

# INSTALLATION INSTRUCTIONS FOR T-LB MANUAL LIFT BARRIER GATE ARMS

Questions? Call 800.448.2647 or visit our website at: [tamiscorp.com](http://tamiscorp.com)

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YOUR T-LB MANUAL LIFT BARRIER GATE ARM WILL ARRIVE WITH WEIGHT PLATES ATTACHED TO THE BASE UNIT THAT CORRESPOND WITH THE LENGTH OF BARRIER ARM ORDERED. IF YOU EVER WANT TO ADD A LONGER ARM, WE CAN SIMPLY SHIP ARM SECTIONS, CONNECTING SLEEVES, PENDULUM SUPPORTS, CABLE TRUSS SUPPORTS AND ADDITIONAL WEIGHT PLATES TO EASILY RECONFIGURE YOUR T-LB UNIT INCREASING THE SIZE UP TO 30 FEET IN LENGTH

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ANCHOR BOLTS FOR MOUNTING PLATE TO CONCRETE ARE NOT INCLUDED. PURCHASE 1/2" DIAMETER & 6" TO 8" LONG CONCRETE ANCHORS. (J BOLTS, OR LDT)

PADLOCK OR PIN LOCK FOR LOCKING GATE ARM IS NOT INCLUDED

## **Mounting Suggestions for the Manual Lift Barrier Gate Arm**

*PLEASE CONSULT WITH AN ENGINEER FOR THE BEST ADVICE ON MOUNTING PADS. AS SOIL CONDITIONS ARE ALWAYS DIFFERENT*



Surface mounted plate with 4 pre- drilled 5/8" diameter bolt holes. The mounting plate is 15" X 15" and 1" in from edges gives you center of the bolt holes.

Mount on to concrete or build a concrete pad and use four 1/2" diameter and 6" to 8" long concrete anchors. (j bolts, or LDT) [Anchor bolts for mounting plate to concrete are not included](#)

This base needs to be bolted on to a concrete surface or a concrete pad. Be sure that the concrete is cured before drilling the bolt holes in to it. Or pre- make the pad with wet set anchor bolts.

A 20" X 20" pad is usually a sufficient size and should be at least 8" thick. Reinforce using 8 #4 rebar evenly spaced in every direction. Make sure concrete is 2" or more over the rebar. Use a 3 to 4000 psi concrete.

You can also opt to use a drop-in anchor so that you can easily unbolt from the pad and move the unit to another pad and back again. Such as, CONFAST® Drop-in Anchors.

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Or you can build portable concrete pads that can be moved around by a fork lift.

Please check with a structural engineer as this build idea is only a suggestion.

Portable pad:

Should be at least 36" X 36" and 8" thick or more.

The portable concrete pad would require 2 forklift slots. 2" high by 8" wide slots in the concrete pad that would accept the fork lift forks for moving the concrete pad.

4000 psi concrete should be used. 8 #4 rebar, 4 in each direction evenly spaced with a minimum of 2" of concrete over the rebar.

Wet set four ½" diameter J bolt concrete anchors or check with an expert about curing time before drilling anchors in to the concrete.

## Installation Instructions for installing your new Manual Lift Barrier Gate Arm

Step 1: Unpackage and inspect for damages or missing pieces - Report damage or missing items to 520-780-9751 immediately.

Step 2: Bolt base unit to the concrete or concrete pad. Anchor Bolts are not included. Purchase ½" diameter and 6" to 8" long.



Step 3: Remove the bolt and nut that is holding the unit in the upright shipping position, set bolt and nut aside, you will need it later in the installation process. Use a 9/16" socket.

Step 4: Maneuver unit so that it is in a horizontal position and ready to accept the barrier arm. If you have purchased a 20', 25' or 30' unit, the counter weights are going to be very heavy. Up to 210 lbs. if a 30 ft unit. Be sure to have at least two people for this installation.

Step 5: Put bolt and nut from Step 3 in to the horizontal hasp to secure it in to the horizontal position.

If you purchased an Manual Lift Barrier Gate Arm that has a Cable Truss Support: 16', 20', 24' & 30' models.

Triangle Shaped Cable Truss Bracket installs in to the same two holes that also accept the 1<sup>st</sup> two holed 6 ft barrier arm section. Use a ¾" socket to remove the bolts, nylock and washers that were in the holes on the base upright arm. Set bolts, nylock and washer aside as you will need them for Step 7.

Step 6: Insert the first white/reflective striped barrier arm section with the two holes into the receiver tube on base unit. (See Step 8 if your unit has multiple arm sections).



Step 7: Secure with the provided bolts and washers and tighten. Use a ¾" socket.

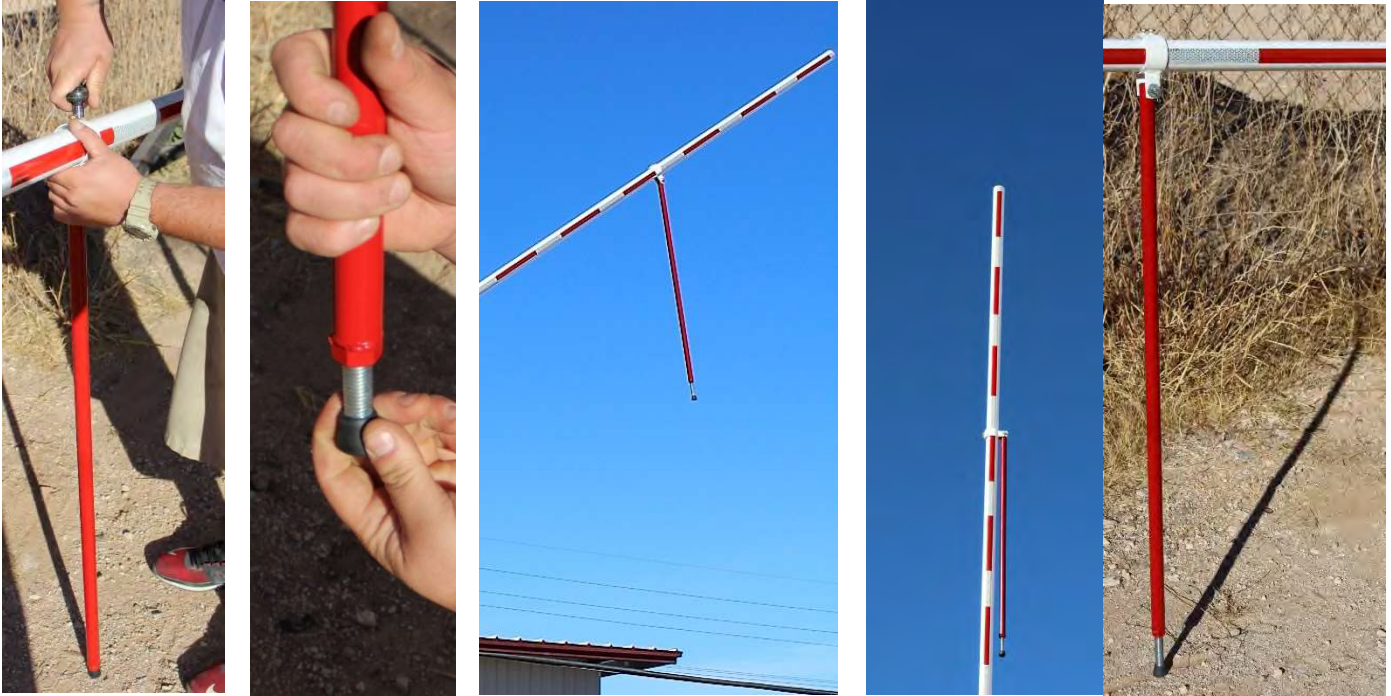
If you have the cable truss triangle shaped bracket, put the triangle shaped bracket on after you have inserted the first barrier arm section and use the bolts and washers that you set aside. 4" long. Use ¾" socket to tighten.

Step 8: If your unit came with an additional arm section(s), there are aluminum connecting sleeve(s) located in each arm section. (secured to base unit(s) Use the sleeve(s) to connect the arm section(s). Secure with the provided bolts and washers and tighten. Use a ¾" socket.

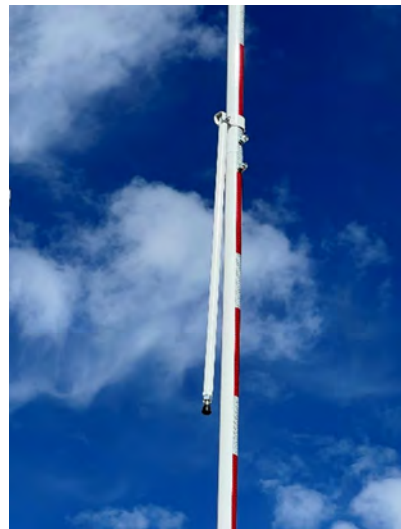


Step 9: Install Pendulum Support on arms 16 feet and longer. The best spot is 4 to 8 feet in from the tip of barrier arm. Slide the collar over the arm and use a 7/16" socket to tighten the two, bolt head set screws until snug against the arm and the collar does not move or slide. Pendulum Supports are optional on arms 12 feet to 16 feet and required on arms 17 feet to 30 feet.

If you purchased a unit that includes a Cable Truss Support go to page 6 & 7 before installing this pendulum support post. You will need to install the cable clamp bracket before the pendulum support.



The pendulum supports are powder coated white. Shown above in red for clarity.



Step 10: Remove the bolt from Step 3 and Step 5 that is keeping the unit secured in the horizontal position.

Step 11: Congratulations! You are now ready to control a vehicle traffic lane with your new Manual Lift Barrier Gate Arm.

**UNITS EQUIPPED WITH A CABLE TRUSS SUPPORT (extra-long arm support)**

If you purchased an Manual Lift Barrier Gate Arm that has a Cable Truss Support:

The triangle bracket, steel cable and the small round clamp bracket will need to be installed by you. Any parts, steel cable assemblies, hardware, pendulum support posts or receiving posts are located on the pallet. The barrier arm sections will be on the pallet and secured to the base units. The bolts for the securing the first arm section on to the base will be in the two bolt holes at the top of the base receiver tube. All other arm sections will be on the pallet and each section will have the aluminum sleeve connector installed on to the arm section.





Attach the round Cable Truss Clamp Bracket on to the Barrier Arm. The cable will not be the full length of the arm. Slightly tighten bolt head set screws with a 7/16" socket. Only slightly tighten at this point because you will need to move this clamp bracket to get any slack needed as you are attaching the eye bolt/cable to the triangle shaped bracket at the main base. *(be sure to put this cable truss clamp bracket on before the pendulum support – see Step 9 for pendulum support instruction)* Once the cable truss clamp

bracket is on you can then install pendulum support See Step 9 on page 5.



Bring the steel cable with the eye bolt to the triangle shaped bracket. And install as shown. Now stretch out the cable and adjust the cable truss clamp bracket so that most of the slack is taken out and now you can tighten the cable truss clamp bracket with a 7/16" socket until clamp bolt head set screws are snug against the arm and the clamp bracket does not slide or move. Now go back to the triangle shaped bracket and begin to turn the bolt with a 9/16" socket to tighten and straighten the arm.







Use 9/16" socket to turn bolt, this will tighten the cable and straighten the arm

Have someone hold a screw driver through the eye bolt as pictured while you tighten the cable. This will ensure you don't pinch your fingers while tightening the cable



The arm will have a bend or sag before you tighten the cable. This is normal and you will see as you turn the bolt with the socket or wrench the cable gets more taugth and the arm will begin to straighten. Once you are satisfied with the tightness of the cable and the arm is straight, stop. Over tightening will give you an upward bow. If that happens loosen the bolt until arm is straight and not bowed upward.



Installation Trick: Have someone press down gently on the top of the arm like this while you are tightening the cable: This will take the sag out while you are tightening and will make it easier to turn the eye bolt. Be sure to have the pendulum support installed for this install trick as shown in picture to the left.

*If you would like to lock the barrier arm in to the closed horizontal position, simply insert a padlock or pin lock in to the horizontal hasp and lock. If you would like to lock your barrier arm in the open vertical position, raise the arm to full upright position and insert padlock or pin lock in to the vertical hasp and lock. We do not recommend leaving the arm in the vertical position. Windy conditions can whip the arm around and cause unintended damage to the unit.*

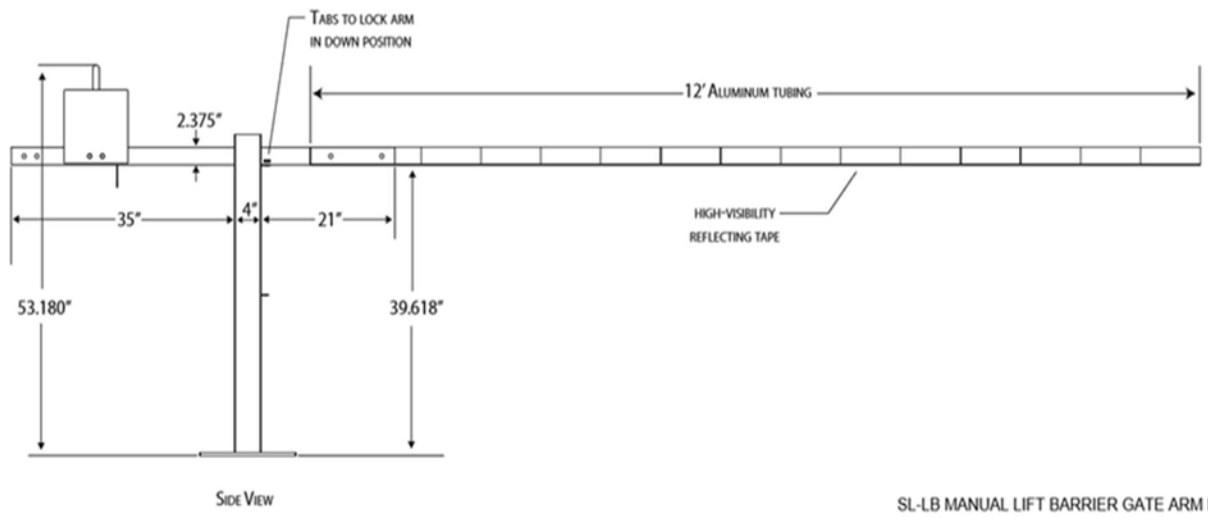
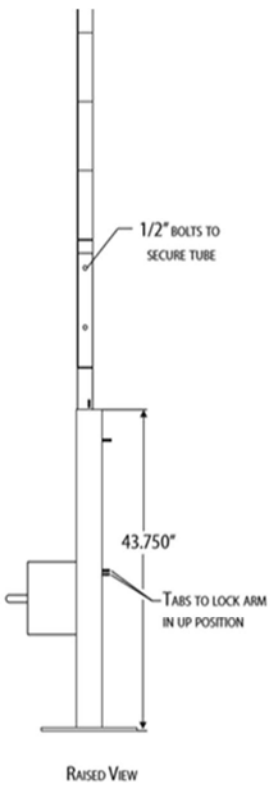
***NEW PRODUCT!! Extra security, a secondary locking point for the horizontal position. PN# T-RPL - Lift Barrier Arm Receiving Post - w/ U cradle, accepts customer provided pin lock or long shackle padlock, height adjustable, 6"x6" pad mounting plate. This is highly recommended for windy conditions. Locking the arm tip holds the arm firmly and keeps it from moving in windy conditions.***



**NEW PRODUCT!! Lockable Barrier Arm Tip Support Post. It is HEIGHT ADJUSTABLE!!**

**PN# T-RPL - Lift Barrier Arm Receiving Post - w/ U cradle, accepts customer provided pin lock or long shackle padlock, height adjustable (4"), 6"x6" pad mounting plate.**





SL-LB MANUAL LIFT BARRIER GATE ARM DETAIL  
1-22-18

## **MODEL T-LB WARRANTY**

THANK YOU FOR PURCHASING AN T-LB MANUAL LIFT BARRIER ARM (WITH CABLE TRUSS SUPPORT AND PENDULUM SUPPORT) FROM TAMIS CORPORATION. BELOW ARE THE TERMS UNDER WHICH YOUR PRODUCTS ARE COVERED UNDER OUR MANUFACTURER'S WARRANTY...

2-YEAR WARRANTY – COVERS ALL WEAR PARTS ON THE BARRIER, INCLUDING THE PENDULUM SUPPORTS AND CABLE TRUSS SUPPORTS. ALL WORKMANSHIP IS COVERED UNDER THIS 2-YEAR WARRANTY. THIS WARRANTY DOES NOT APPLY TO COSMETIC DAMAGE, SUCH AS SCRATCHES, ABUSE OR GENERAL WEAR AND TEAR.

THIS GUARANTEE PROVIDES YOU WITH FREE REPLACEMENT WEAR PARTS IF NEEDED FOR YOUR T-LB MANUAL LIFT BARRIER GATES FOR A PERIOD OF UP TO 2 YEARS. INCLUDES BEARINGS, FOAM HANDLE GRIPS AND RUBBER BUMPERS.

THIS GUARANTEE PROVIDES YOU WITH FREE REPLACEMENT PARTS FOR THE PENDULUM SUPPORTS IF THEY SHOULD FAIL DURING REGULAR INTENDED USE. IF PARTS WILL NOT EASILY FIX THE FAILURE, A NEW PENDULUM SUPPORT WILL BE SHIPPED TO YOU FREE OF CHARGE. PHOTO EVIDENCE OF FAILURE WILL BE REQUIRED.

SHOULD YOU EXPERIENCE A PROBLEM WITH YOUR T-LB MANUAL LIFT BARRIER GATE, CABLE TRUSS SUPPORTS OR PENDULUM SUPPORTS YOU CAN CONTACT US AT 800.448.2647. YOU MAY ALSO EMAIL US AT SALES.INFO@TAMISMAIL.COM.

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