



OWNER'S MANUAL  
MODEL # TGL-500  
HITCH LIFT

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	<b>WARNING</b>
READ THE INSTRUCTIONS AND SAFETY WARNINGS BEFORE OPERATING THIS LIFT. FAILURE TO FOLLOW THE INSTRUCTIONS AND SAFETY WARNINGS MAY RESULT IN PERSONAL INJURY OR PROPERTY DAMAGE.	

**For Customer Service Call or Fax**  
1 (800) 87-LARIN

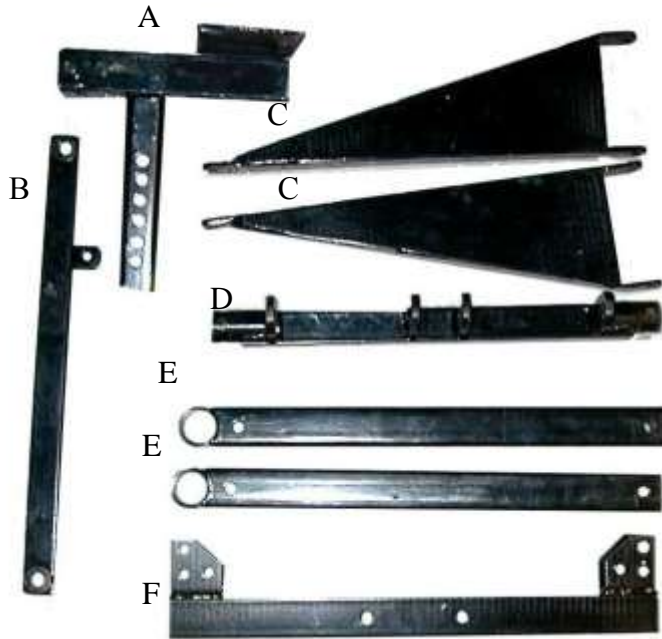
**SPECIFICATIONS.....**

Max Capacity:.....500 lbs.  
 Motor Power:..... 12 VDC

**SPECIFICATIONS ARE SUBJECT TO CHANGE  
 WITHOUT NOTICE**

**FIGURE 1 Contents of Carton**

Description	Qty	Part #
Hitch Adapter Plate.....	1	A
Lifting Arm.....	1	B
Guide Arms.....	2	C
Pivot Tube.....	1	D
Platform Arms.....	2	E
Outrigger Support .....	1	F
Outrigger Assemblies....	2	G



**Not Shown on this page (See Parts Diagram):**

**Hardware, CTN. #1**

This box contains all the nuts, bolts and washers, and quick release pins and stabilizer clamp, outrigger assembly, outriggers wrench and deck tie-downs.

**Motorized cable module, CTN. #2**

This box contains the motorized cable module, hex head cap screws, washers and nylon lock nuts required to mount the module along with a hex key (allen wrench) for these bolts and cable set for connection to the battery.

**Motor Controls, CTN. #3**

This box contains the Pistol Grip Trigger, Limit Switch Assembly and screws, washers required to mount the Limit Switch Assembly.

**Deck Plate (On bottom of box)**

# ASSEMBLY INSTRUCTIONS

## **IMPORTANT SAFETY INFORMATION**

It is the owner and/or operators responsibility to study and understand the safety and operating instructions before operating this lift. Safety information shall be emphasized and understood prior to use. The lift shall be inspected per the instruction manual prior to use. The lift shall be maintained in accordance with the product instructions. If the operator is not fluent in English, the product warnings and instructions shall be read to and discussed with the operator in the operator's native language by the purchaser/owner or his designee, making sure that the operator comprehends their content.

### **WARNING!**

**FAILURE TO FOLLOW THESE SAFETY WARNINGS MAY RESULT IN LOSS OF LOAD, DAMAGE TO LIFT, AND/OR LIFT FAILURE RESULTING IN PERSONAL INJURY OR PROPERTY DAMAGE.**

#### **Study, understand and follow all instructions and warnings before operating.**

Visual inspection shall be made before each use by checking for damage, wear, abnormal conditions such as bent, worn, loose, missing parts or kinked or frayed cable.

Cable inspection shall be made in accordance with the instruction manual.

Inspect lift immediately if it is suspected to have been subject to abnormal load or shock. It is recommended that this inspection is being made by the manufacturer's authorized repair facility prior to use.

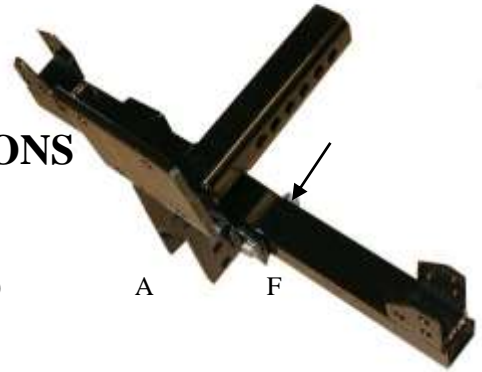
Owners and/or operators should be aware that repair of this equipment requires specialized knowledge and facilities. It is recommended that an annual inspection be made by the manufacturer's authorized repair facility and that any defective parts, decals or safety labels or signs be replaced with the manufacturer's specified parts.

If you encounter any problems or difficulties, contact the manufacturer's toll free at 1-800-87-LARIN to reach customer service.

#### **WARNING!**

- . USE HOLD DOWN STRAPS TO SECURE THE LOAD TO THE DECK PLATE WHEN NECESSARY.
- . CENTER THE LOAD ON THE LIFT PLATFORM.
- . DO NOT EXCEED THE RATED CAPACITY.
- . USE THE OUTRIGGER ARMS WHEN RAISING OR LOWERING THE LOAD.
- . DO NOT MOVE THE VEHICLE WITH THE LOAD ON THE PLATFORM.
- . DO NOT ALLOW ANYONE TO BE ON OR BENEATH THE PLATFORM WHEN IT IS LOADED.
- . NO ALTERATIONS SHALL BE MADE TO THIS PRODUCT.
- . DO NOT USE THIS MOTORIZED CABLE MODULE FOR ANY OTHER PURPOSE.
- . THE LIFT MAY BE PERTAINING TO POSSIBLE PINCH POINT HAZARDS, ALWAYS BE OBSERVANT AND CAUTIOUS WHEN OPERATING THE LIFT.
- . DO NOT ALLOW CHILDREN TO PLAY ON OR AROUND THE LIFT.
- . DO NOT ALLOW CHILDREN TO OPERATE THE LIFT.
- . DO NOT ALLOW THE CABLE TO KINK OR FRAY.
- . REPLACE ANY DAMAGED CABLE BEFORE USE.
- . INSPECT, CLEAN AND TIGHTEN ELECTRICAL CONNECTIONS PERIODICALLY.
- . REMOVE THE POWER SUPPLY CORD AND THE PISTOL-GRIP CORD FROM THE MOTORIZED CABLE MODULE BEFORE WORKING ON THE LIFT.
- . NEVER ALLOW HANDS OR FINGERS IN THE AREA OF THE CABLE WHEN LIFT IS POWERED OR PISTOL-GRIP TRIGGER IS ACTIVATED.
- . THE LIFT IS NOT TO BE USED FOR LOADING OR UNLOADING PEOPLE.
- . DO NOT ALLOW SLACK IN CABLE
- . CHECK BATTERY CHARGE BEFORE USE.

# ASSEMBLY INSTRUCTIONS



## 1 Attach the Outrigger Arm

Attach outrigger support (F) to the hitch adapter (A) using two M12 x 75 bolts (#14) with M12 flat washers (#5) and M12 nylon lock nuts (#4).

## 2 Attach the Outriggers

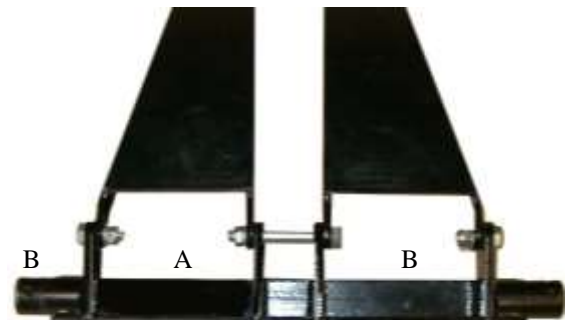
Attach the two outrigger assemblies to the far outside lower holes in the outrigger tube (F) as shown. Use a M12 x 75 bolt (#14) with a M12 washer (#5) and M12 nylon lock-nut (#4) on each bolt. Position the outrigger tubes as shown, then install a quick release pin through the outrigger tube and outrigger assembly as shown. After installing the pin, replace the securing clip in the pins.



*The assembly should now look like this.....*

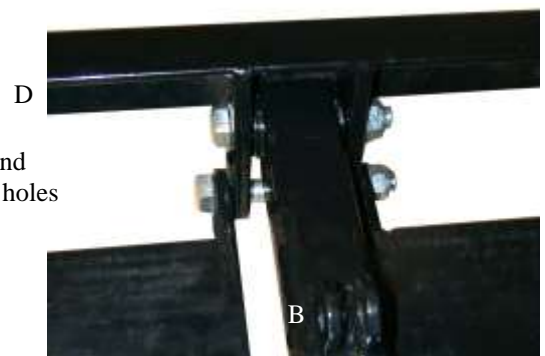
## 3 Attach the Guide Arms to the Pivot Tube

Attach the Guide Arms to the Pivot Tube. Start at the center holes (A) and Use an M12 x 105 (#11) bolt with an M12 washer (#5) and an M12 nylon lock-nut (#4). Then Use M12 x 35 bolts (#6) with M12 washers (#5) and M12 nylon lock-nuts (#4) on each of the Outside holes (B).



## 4 Attach the Lifting Arm to the Pivot Tube

Attach the Lifting Arm (B) to the Pivot Tube (D) using an M12 x 85 bolt (#7) and An M12 washer (#5) and an M12 nylon lock-nut(#4). Notice that the tabs with the holes in them face up and are closest to the Pivot Tube.



## 5 Attach the Lifting Arm and Guide Arms to the Hitch Adapter Plate

Attach the Lifting Arm (B) to the Hitch Adapter Plate (A) using an M12 x 85 bolt (#7) and an M12 washer (#5) and an M12 h all the parts. Secure it with an M12 washer (#5) and an M12 nut (#4). nylon lock-nut (#4). Now attach the two ends of the Guide Arms (C) using an M12 x 105 bolt (#11) through

## ASSEMBLY INSTRUCTIONS

### 6 Position the Platform Arms onto the Pivot Tube

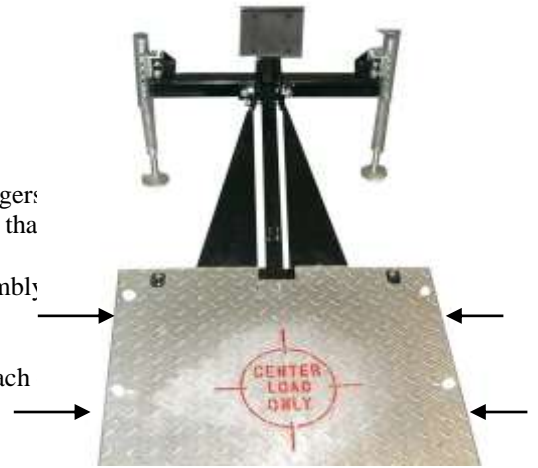
Do not use any fasteners at this time, simply slide the Platform Arms (E) onto the ends of the Pivot Tube (D)



*The assembly should now look like this.....*

### 7 Install the Deck Plate onto the Platform Arms

Begin by moving the outrigger assemblies into the down position. Remove the quick release pins that secure the outrigger assemblies, rotate the outriggers down, and then replace the quick release pin to lock them in place. Remove the pins that hold the inside tubes in the outrigger assemblies, and move them to the lowest position. Replace the quick release pins and securing clips. This will help to support the assembly in a convenient position for this step. Now lower the Deck Plate onto the Platform Arms, aligning the holes. Using a screwdriver or punch to help align the holes, insert an M10 x 55 bolt (#1) through each of the four holes. These holes are located where shown by the arrows.



*The assembly should now look like this.....*

### 8 Secure the Deck Plate to the Platform Arms

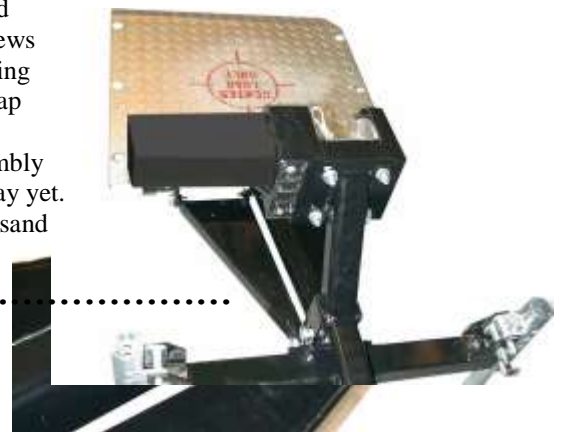
Using an assistant, raise the Deck Plate into the upright position. While the helper holds the Deck Plate up, install an M10 washer (#3) and an M10 nylon lock-nut (#2) onto each of the M10 bolts (#1). Install the two quick release pins and clips in the deck plate. Notice that there is a place to mount your license plate on the bottom of the Deck Plate if needed.



*The assembly should now look like this.....*

### 9 Install the Motorized Cable Module to the Hitch Adapter Plate

The Motorized Cable Module is in a separate carton inside the main carton. Packed with it are four socket head cap screws, washers and nylon lock-nuts. Also enclosed is a hex key (Allen wrench) for the socket head cap screws. Start one of the cap screws through from the inside of the cable module. Use the hex key to hold it in place. Using your assistant to help hold the cable module, position it from the front placing the cap screw through the corresponding hole in the Hitch Adapter Plate. Now while the assistant holds the cable module and the hex key, go around to the back of the assembly and install one of the washers and nylon lock-nuts. Do not tighten this nut all the way yet. Repeat installing the other three cap screws from the front and installing the washers and nylon lock-nuts. Now you can tighten all four nuts securely.



*The assembly should now look like this.....*

## ASSEMBLY INSTRUCTIONS

### 10 Install the Limit Switch

Use a straight bladed screwdriver to remove the two screws and washers in the location shown by the arrows. The Limit Switch assembly is packed in a carton with the pistol-grip trigger, some cables and connectors. The Limit Switch has a round yellow connector on the end. Install it as shown using the two screws and washers removed earlier in this step. Notice that the Limit Switch has slotted holes. These will allow movement so that you may adjust the maximum lift height for your truck.

To adjust the limit switch, either move the Limit Switch Assembly in the slots, or remove and rotate the roller control arm, or both. The switch is adjusted at the time of installation to the truck.



*The Limit Switch viewed from the other side.....*

**It is now time to install the unit to your truck. Having an assistant available will make the next step easier.**

## INSTALLATION INSTRUCTIONS

### 11 Install the Lift to the Truck

With the help of your assistant, install the Hitch Adapter Plate tube into the receiver tube of your hitch. Install a 1/2" hitch pin (not supplied) through the holes. In order to connect the cable from the Motorized Cable Module to the Lifting Arm, it will be necessary to supply power. The Deck Plate will be on the ground at this time. Lower the inner tubes of the Outrigger Assemblies so they are near the ground, but not yet touching. Turn the inner shafts to bring them into contact with the ground. It is not necessary to use the supplied wrench to turn these shafts, you do not want any pressure now, only contact.

# INSTALLATION INSTRUCTIONS

## 12 Connect the 12 VDC

***Disconnect the vehicle battery positive terminal. You will be making power connections and it is not safe to work with the power connected.***

The Hitch Lift uses 12 Volts DC, and it will require 40 amps at full load. Most manufacturers will fuse this line at 35 or 40 amps, but if the cable is #6 or larger you may be able to install a larger fuse.

***You should check your vehicle owners manual or consult your dealer to be sure it is acceptable change the fuse size to 50 Amps.***

You must provide a separate circuit (fused at 50 amps) directly from the battery. Make a suitable splice connector to the appropriate battery positive connection and the red wire that is on the battery power cable. Connect the ring lug on the black cable to a secure metal frame ground. This cable is 6.5 meters (21 feet) long.

- Connect the battery cable connector to the jack on the side of the motorized cable module.
- Plug the round yellow connector on the Limit Switch cable into the round yellow connector on the motorized cable module.
- Plug the black round connector on the pistol-grip trigger into the round black connector on the motorized cable module.
- Reconnect the battery positive connection.

Notice that the pistol-grip trigger has a yellow lever above the trigger. This lever controls the direction of the Hitch Lift. Observe the drum of the Cable Module while you depress the pistol-grip trigger. You will need to release cable from the drum in order to connect it to the Lifting Arm (B). When you are sure that the cable drum will rotate in the direction to pay out cable, depress the trigger while pulling on the end of the cable. Remove sufficient cable to reach the eyes on the top of the Lifting Arm (B).

# INSTALLATION INSTRUCTIONS

## 13 Connect the cable to the Lifting Arm

Connect the cable end to the Lifting Arm by using an M10 x 35 bolt (#10) and An M10 washer (#3) and an M10 nylon lock-nut (#2). Now you can test the lift by moving the direction lever to "UP" and pressing the trigger. Be sure to guide the cable the first time to get it to wind tightly after slack was allowed into the system in the previous step.

If your tailgate is lowered, raise the Hitch Lift carefully. There is adjustment available in the limit switch to allow matching the Deck Plate level to the tailgate level. ***See Assembly Step #10. Adjust the limit switch so that the Deck Plate surface is even with the tailgate surface when the Deck Plate is fully raised..***



***Be sure that your license plate is not obstructed by the Hitch Lift when the vehicle is driven. If it obstructed, remove the Deck Plate when driving or mount the license plate to the mounting bracket provided on the rear of the Deck Plate.***

# OPERATING INSTRUCTIONS

## **IMPORTANT SAFETY INFORMATION**

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Visual inspection shall be made before each use by checking for damage, wear, abnormal conditions such as bent, worn, loose, missing parts or kinked or frayed cable.

Cable instructions shall be made in accordance with the instruction manual.

Inspect lift immediately if it is suspected to have been subject to abnormal load or shock. It is recommended that this inspection is being made by the manufacturer's authorized repair facility prior to use.

Owners and/or operators should be aware that repair of this equipment requires specialized knowledge and facilities. It is recommended that an annual inspection be made by the manufacturer's authorized repair facility and that any defective parts, decals or safety labels or signs be replaced with the manufacturer's specified parts.

If you encounter any problems or difficulties, contact the manufacturer's toll free at 1-800-87-LARIN to reach customer service.

#### **WARNING!**

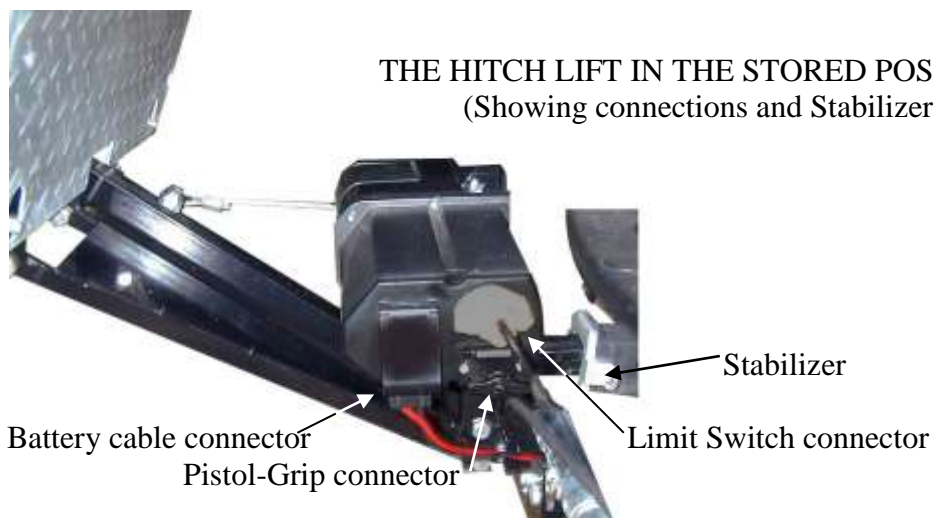
- . USE HOLD DOWN STRAPS TO SECURE THE LOAD TO THE DECK PLATE WHEN NECESSARY.
- . CENTER THE LOAD ON THE LIFT PLATFORM.
- . DO NOT EXCEED THE RATED CAPACITY.
- . USE THE OUTRIGGER ARMS WHEN RAISING OR LOWERING THE LOAD.
- . DO NOT MOVE THE VEHICLE WITH THE LOAD ON THE PLATFORM.
- . DO NOT ALLOW ANYONE TO BE ON OR BENEATH THE PLATFORM WHEN IT IS LOADED.
- . NO ALTERATIONS SHALL BE MADE TO THIS PRODUCT.
- . DO NOT USE THIS MOTORIZED CABLE MODULE FOR ANY OTHER PURPOSE.
- . THE LIFT MAY BE PERTAINING TO POSSIBLE PINCH POINT HAZARDS, ALWAYS BE OBSERVANT AND CAUTIOUS WHEN OPERATING THE LIFT.
- . DO NOT ALLOW CHILDREN TO PLAY ON OR AROUND THE LIFT.
- . DO NOT ALLOW CHILDREN TO OPERATE THE LIFT.
- . DO NOT ALLOW THE CABLE TO KINK OR FRAY.
- . REPLACE ANY DAMAGED CABLE BEFORE USE.
- . INSPECT, CLEAN AND TIGHTEN ELECTRICAL CONNECTIONS PERIODICALLY.
- . REMOVE THE POWER SUPPLY CORD AND THE PISTOL-GRIP CORD FROM THE MOTORIZED CABLE MODULE BEFORE WORKING ON THE LIFT.
- . NEVER ALLOW HANDS OR FINGERS IN THE AREA OF THE CABLE WHEN LIFT IS POWERED OR PISTOL-GRIP TRIGGER IS ACTIVATED.
- . THE LIFT IS NOT TO BE USED FOR LOADING OR UNLOADING PEOPLE.
- . DO NOT ALLOW SLACK IN CABLE
- . CHECK BATTERY CHARGE BEFORE USE.



# OPERATING INSTRUCTIONS

## To Raise the lift

- 1) Lower the outrigger tubes so they are about 3 inches above the ground.
- 2) Lower the vehicle tail gate.
- 3) Place the load on the platform.
- 4) Secure the load with hold down straps.
- 5) Place the direction selector switch in the “UP” position
- 6) Operate the trigger until the load is just beginning to come off the ground.
- 7) Lower the outrigger tubes completely down to the ground by turning the shaft.
- 8) Raise the load until it is at the tailgate level.
- 9) Remove the hold down straps. Carefully transfer the load to the truck bed.
- 10) Secure the load in the truck bed with hold down straps before operating the truck.
- 11) Raise the tailgate.
- 12) Change the direction switch to “DOWN”.
- 13) Operate the trigger to lower the Deck Plate until it is about 2 inches above the ground.
- 14) Remove the retaining clips and pull the quick release pins from the Deck Plate.  
*(The Deck Plate will be free to rotate after the pins are pulled, make sure that you are not in a position to be struck by the Deck Plate.)*
- 15) Rotate the Deck Plate up to the storage position and replace the pins and clips.
- 16) Move the direction switch to the “UP” position
- 17) Press the trigger switch to raise the lift all the way up.
- 18) Raise the outriggers by turning the shafts. It may be necessary to use the included wrench.  
*(When the load was placed on the truck, the springs allowed the truck bed to lower. This was the reason for not placing the outriggers on the ground until AFTER the weight of the load was on the Lift and the Lift was beginning to rise from the ground.)*
- 19) Unplug and store the pistol-grip trigger in a safe location.



# OPERATING INSTRUCTIONS

## To Lower the lift

- 1) Lower the outrigger tubes so they are about 3 inches above the ground.
- 2) Plug in the pistol-grip trigger.
- 3) Lower the vehicle tailgate.
- 4) Remove the retaining clips and pull the quick release pins from the Deck Plate.  
*(The Deck Plate will be free to rotate after the pins are pulled, make sure that you are not in a position to be struck by the Deck Plate.)*
- 5) Rotate the Deck Plate to the level operating position and replace the pins and clips.
- 6) Place the direction selector switch in the “UP” position
- 7) Operate the trigger until the Deck Plate is level with the tailgate.
- 8) Remove the hold down straps from the load.
- 9) Carefully transfer the load to the Deck Plate.
- 10) Secure the load with hold down straps.
- 11) Lower the outrigger tubes completely down to the ground by turning the shaft.
- 12) Lower the load until it is at ground level.
- 13) Remove the hold down straps. Carefully transfer the load to ground.
- 14) Raise the tailgate.
- 15) Change the direction switch to “UP”.
- 16) Operate the trigger to raise the Deck Plate until it is about 2 inches above the ground.
- 17) Remove the retaining clips and pull the quick release pins from the Deck Plate.  
*(The Deck Plate will be free to rotate after the pins are pulled, make sure that you are not in a position to be struck by the Deck Plate.)*
- 18) Rotate the Deck Plate up to the storage position and replace the pins and clips.
- 19) Press the trigger switch to raise the lift all the way up.
- 20) Raise the outriggers by turning the shafts.
- 21) Pull the pins from the outrigger inner tubes. Return them to their fully up position
- 22) Replace the pins and clips in the outrigger inner tubes.
- 23) Pull the pins and clips from the outrigger outer tubes.
- 24) Rotate the outriggers to their upright stored position and replace the pins and clips.
- 25) Unplug and store the pistol-grip trigger in a safe location.
- 26) You may use the supplied deck tie-downs to secure the deck plate if desired.

THE HITCH LIFT IN THE UP POSITION  
(Tailgate up for clarity.)



# ***IMPORTANT CONSIDERATIONS***

## **MAINTENANCE**

- Visual inspection shall be made before each use by checking for damage, wear, abnormal conditions such as bent, worn, loose or missing parts, kinked or frayed cable.
- To replace damaged, frayed or kinked cable, use only factory supplied spare parts. Refer to the enclosed parts diagram. Replacement parts for cable assemblies include complete instructions.
- Inspect lift immediately if it suspected to have been subject to abnormal load or shock. It is recommended that this inspection be made by the manufacturer's authorized repair facility prior to use.
- Owners and/or operators should be aware that repair of this equipment requires specialized knowledge and facilities. It is recommended that an annual inspection be made by the manufacturer's authorized repair facility and that any defective parts, decals, or safety labels or signs be replaced with manufacturer's specified parts. If you encounter any problems or difficulties contact the manufacturer toll free at 1-800-87-LARIN. Ask for customer service.

## **DAMAGED PRODUCT**

- Any lift that appears to be damaged in any way, or operates abnormally **SHALL BE REMOVED FROM SERVICE UNTIL IT IS REPAIRED.**
- It is recommended that necessary repairs be made by a manufacturer's authorized repair facility and only factory authorized parts, labels and decals shall be used.

## **ALTERATIONS**

- Because of potential hazards associated with misuse of the lift, **NO ALTERATIONS SHALL BE MADE TO THIS PRODUCT.**
- Because of potential hazards associated with any other application, **THE MOTORIZED CABLE MODULE SHALL NOT BE USED FOR ANY OTHER PURPOSE THAN TGL-500 LIFT.**

## **ONE YEAR LIMITED WARRANTY**

Larin Corporation warrants its products for a period of one year from the date of purchase against manufacturer or material defects. This warranty does not cover damage caused by accident, misuse, or tampering/altering of the product, and a charge will be made for such repairs.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

This warranty excludes all consequential damages. Some states do not allow the exclusion of consequential damages, so the foregoing exclusions may not apply to you. For warranty service, please return the product prepaid to Larin Corporation, 2029 Business Parkway, Ontario, California 91761. Be certain to include your name and address, proof of purchase date and description of the problem and the repaired or replaced product will be sent to you freight collect

## **RETURN POLICY**

**DO NOT** return unit to store where purchased if upon receipt and inspection you discover missing or defective parts. Please call or Fax 1-(800) 87-LARIN. We will send you the parts free of charge. In case the unit needs to be returned, it should be packed in the original box.

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