Installation of Levelok Model LL-QC-3, Streamline, KeyLok, Quick Connect Base Unit

Read these instructions carefully. It is important that these instructions are understood before using Quick Connect Base Units. Improper installation and use can cause serious injury. Always inspect Quick Connect System before each use. Keep debris and other types of foreign matter such as paint, grease, soil, sand, etc., away from base units. Do not use base units if damaged, worn or exposed to chemicals or fire.

(This product approved for use on Type II, Type I, Type IA and Type IAA fiberglass ladders.)

1.) Snap Assembly together (Figure 1) - Attach Leveler to one Quick Connect Base Unit by inserting the 3 knobs on the back of leveler into the 3 keyholes of the Base Unit and then sliding leveler upward until it snaps into position. Black Leveler cap should be pointing upwards, corresponding with red, UP label on Base Unit. (See Figure 1)

Red UP Label

Mark A - Bottom Edge of Base

Figure 3

Shoe

Just Above

Ladder Shoe

2.) Position Base Units (See Figure 2) - Place assembly at bottom of ladder, along **centerline** of ladder rail. The leveler's rubber tread should be positioned just above the pad of ladder shoe when both shoes are in uppermost position. Place small indicator mark (Mark A) on ladder rail at bottom of base unit. This represents the *Approximate* location of base unit. *ATTN*: Review Rule A thru E below before moving onto Step 3.

Figure 2

IMPORTANT NOTE: Review Rule A through E below before proceeding.

Rule A: The two small (3/16" dia) mounting holes, located at top of unit, and the large (5/16" diameter) mounting hole, located just under the KeyLok label, should be positioned above the first ladder rung on ALL ladders. All 3 of these holes *must* be used for installation on *all* ladders. (See Figure 3)

Rule B: The two small (3/16" dia) mounting holes, located just above color Levelok logo and just below middle keyhole of base unit, should be positioned at or above the first ladder rung. (See Figure 4; Arrows A) (Optional Holes: See Rule E)

Rule C: The lower 5/16" dia. hole, located just beneath the Levelok color logo, should be positioned at or below the 1st ladder rung. (See Fig 4; Arrow B) (Optional Hole: See Rule E)

Rule D: The lowest two small (3/16" dia) mounting holes, located at bottom of base unit, *must* be used for proper installation on *all* ladders. (See Figure 4; Arrows C)

Rule E: Optional Mounting Holes: Use either 2 mounting holes A or single hole B, shown in Fig. 4. The use of all 3 of these holes (Holes A and Hole B) are not necessary for proper installation. (See Fig. 4)

Optional Example A: If hole B is used, then holes A should not be used. Optional Example B: If holes A are used, then hole B should not be used

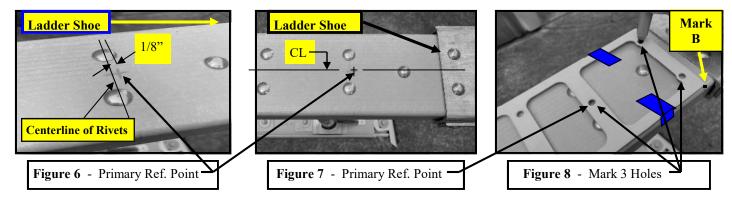
Figure 4

NOTE: After *Approximate* position of base unit has been achieved, and clearly marked on ladder, at bottom of base unit, you should move on to step 3. At this point you have only located the temporary, approximate position of base unit. Determining final position is next.

3.) Final Position of Base Unit: Hold provided cardboard template on ladder rail, lining up the bottom edge with pencil mark previously placed on rail as the "Approximate" position of base unit. Adjust template, slightly, up or down rail until the best location for bolt and washer clearances are achieved. Check positioning of mounting holes on inside and outside of ladder rail for sufficient clearance of mounting bolts, washers, aluminum cylinder spacers and locknuts around corner braces, rungs, rivets, plates, etc. After finding the best position, draw a final, small indicator line at bottom edge of the Template (Mark B). Use a different color marker to indicate final position. (See Fig. 5)

Mark B - Bottom Figure 5 **Edge of Template**

Page 1



Ladders with Riveted Rungs: Installation onto fiberglass ladders with *Riveted (See Fig 6 - 8)* rung-to-plate connections may require locating a "primary" reference point for an accurate template position. This reference point is used when and if the template position appears to enable all bolt holes to line up with proper clearances on inside of rail for washers, nuts, etc. If this is the case, the first-hole reference point can be located by drawing a line

between the two lowest rivets under the first ladder rung, then placing a mark 1/8" below this line, on the Centerline (CL) of the rail. (See Figure 6)

SPECIAL NOTE: Some ladders, made with a metal knee brace (angle brace—See Figure 9) under the first ladder rung, may allow installation of the lower 5/16" diameter mounting bolt to be positioned and secured directly into the same hole as the rivet or bolt hole in the lower portion of the angle brace. This hole may need to be drilled slightly larger for the 5/16" diameter bolt to fit with proper clearance. Upper 5/16" diameter mounting bolt typically fits between rung plate rivets is cases such as this.

Ladders with Open Rung Holes: Installation onto fiberglass ladders with *Open Rung Holes* (See Fig. 10, 11 & 12) may require cutting out a portion of template to allow template to lay flat onto the rail surface before marking mounting holes.



Figure 10

- **4.)** Tape Template & Mark Mounting Holes: Tape Template on centerline of rail with bottom edge lining up with Mark B. With a pencil or fine tip, black marker, draw a small indicator circle on the ladder rail at each hole to be used for mounting. (See Fig. 8 & 12)
- **5.) Drill Pilot Holes**: Using a 1/8" diameter drill bit, drill a pilot hole in the middle of each indicator circle. Then, using the correct drill bit, per Rules A E on page 1, drill all mounting holes out. Use a 3/16" diameter drill bit for smaller mounting holes and an 5/16" diameter drill bit for all larger mounting holes. Repeat these steps on opposite side of ladder. (See Figure 13 on Next Page)

 Figure 11
- **6.)** Check for Fit: With ladder rail facing upward, (See Fig. 12 & 17) place base unit onto rail, lining up the appropriate mounting holes. Slide mounting bolts into the correct base unit holes that you just drilled into the ladder rail. Verify that all bolts and washers line up properly with adequate clearances. Make fine-tune hole drilling adjustments wherever necessary. Read step 7 before final installation.
- 7.) Check for Proper Clearance of Leveler Shoe Bolt: With ladder in same position as Step 6, with Base Unit still in place, and all mounting bolts loosely fit inside the mounting holes, tape the base unit down so it cannot slide around. (See Fig. 17 on Next Page) Attach KeyLok Ladder Leveler to base unit and snap-lock into place. Carefully and slowly extend leveler leg outward approximately 4" to determine if there is ample clearance between the ladder shoe bolt and the leveler shoe bolt. If interference is

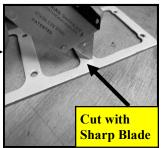


Knee

Brace

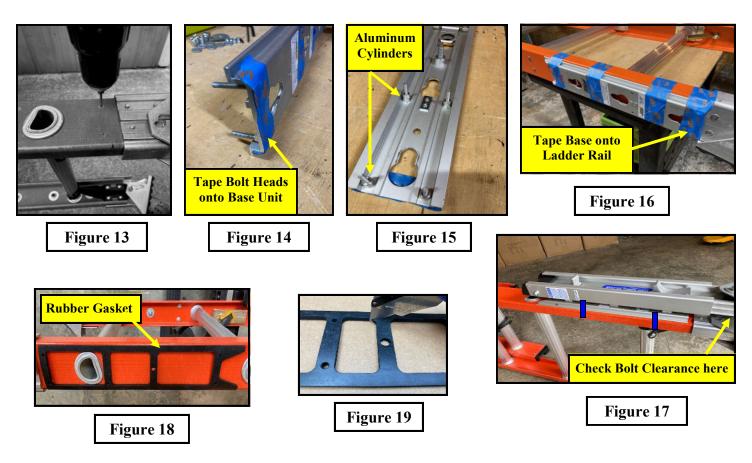
<mark>5/16"</mark> Dia.

Bolts



detected, you will need to install a thick rubber gasket, model LL-QC-3-GSKT. (**Sold Separately**) This accessory will serve to hold the leveler farther out and away from the rail, thereby eliminating interference between leveler shoe and ladder shoe. Normally this occurs on ladders with thick metal shoe brackets. (**See Step 8**)

- **8.)** Install Rubber Gasket: Only needed when more clearance needed between leveler shoe bolt and ladder's stock shoe bolt. Lay rubber gasket onto ladder rail, aligning the holes in gasket with holes you previously drilled for your ladder's specific installation. Cut the appropriate portion of gasket out (See Figure 18 & 19) that is not used with your specific installation, using a sharp utility blade. Check for proper fit with all bolts necessary for your specific installation. If proper bolt clearances achieved, move on to step 9.
- **9.) Prepare Base Units for Final Mounting:** Using blue painter's tape, or similar, tape all bolt heads onto the base unit with small piece of tape at each bolt. (See Figure 14) Then, flip base unit over onto its face, with threaded bolt ends facing up. Slide corresponding aluminum cylinders and rubber gasket, (if necessary) over all bolt ends. (See Figure 15)
- 10.) Mount Base Units: Lay ladder onto its face with rungs parallel to floor. (See Figure 16) Slide entire base unit assembly with mounting bolts, aluminum cylinders and rubber gasket, (if necessary) back into corresponding mounting holes, with bolt heads taped to keep them in place. Then, tape or clamp entire base unit assembly to the ladder rail. Mount corresponding washers and nuts on the inside face of the rail by hand. Using included hex wrenches, tighten all nuts with a wrench or socket for a snug fit. Do not over tighten.



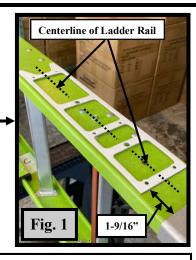
CAUTION: The Base Unit MUST be positioned so the release lever and red UP label is at the top, pointing toward top of ladder. Installing the Base Unit incorrectly can cause the base unit latch to release while a person is on the ladder, causing serious injury.

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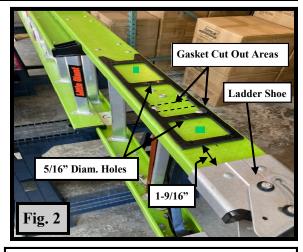
Installation Instructions for Levelok LL-QC-3, Streamline Base Unit on Little Giant Hyperlite Fiberglass Extension Ladder with a Type 1AA, 375 Pound Duty Rating

(For Installation on a Type 1A, 300 pound duty rated Hyperlite Ladder, please refer to page 1-3 of these instructions)

Figure 1...Place cardboard
Template on
Centerline of ladder rail, as shown. Bottom edge should be positioned 1-9/16" above top edge of metal shoe bracket.



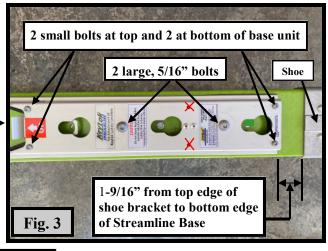
<u>Figure 1</u>.....Bottom edge of base unit should be positioned 1-9/16" above top edge of metal Ladder Shoe Rail Bracket.

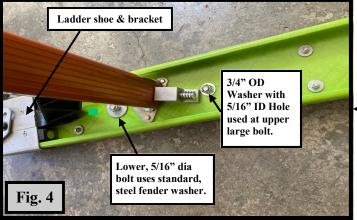


Rubber Gasket is used to avoid rivet interference on base unit flanges. Cut where necessary. Check for flush, even fit. Figure 2.

See correct mounting bolt locations in <u>Figure 3</u> to the right.....

Please note: In this specific installation, there are <u>no</u> mounting bolts located at the 2 small holes between the middle keyhole and the bottom keyhole. These holes are indicated by a red X, shown in Figure 3.





<u>Figure 4</u> ... See bolt, washer and locknut locations to the left.

Please Note: The upper, 5/16" diameter bolt uses a smaller, 3/4" outside diameter washer to allow clearance between the spring loaded clicker and outer edge of steel washer.

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