INSTRUCTIONS - LVR-TRI-PIN-2

WARNING:

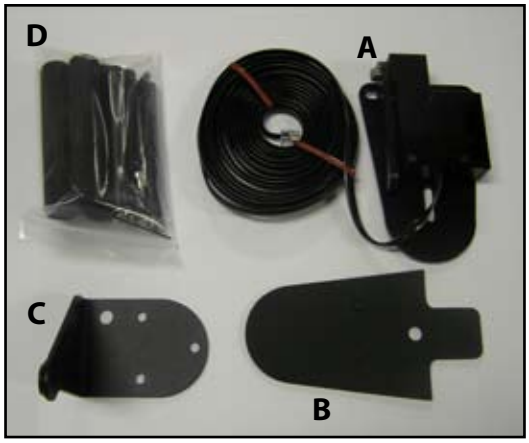
THESE INSTRUCTIONS SHOULD BE READ THOROUGHLY BEFORE ATTEMPTING TO INSTALL THIS EQUIPMENT. FAILURE TO DO SO COULD RESULT IN THE LEVER-TRI-PIN BEING INSTALLED INCORRECTLY LEADING TO AN ACCIDENT RESULTING IN SERIOUS INJURY AND/OR DEATH.

CAUTION: WHAT NOT TO DO

- INSTALL THE LEVER-TRI-PIN IF ALL COMPONENTS ARE NOT PRESENT.
- DEVIATE FROM ANY STEPS SHOWN IN THESE INSTRUCTIONS.
- INSTALL THIS EQUIPMENT IF YOU ARE UNSURE ABOUT ANY STEP IN THESE INSTRUCTIONS.

INSTALLING THE LEVER-TRI-PIN:

STEP 1



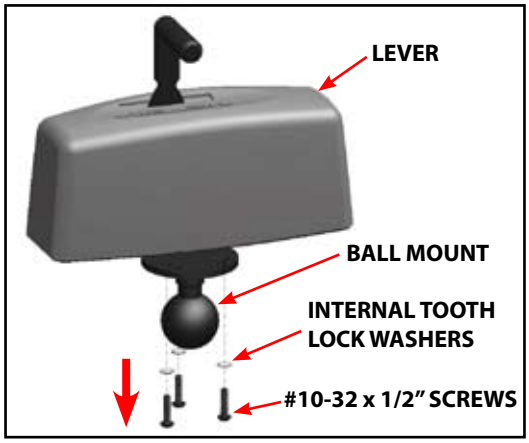
Verify that the following components are in the **LVR-TRI-PIN-2**:

A. (1) TRI-PIN Assembly
B. (1) Foam Pad
C. (1) Mounting Bracket
D. (1) Hardware Bag:
   - (3) Foam Grips
   - (3) Grip Pins
   - (3) 1/4" x 1" Screws
   - (3) 1/4" Flat Washers
   - (3) #10-32 x 3/4" Safety Torx Screws
   - (1) #10-32 x 1/4" Shoulder Screw
   - (1) 1/16" Allen Wrench
   - (1) Safety Torx Bit

NOTE:

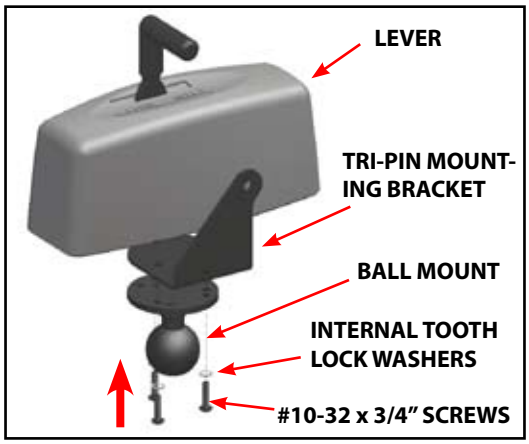
IF ANY OF THESE COMPONENTS ARE NOT INCLUDED WITH THE LVR-TRI-PIN-2, CALL THE EMC SERVICE DEPARTMENT. **DO NOT ATTEMPT TO INSTALL WITHOUT ALL PARTS.**

STEP 2



Remove the (3) original #10-32 x 1/2" safety Torx screws using the supplied safety Torx bit and remove the ball mount from the bottom of the Lever. The original #10-32 x 1/2" safety Torx screws may be discarded but be sure to save the internal tooth lock washers and the ball mount as they will be reused.

STEP 3



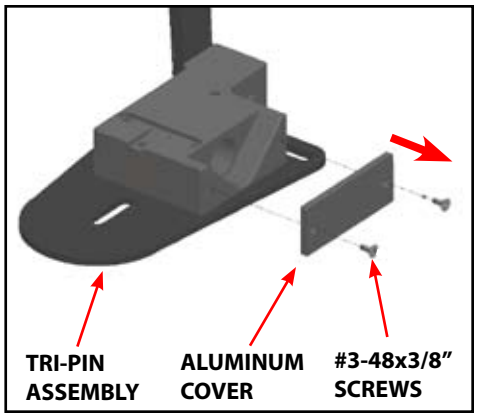
Insert the Tri-Pin mounting bracket as shown in the figure above. Replace the ball mount and the internal tooth lock washers and use the **#10-32 x 3/4"** safety Torx screws that were supplied in the hardware bag.

WARNING:

BE SURE TO PROPERLY TIGHTEN THE SCREW TO THE PROPER TORQUE SETTING OF 2.5 FT-LBS AND USE BLUE LOCTITE®.

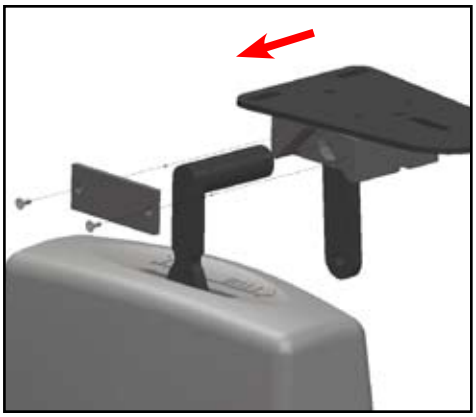
INSTRUCTIONS - LVR-TRI-PIN-2

STEP 4



Remove the (2) #3-48 x 3/8" flat head screws and the aluminum cover from the TRI-PIN Assembly using the 1/16" allen wrench supplied in the hardware bag.

STEP 5



Insert the Tri-Pin Assembly onto the Lever handle as shown, it will only fit on one way. Reattach the aluminum cover using the same (2) #3-48 x 3/8" flat head screws that were removed in step 4.

At this time, the assembly should resemble the figure above.

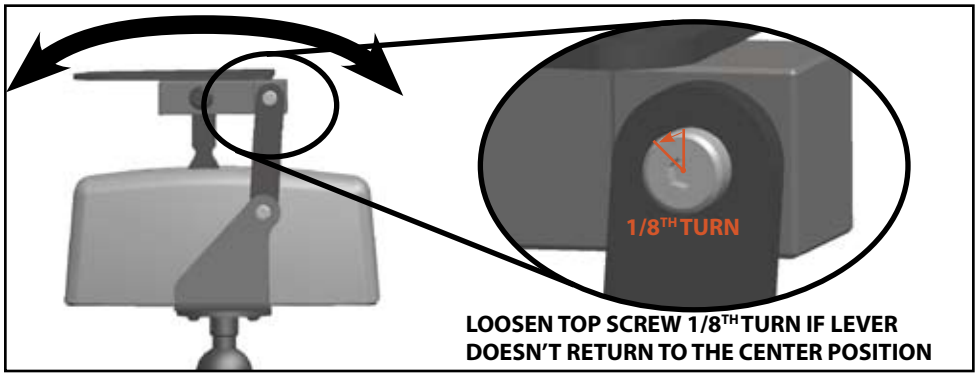
STEP 6

Attach the arm of the Tri-Pin Assembly to the Tri-Pin mounting bracket using the #10-32 x 1/4" shoulder screw supplied in the hardware bag.

WARNING:

BE SURE TO PROPERLY TIGHTEN THE SCREW TO THE PROPER TORQUE SETTING OF 2.5 FT-LBS AND USE BLUE LOCTITE®.

STEP 7

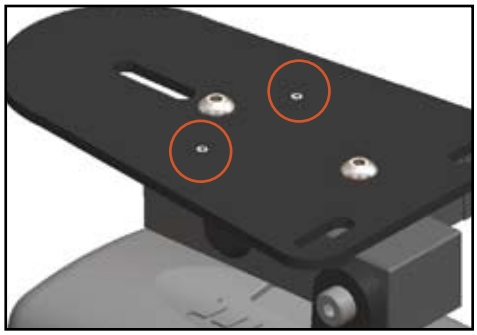


At this point, make sure the lever will travel to the full gas and the full brake positions. Also make sure that the lever will return to the center position from both the full gas and full brake positions. If the lever does not return to the center position, loosen the top screw that attaches the Tri-Pin Assembly to the Tri-Pin Assembly arm 1/8TH turn.

WARNING:

IF THE LEVER DOES NOT RETURN TO THE CENTER POSITION AFTER LOOSENING THE SCREW 1/8TH TURN, CALL EMC'S SERVICE DEPARTMENT. **DO NOT LOOSEN MORE THAN 1/8TH TURN.**

STEP 8



Verify that both #6-32 x 1/8" set screws in the Tri-Pin Assembly are flush with the TOP of the Tri-Pin Assembly. These will be used for fine adjustment in the "Client Fitting" section.

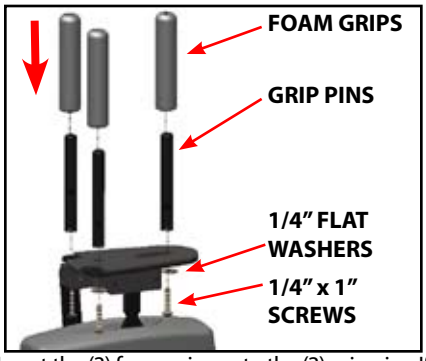
STEP 9

On the foam pad, punch out the screw access holes shown in the figure above. Also, remove the adhesive backing from the foam pad.

STEP 10

Place the foam pad on top of the Tri-Pin Assembly as shown. This pad may be cut or modified to meet your client's needs.

STEP 11



Insert the (3) foam grips onto the (3) grip pins. If necessary, use soapy water to lubricate the foam grips. Attach the (3) pins to the slots in the Tri-Pin Assembly using the 1/4" x 1" screws and 1/4" flat washers as shown in the figure above.

INSTRUCTIONS - LVR-TRI-PIN-2

FITTING YOUR CLIENT FOR THE LEVER-TRI-PIN:

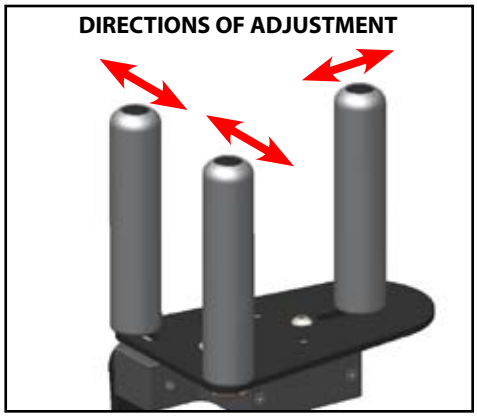
NOTE:

THIS SECTION ASSUMES THAT THE LEVER-TRI-PIN HAS BEEN INSTALLED CORRECTLY AND HAS BEEN CONNECTED TO THE APPROPRIATE FUNCTION(S) WHICH IT WILL CONTROL.

NOTE:

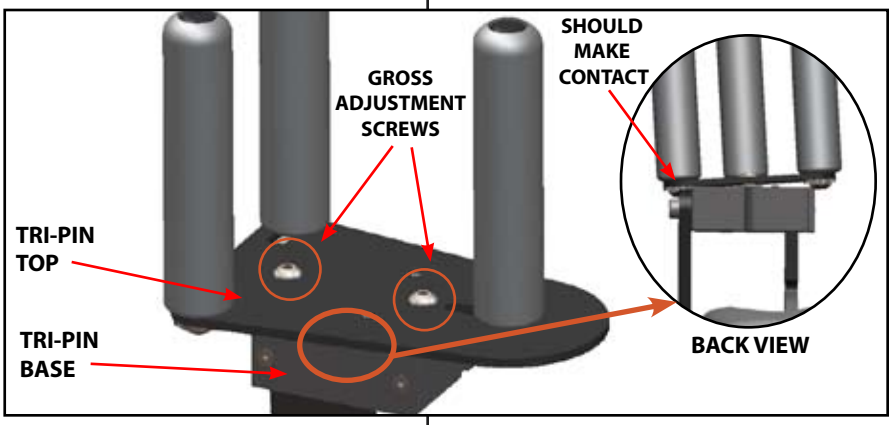
THE FOAM PAD HAS BEEN REMOVED FROM THE FIGURES IN THIS SECTION FOR CLARITY. THESE ADJUSTMENTS CAN, AND SHOULD, BE MADE WITH THE PAD IN PLACE.

STEP 1



Adjust the grip pins (by loosening the 1/4" x 1" screws under them) to a position necessary for the client to fully operate the Lever and Tri-Pin effectively and comfortably.

STEP 2



Loosen the two gross adjustment screws on top of the Tri-Pin Assembly approximately 1/2 turn each such that the top of the Tri-Pin pivots easily on the Tri-Pin Base.

WARNING:

DO NOT LOOSEN THE GROSS ADJUSTMENT SCREWS MORE THAN 1/2" TURN.

STEP 3

Next, begin tightening the gross adjustment screw while the client moves the Tri-Pin to each side. It is important that the Tri-Pin Top makes contact with the Tri-Pin Base as shown in the figure above. Once the client is **UNABLE** to make the Tri-Pin Top make contact with the Tri-Pin Base, loosen the gross adjustment screws back to the setting where the client could make the contact. This completes the "gross adjustment" section.

STEP 4

FIGURE 1

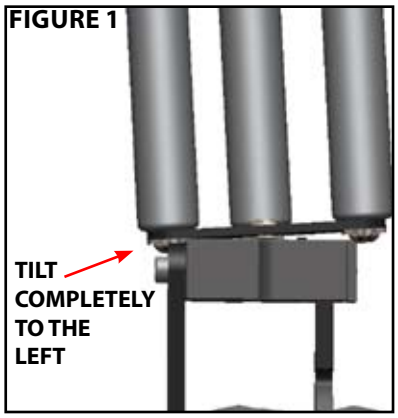
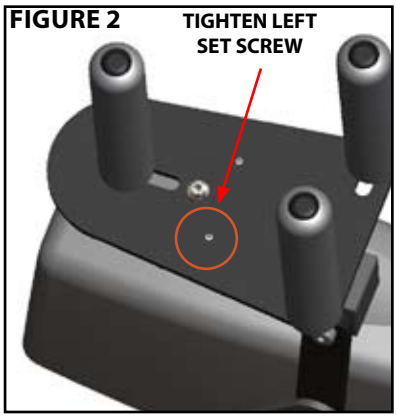


FIGURE 2



Now that the client can pivot the Tri-Pin Top such that it will make contact with the Tri-Pin Base, the "fine adjustment" of the Tri-Pin can be performed. First, pivot and hold the Tri-Pin Top completely to the left as shown in **Figure 1**. Using the 1/16" allen wrench provided in the hardware bag, begin tightening the 06-32 x 1/8" set screw on left hand side of the Tri-Pin Top (**Figure 2**). Tighten this set screw **just** until the function that the Tri-Pin is connected to activates. Release the Tri-Pin and verify that the function returns back to the null condition. Repeat for the right hand side of the Tri-Pin and its associated function.

Once both functions have been tested and work properly, have the client operate the Tri-Pin once again to verify that both functions work properly. If the force required to activate the Tri-Pin by the client is too great, tighten the "fine adjustment set screws". If that does not work, go back to **Step 2** and perform the "gross adjustment" again.

WARNING:

AFTER COMPLETION OF THE INSTALLATION AND FITTING OF THE LEVER-TRI-PIN, VERIFY THAT ALL SCREWS ARE TIGHTENED AS SPECIFIED OR SUCH THAT THERE IS **NO ACCIDENTAL MOVEMENT OF THE DEVICE UNDER NORMAL OPERATING CONDITIONS**. FAILURE TO DO SO COULD CAUSE AN ACCIDENT RESULTING IN SERIOUS INJURY AND/OR DEATH.