electric Bed Lift Kit for the following options listed below:

701-071A	Treker ST Series (S/N 418339+)
701-072A	Treker NT Series (S/N 418339+)
701-044A	Treker ST Series (S/N 418338-)
701-045A	Treker NT Series (S/N 418338-)

Assembly Instructions for 4210ST & 4410ST Series Trekers

On page 6 is a detailed listing of parts included in this kit. Use this list as a checklist to inventory parts received.

Tools required:

- Standard Blade Screwdriver
- Two 7/16" wrenches
- One 1/2" wrench
- Needle Nose Pliers
- Work Gloves

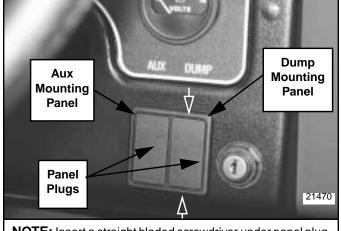
Initial Preparations

- 1. Park vehicle on a level surface. **Don't work under or around a vehicle parked on an incline**.
- 2. Make the following gear and park brake selections:
 - a. 4200/4400 NT & ST Trekers:
 - •Set shift selector in forward gear.
 - Set park brake.
 - b. 4210ST & 4410ST Trekers.
 - •Set shift selector in Park.
- 3. Turn ignition switch off and remove switch key.

Rocker Switch Installation

Refer to Figure 1A:

 Remove panel plug from dump mounting panel by prying with a straight bladed screwdriver under the panel plug.



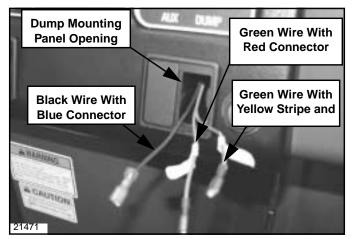
NOTE: Insert a straight bladed screwdriver under panel plug as indicated by white arrows to pry panel plug out.

Aux and Dump Panel Plugs Figure 1A

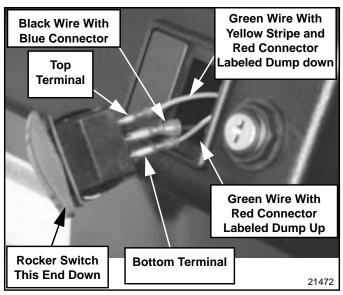
Assembly Instructions for 4210ST & 4410ST Series Trekers

Refer to Figure 2A:

2. Locate behind the dashboard a green wire with red connector, green wire with yellow stripe and red connector and black wire with blue connector. Wires can be located by looking through the left front fender well at the dashboard. If unable to locate the wires, then remove glove box by prying glove box from dashboard with a screwdriver at its rivet locations. Once the wires are located, pull them through the dump mounting panel opening as shown.



Electrical Wiring & Mounting Panels
Figure 2A

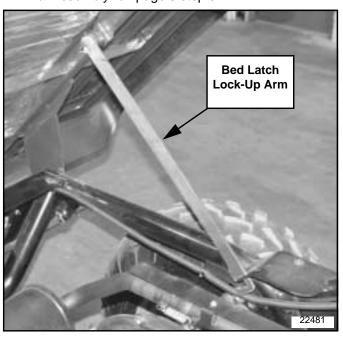


Rocker Switch with Electrical Wiring attached Figure 3A

Refer to Figure 3A:

- 3. Plug wires to rocker switch terminals as follows:
- Green wire with yellow stripe and red connector labeled *Dump Down* to rocker switch top terminal.
- Black wire with blue connector to middle rocker switch terminal.
- Green wire with red connectorlabeled *Dump Up* to rocker switch bottom terminal.

 Do not press rocker switch into dump mounting panel until after electric lift cylinder has been installed and after correct wiring connections have been verified in "Final Assembly" on page 5 step 3.



Bed Latch Lock-Up Arm Figure 4A

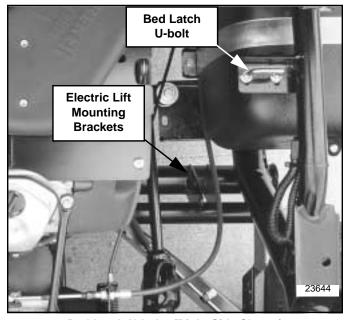
Cargo Latch Removal

Refer to Figure 4A:

 Support the cargo box in the up position with the Bed Latch Lock-Up Arm.

Refer to Figure 5A:

Unbolt and remove the 5/16" U-bolt from the right and left side of the Treker chassis.

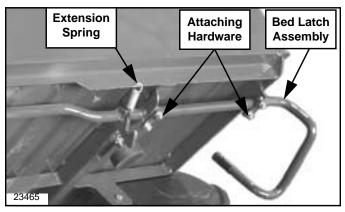


Bed Latch U-bolts (Right Side Shown) Figure 5A

Assembly Instructions for 4210ST & 4410ST Series Trekers

Refer to Figure 6A:

- 3. Remove the two extension springs from the Bed Latch Assembly.
- 4. Remove attaching hardware mounting the Bed Latch Assembly. Attaching hardware consist of eight 1/4"-20 x 5/8" hex head cap screws, flat washers, hex flange lock nuts and four latch keeper bars.



Bed Latch U-bolts (Left Side Shown) Figure 6A

Electric Lift Cylinder Installation

Refer to Figure 7A & Figure 8A:

1. Attach the base of the Electric Bed Lift to the mounting bracket (see Figure 8A for mounting bracket location) with a 1/2" x 49/64" clevis pin. Secure pin with 5/32" cotter pin. The rod end will be attached to the cargo box later. Secure pin in place by bending one leg of the cotter pin.

Refer to Figure 8A:

2. Locate the T-shaped connector mounted on the end of the Treker wiring harness. Cut plastic tie securing the T-shaped connector to the Treker frame.

Refer to Figure 9A:

Plug the T-shaped connector to the Electric Lift connector.

IMPORTANT: The Electric Bed Lift is protected by an internal clutch in both directions. When the up or down travel limit is reached, the electric dump will make a loud "**ratchet**" noise indicating end of travel limit has been reached or the Electric Bed Lift is overloaded. When this noise is heard, release the switch immediately.



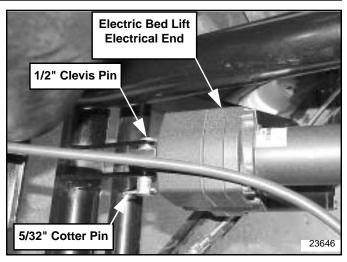
CAUTION!

The cylinder needs to be extended to attach it to the cargo box. Be very careful not to hit anything while extending the cylinder causing bodily injury or damage to the vehicle.

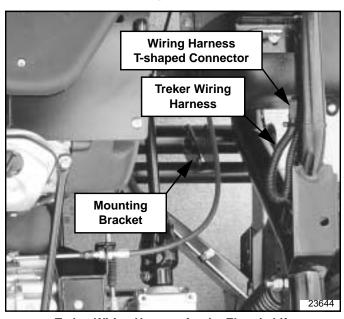


CAUTION!

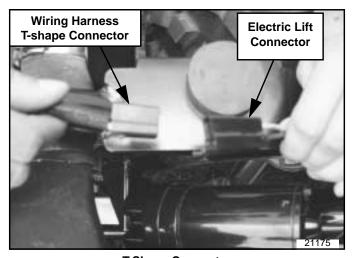
Care should be taken when removing the Bed Latch Lock-Up Arm to prevent injury. Avoid pinch points and make certain the cargo box does not fall when changing from Bed Latch Lock-Up Arm to Electric Bed Lift Assembly.



Electric Lift Lower Mounting Figure 7A



Treker Wiring Harness for the Electric Lift Figure 8A



T-Shape Connector Figure 9A

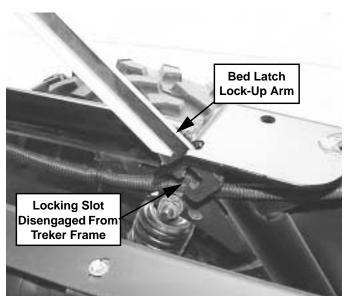
3

Refer to Figure 11A:

4. Do not connect rod end to cargo box until after step 5. Extend the rod end of the electric lift until it is approximately 1" from its connection point located under the cargo box.

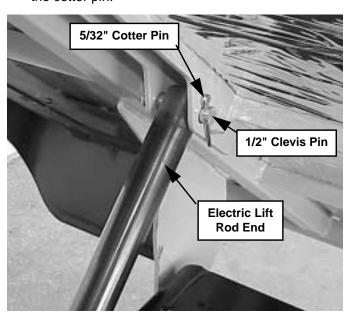
Refer to Figure 10A:

5. With a secure hold on the cargo box, un-hook the Bed Latch Lock-Up Arm as shown.



Bed Latch Lock-Up Arm (Lower End) Figure 10A

6. Manually align the cargo box connection holes with the electric cylinder rod end. Attach rod end to the cargo box with 1/2" x 49/64" clevis pin and 5/32" cotter pin. Secure pin in place by bending one leg of the cotter pin.

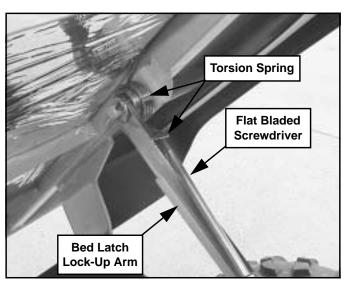


Rod End Connection Figure 11A

Bed Latch Lock-Up Arm Removal

Refer to Figure 12A:

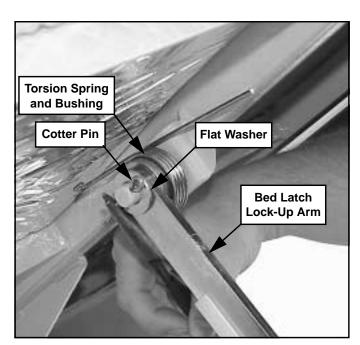
1. With a standard screwdriver, pry the torsion spring off of the Bed Latch Lock-Up Arm.



Un-Hooking Torsion Spring Figure 12A

Refer to Figure 13A:

 Straighten cotter pin and remove. Remove Flat Washer, Bed Latch Lock-Up Arm, torsion spring and bushing.



Bed Latch Lock-Up Removal Figure 13A

Assembly Instructions for 4210ST & 4410ST Series Trekers

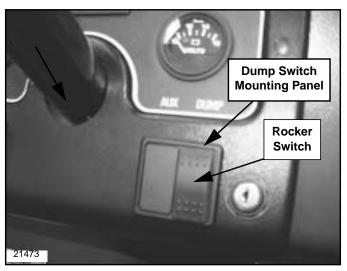
Final Assembly

Refer to Figure 3A on page 2:

3. Correctly orient rocker switch as shown in Figure 3A on page 2 and activate it to raise and lower cargo box. Pushing at the top of the rocker switch should raise the cargo box and at the bottom of the rocker switch should lower the cargo box. Switch the two green wires if the switch does not operate correctly.

Refer to Figure 14A:

4. Once the rocker switch operates correctly, press it into the dump mounting panel.



Rocker Switch Plugged to Electrical Connector Figure 14A

Listing of Parts (4200ST & 4400ST Trekers)

Your kit includes:

701-071A Electric Bed Lift for Treker ST Series

Qty.	Part No.	Part Description
1	701-055M	MANUAL ELECTRIC BED LIFT INSTRUCTION
2	805-045C	PIN COTTER 5/32 X 1 1/4 LG
2	805-303C	PIN CLEVIS 1/2X1 49/64 USABLE
1	833-254C	DUMP SWITCH
1	833-271C	SWITCH ACTUATOR
1	833-317C	ELECT. LINEAR ACTUATOR 12" STROKE

Assembly Instructions for 4200/4400 ST & NT (S/N 418339+)

On page 10 is a detailed listing of parts included in this kit. Use this list as a checklist to inventory parts received.

Tools required:

- Standard Blade Screwdriver
- Needle Nose Pliers
- Work Gloves

Initial Preparations

 Park vehicle on a flat surface, move gear shift lever to neutral, set park brake, turn off engine and remove ignition key.

Refer to Figure 1B:

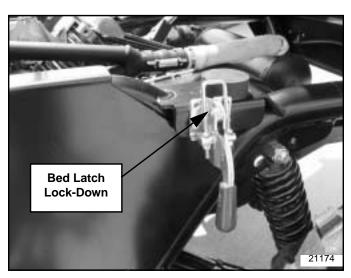
Raise the cargo box fully up to support it with the Bed Latch Lock-Up Arm.



Bed Latch Lock-Up Arm Figure 1B

Refer to Figure 2B:

Unbolt and remove bed latch lock-down from the driver's side of chassis.

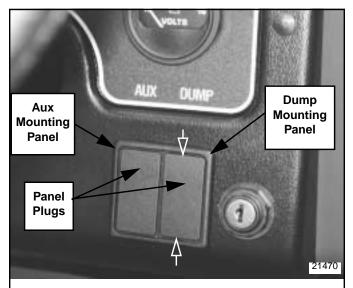


Bed Latch Lock-Down Figure 2B

Rocker Switch Installation

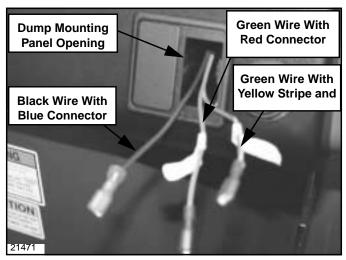
Refer to Figure 3B:

1. Remove panel plug from dump mounting panel by prying with a straight bladed screwdriver under the panel plug.



NOTE: Insert a straight bladed screwdriver under panel plug as indicated by white arrows to pry panel plug out.

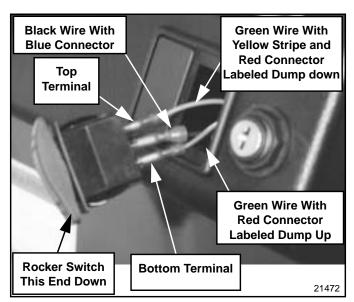
Aux and Dump Panel Plugs Figure 3B



Electrical Wiring & Mounting Panels
Figure 4B

Refer to Figure 4B:

2. Locate behind the dashboard a green wire with red connector, green wire with yellow stripe and red connector and black wire with blue connector. Wires can be located by looking through the left front fender well at the dashboard. If unable to locate the wires, then remove glove box by prying glove box from dashboard with a screwdriver at its rivet locations. Once the wires are located, pull them through the dump mounting panel opening as shown.



Rocker Switch with Electrical Wiring attached Figure 5B

Refer to Figure 5B:

- 3. Plug wires to rocker switch terminals as follows:
- Green wire with yellow stripe and red connector labeled *Dump Down* to rocker switch top terminal.
- Black wire with blue connector to middle rocker switch terminal.

- Green wire with red connectorlabeled *Dump Up* to rocker switch bottom terminal.
- Do not press rocker switch in to dump mounting panel until after electric lift cylinder has been installed and after correct wiring connections have been verified in "Final Assembly" on page 9 step 3.

Electric Lift Cylinder Installation



CAUTION!

Securely support cargo box in the up position to prevent injury while exchanging lock-up arm with Electric Lift Cylinder.

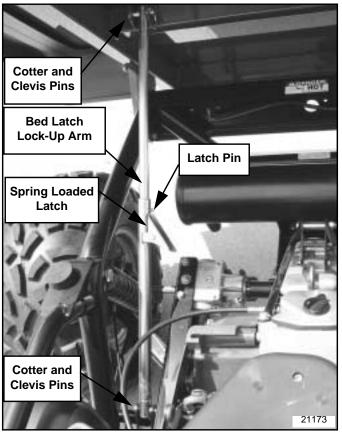


CAUTION!

Care should be taken when removing the Bed Latch Lock-Up Arm to prevent injury. Avoid pinch points and make certain the cargo box does not fall when changing from Bed Latch Lock-Up Arm to Electric Bed Lift Assembly.

Refer to Figure 6B

- Support the cargo box in the up position with a device other than the Bed Latch Lock-Up Arm to relive tension on the connecting pins.
- Remove existing cotter pins and clevis pins located at both ends of the Bed Latch Lock-Up Arm. Remove lock-up arm from vehicle.



Rocker Switch Connection Figure 6B

Assembly Instructions for 4200/4400 ST & NT (S/N 418339+)

Refer to Figure 7B:

3. The Electric Bed Lift mounts in the same pin connections as the Bed Latch Lock-Up Arm was mounted. First mount the electrical end of the Electric Bed Lift to the Treker frame with a 1/2" x 49/64" clevis pin. Secure pin with 5/32" cotter pin. The opposite end will be attached to the cargo box later.

Final Assembly

Refer to Figure 8B:

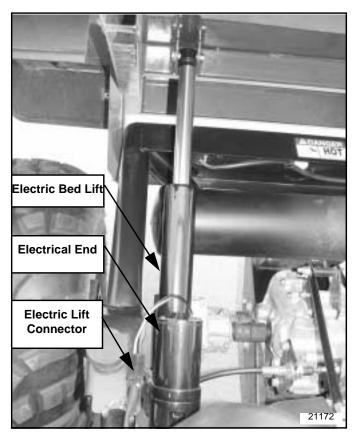
 Locate T-shaped connector on Electric Lift Wiring Harness and connect it to the electric lift connector.

IMPORTANT: The Electric Bed Lift is protected by an internal clutch in both directions. When the up or down travel limit is reached, the electric dump will make a loud "**ratchet**" noise indicating end of travel limit has been reached or the Electric Bed Lift is overloaded. When this noise is heard, release the switch immediately.

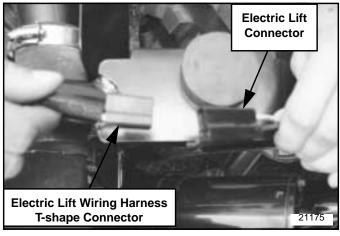


CAUTION!

The cylinder needs to be extended to attach it to the cargo box. Be very careful not to hit anything while extending the cylinder causing bodily injury or damage to the vehicle.



Electric Bed Lift Figure 7B



T-Shape Connector Figure 8B

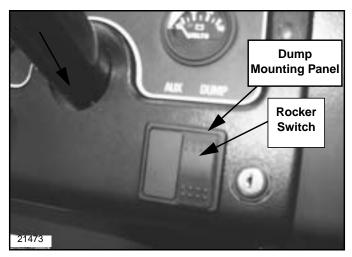
2. Support electric lift cylinder up in alignment with cargo box pin connection point and activate rocker switch to extend electric lift cylinder until it is close to its connecting point. With a secure grip on the cargo box, remove its support and align cargo box pin connection with electric lift cylinder mounting hole. Attach the cylinder to cargo box with 1/2" x 49/64" clevis pin and secure pin with 5/32" cotter pin.

Refer to Figure 5B on page 8:

Correctly orient rocker switch as shown in Figure 5B on page 8 and activate it to raise and lower cargo box. Pushing at the top of the rocker switch should raise the cargo box and at the bottom of the rocker switch should lower the cargo box. Switch the two green wires if the switch does not operate correctly.

Refer to Figure 9B:

- 4. Once the rocker switch operates correctly, press it into the dump mounting panel.
- 5. If the glove box was removed, reinstall it with the drain holes located at the bottom by pushing the existing rivets back into the dashboard.



Rocker Switch Plugged to Electrical Connector Figure 9B

9

Listing of Parts (Trekers with S/N 418339+)

Your kit includes:

701-071A Electric Bed Lift for Treker ST Series

Qty.	Part No.	Part Description
1	701-055M	MANUAL ELECTRIC BED LIFT INSTRUCTION
2	805-045C	PIN COTTER 5/32 X 1 1/4 LG
2	805-303C	PIN CLEVIS 1/2X1 49/64 USABLE
1	833-254C	DUMP SWITCH
1	833-271C	SWITCH ACTUATOR
1	833-317C	ELECT. LINEAR ACTUATOR 12" STROKE

701-072A Electric Bed Lift for Treker NT Series

Qty.	Part No.	Part Description
1	701-055M	MANUAL ELECTRIC BED LIFT INSTRUCTION
2	805-045C	PIN COTTER 5/32 X 1 1/4 LG
2	805-303C	PIN CLEVIS 1/2X1 49/64 USABLE
1	833-254C	DUMP SWITCH
1	833-271C	SWITCH ACTUATOR
1	833-318C	ELECT. LINEAR ACTUATOR 8" STROKE

Assembly Instructions for ST & NT Trekers (S/N 418338-)

On page 15 is a detailed listing of parts included in this kit. Use this list as a checklist to inventory parts received.

The pictures in this section are of an NT Series Treker unless stated otherwise. Battery location and main wiring harness will be in a slightly different location for the ST Series.

Tools required:

- Standard Blade Screwdriver
- Needle Nose Pliers
- Work Gloves

Initial Preparations



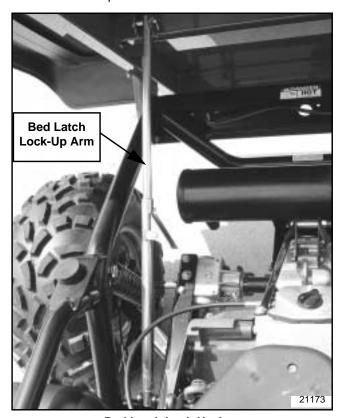
WARNING!

The Electric Bed Lift wiring harness should be installed as outlined in these instructions before removing the Bed Latch Lock-Up Arm to prevent possible injury while working under the cargo box.

 Park vehicle on a flat surface, move gear shift lever to neutral, set park brake, turn off engine and remove ignition key.

Refer to Figure 1C:

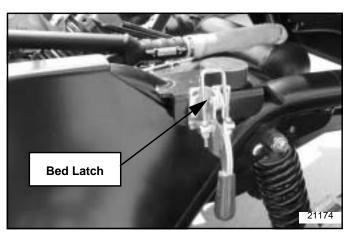
Raise the cargo box fully up to support it with the Bed Latch Lock-Up Arm.



Bed Latch Lock-Up Arm Figure 1C

Refer to Figure 2C:

Unbolt and remove bed latch lock-down from the driver's side of chassis.



Bed Latch Lock-Down Figure 2C

Wiring Harness Installation

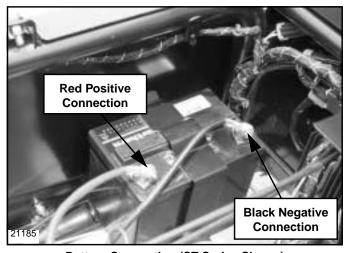


CAUTION!

Disconnect battery before doing any electrical work. Do not reconnect battery until Electric Bed Lift wiring harness is completely installed. Injury to a person and/or the vehicle may result if this caution is not followed.

Refer to Figure 3C:

1. First disconnect the black negative lead at the battery. Then disconnect the red positive lead. Do not reconnect until instructed.

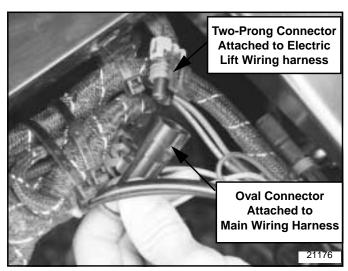


Battery Connection (ST Series Shown) Figure 3C

Refer to Figure 4C on page 12:

 Locate the two-prong connector on the electric lift wiring harness. Also, under the seat platform is the vehicle's main wiring harness where multiple connectors are bundled together. Locate the oval shape connector in this bundle that mates with the two-prong connector on the electric lift wiring harness and snap the two together.

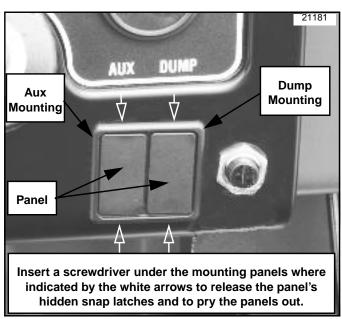
Assembly Instructions for ST & NT Trekers (S/N 418338-)



Oval Shaped Connector Figure 4C

Refer to Figure 5C:

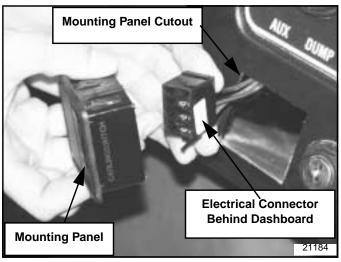
- Remove the two panel plugs from the aux (auxiliary) and dump mounting panels located on the dashboard by prying a screwdriver below each plug.
- 4. Pry out the side by side aux and dump mounting panels with a screwdriver by wedging the screwdriver under the bottom end of the dump mounting panel. Push up under the mounting panel housing to release the mounting panel's hidden snap latch and pry out approximately 1/4" from the dashboard. Repeat this procedure below the aux mounting panel, above the aux mounting panel and then above the dump mounting panel. Continue prying the aux and dump mounting panels out in this counterclockwise fashion until both mounting panels are removed from the dashboard.



Aux and Dump Mounting Panels Figure 5C

Refer to Figure 6C:

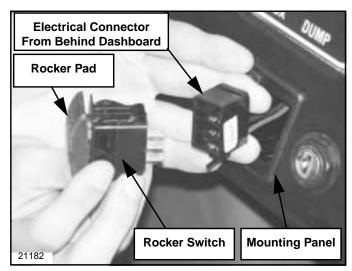
5. Located behind the dashboard is the electric lift electrical connector which can be identified by its two green wires and one black wire. If the connector cannot be located, then remove the glove box by prying the glove box from the dashboard with a screwdriver at its rivet locations. Once the connector is located, pull it through the mounting panel cutout and thread it through the dump mounting panel.



Electrical Connector & Mounting Panels
Figure 6C

Refer to Figure 7C:

- 6. With the electrical connector threaded through the dump mounting panel, press the side by side mounting panels back into the dashboard.
- 7. Align rocker switch terminals with electrical connector sockets and plug the switch into the connector. Do not press the rocker switch into the dump mounting panel until after the electric lift cylinder has been installed and after the correct switch orientation as been determined.



Rocker Switch and Electrical Connector Figure 7C

Electric Lift Cylinder Installation



CAUTION!

Securely support cargo box in the up position to prevent injury while exchanging lock-up arm with Electric Lift Cylinder.

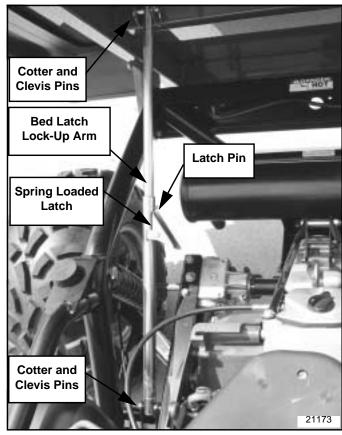


CAUTION!

Care should be taken when removing the Bed Latch Lock-Up Arm to prevent injury. Avoid pinch points and make certain the cargo box does not fall when changing from Bed Latch Lock-Up Arm to Electric Bed Lift Assembly.

Refer to Figure 8C:

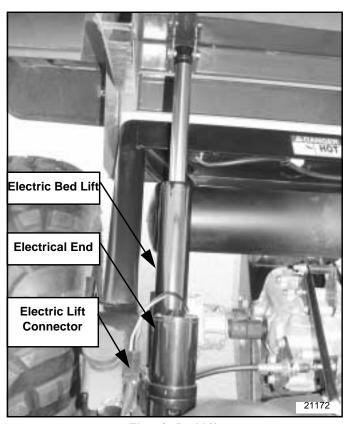
- Support the cargo box in the up position with a device other than the Bed Latch Lock-Up Arm to relive tension on the connecting pins.
- Remove existing cotter pins and clevis pins located at both ends of the Bed Latch Lock-Up Arm. Remove lock-up arm from vehicle.



Rocker Switch Connection Figure 8C

Refer to Figure 9C:

3. The Electric Bed Lift mounts in the same pin connections as the Bed Latch Lock-Up Arm was mounted. First mount the electrical end of the Electric Bed Lift to the Treker frame with a 1/2" x 49/64" clevis pin. Secure pin with 5/32" cotter pin. The opposite end will be attached to the cargo box later.



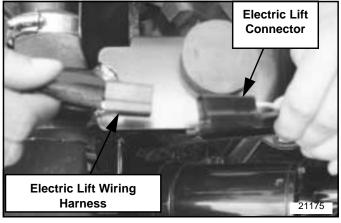
Electric Bed Lift Figure 9C

Final Assembly

Refer to Figure 10C:

 Locate T-shaped connector on Electric Lift Wiring Harness and connect it to the electric lift connector.

IMPORTANT: The Electric Bed Lift is protected by an internal clutch in both directions. When the up or down travel limit is reached, the electric dump will make a loud "**ratchet**" noise indicating end of travel limit has been reached or the Electric Bed Lift is overloaded. When this noise is heard, release the switch immediately.



T-Shape Connector Figure 10C

Refer to Figure 11C:

NOTE: The pictures on this page are of an NT Series Treker. Battery location and main wiring harness will be in a slightly different location for the ST Series.

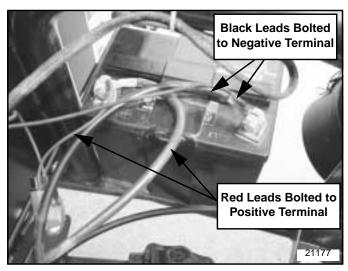
 Locate the red and black leads on the electric lift wiring harness. Also locate the main wiring harness red and black leads that were disconnected from the battery earlier. Bolt the red leads to the positive battery post and then bolt the black leads to the negative battery post.



CAUTION!

The cylinder needs to be extended to attach it to the cargo box. Be very careful not to hit anything while extending the cylinder causing bodily injury or damage to the vehicle.

3. Support electric lift cylinder up in alignment with cargo box pin connection point and activate rocker switch to extend electric lift cylinder until it is close to its connecting point. With a secure grip on the cargo box, remove its support and align cargo box pin connection with electric lift cylinder mounting hole. Attach the cylinder to cargo box with 1/2" x 49/64" clevis pin and secure pin with 5/32" cotter pin.

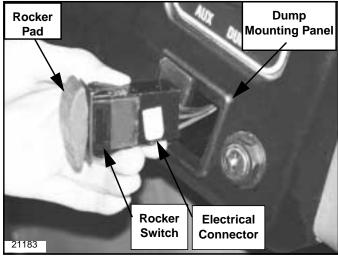


Red and Black Leads (NT Series Shown) Figure 11C

Refer to Figure 12C:

4. Activate rocker switch to raise and lower cargo box. Pushing at the top of the rocker pad should raise the cargo box and at the bottom of the rocker pad should lower the cargo box. Rotate rocker switch 180° if cargo box does not raise and lower as outlined above.

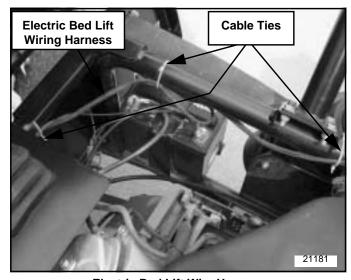
- Check rocker pad and make certain it is rotated as shown in Figure 12C. If not, pry rocker pad off rocker switch, rotate it 180° and press rocker pad back on.
- Press rocker switch into the dump mounting panel once it is oriented correctly.
- 7. If the glove box was removed, reinstall it with the drain holes located at the bottom by pushing the existing rivets back into the dashboard.



Rocker Switch Plugged to Electrical Connector Figure 12C

Refer to Figure 13C:

- Raise cargo box and secure electric lift wiring harness with cable ties approximately every 10" to the vehicle.
- Lower cargo box. Electric Bed Lift is now completely installed.



Electric Bed Lift Wire Harness Figure 13C

Listing of Parts (Trekers with S/N 418338-)

Your kit includes:

701-044A Electric Bed Lift for Treker ST Series

Qty.	Part No.	Part Description
1	701-055M	MANUAL ELECTRIC BED LIFT INSTRUCTION
4	800-182C	CABLE TIE 5 1/2 LONG 1/8 WIDE
2	805-045C	PIN COTTER 5/32 X 1 1/4 LG
2	805-303C	PIN CLEVIS 1/2X1 49/64 USABLE
1	833-254C	DUMP SWITCH
1		833-271CSWITCH ACTUATOR
1	833-317C	ELECT. LINEAR ACTUATOR 12" STROKE
1	833-326C	WIRING HARNESS ELECTRIC BED LIFT COMPLETE WITH 30 AMP BLADE FUSE.

701-045A Electric Bed Lift for Treker NT Series

Qty.	Part No.	Part Description
1	701-055M	MANUAL ELECTRIC BED LIFT INSTRUCTION
4	800-182C	CABLE TIE 5 1/2 LONG 1/8 WIDE
2	805-045C	PIN COTTER 5/32 X 1 1/4 LG
2	805-303C	PIN CLEVIS 1/2X1 49/64 USABLE
1	833-254C	DUMP SWITCH
1	833-271C	SWITCH ACTUATOR
1	833-318C	ELECT. LINEAR ACTUATOR 8" STROKE
1	833-326C	WIRING HARNESS ELECTRIC BED LIFT COMPLETE WITH 30 AMP BLADE FUSE.



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