

# LIGHTWEIGHT #95 LACER OPERATION MANUAL



#### INTRODUCTION

Congratulations on your purchase of the LIGHT WEIGHT #95 LACER. With proper care, it will give you years of economical, quality belt lacing service.

Weighing just 28 pounds, the LW #95 is the lightweight answer to a wide range of applications. For industrial uses, it can be easily taken up on catwalks to repair overhead conveyors, over and under machinery to those "hard-to-get-at" belts, placed right on the conveyor to lace belt ends, and it can be taken right into the field to repair agricultural equipment.

This instruction manual has been compiled for your use. Please read it carefully. It will help you become familiar with your lacer and proper lacing procedures.

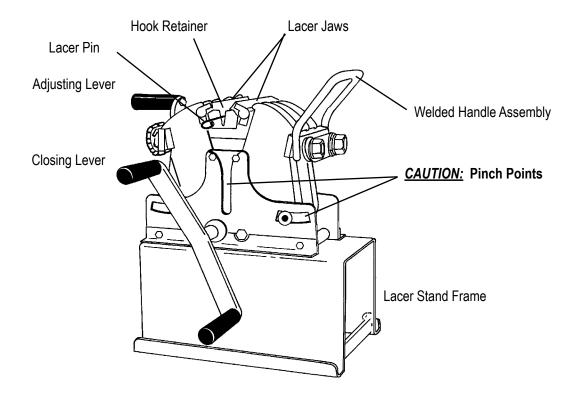
This manual contains stand assembly instructions, lacer operation tips and belt lacing hints that will help you to lace belts anywhere quickly and efficiently.

If you have any questions about the Light Weight #95 Lacer, or the lacing procedures, please contact your Flexco Distributor or Flexco Customer Service.

Your Lacer Identification:	
Model No.	LIGHT WEIGHT #95
Serial No.	
Date Purchased	

Please use correct model number and serial number when corresponding with your Flexco Distributor or with our factory. Proper identification will help us to quickly and efficiently answer your questions or service you with repair parts.

Thank you,



#### Assemble Stand and Closing Lever

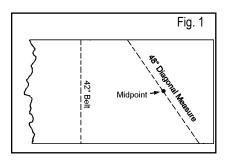
- 1. Align lacer to holes on stand. Attach with screws, lock washers and square nuts.
- 2. Closing Lever can be mounted on either side of lacer. Select side which is most comfortable, place handle on pinion shaft and tighten screw.

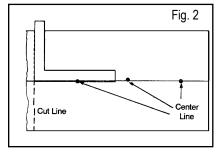
## Prepare belt

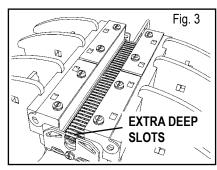
- 1. Square belt end
  - A. Measure diagonally across belt 6" (150mm) longer than belt width and mark center point. Example: Measure 48" (1200 mm) diagonally across a 42" (1050mm) wide belt and mark at 24" (600mm). See Figure 1.
  - B. Repeat at least five more times, moving the tape 12" (300 mm) down the belt each time. Mark each center point.
  - C. Using a straightedge, connect as many points as possible for an average center line. See Figure 2.
  - D. Use a square to draw a perpendicular line to the center line. Cut belt on this line.
- 2. For rough top belt, skive back  $\frac{3}{4}$ " 1" (19 25 mm).

#### Lacing instructions:

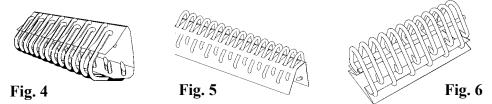
- 1. Select the proper size hook for the application.
- Remove lacer pin from hook retainer. Turn adjusting lever to open lacer jaws. Insert hooks in active slots of hook retainer (no hooks in the two extra deep slots). See Figure 3. Reinsert lacer pin.
- 3. Close adjusting lever until hooks are held firmly between jaws.
- 7. Belt edges should line up when ends are connected.
- 8. Run fingernail across hooks of splice; hook loops should not move.







4. Clipper hooks are available in two carded styles and one Unibar style. Referring to the below drawings, identify the type of lacing you have selected. See Figures 4, 5 and 6.



Insert hooks into hook retainer and secure with lacer pin. If using hooks shown in Figure 4 or 6, remove carding paper. Carding paper as shown in Figure 5 is removed *after* the splice is complete.

- 5. Hold belt down flush and perpendicular onto the hook retainer.
- 6. Holding belt with one hand, turn closing lever with other hand to embed hooks into the belt. Once hooks are started into the belt, both hands can be used to finish cycling the closing lever. Ensure fingers and foreign objects are free from crank, chain and pinch points.
- 7. Open jaws and examine hook clinch. Hooks are properly clinched when a.) approximately 1/2 the diameter of hook leg is imbedded into the belt; b.) Hook points barely penetrate opposite side of belt.
- 8. If additional clinch is required, turn adjusting lever clockwise 1/8 turn and cycle closing lever again. Continue until hooks are properly clinched.
- 9. Remove lacer pin.

#### **Continuous Lacing Wide Belts**

- 1. After first lacing operation is complete, note position of adjusting lever; this will be the "Final Set" point for future sections. This ensures a consistent splice from section to section.
- 2. Position hook retainer with extra deep slots on the left end of retainer.
- 3. Turn adjusting lever counter-clockwise one complete turn to open jaws.
- 4. Insert card of hooks into hook retainer. Insert lacer pin through hook loops, but not into the extra deep slots. Turn adjusting lever clockwise until hooks are firmly held in jaws. Remove paper if applicable (Figures 4 and 6 above).
- 5. Insert last two laced hooks into the extra deep slots (Figure 3). Continue inserting lacer pin through these hooks.
- 6. Cycle closing lever. Turn adjusting lever to "Final Set" position (See above Step 1). Cycle closing lever. Complete additional 6" (150mm) sections as necessary until entire belt width has been laced.

### Lacing Hints

- 1. Select the proper hook based on belt thickness and pulley diameter.
- 2. Hook is properly sized and clinched when:
  - a. Hook legs are parallel. Hook loop should not have a light bulb shape.
  - b. Hook points slightly penetrate opposite side of belt (.005" .015").
  - c. 1/3 to 1/2 of the wire diameter is embedded into the belt.
  - d. When installed, the "knuckles" of the hook should not be higher than the legs.
- 3. Leave 1/4" on each edge of belt unlaced. This guards against end hooks being pulled out.
- 4. Use one more hook on leading edge than on trailing edge.
- 5. Chamfer trailing edge.
- 6. Splice should be uniformly embedded across the entire width of the splice.
- 7. Belt edges should line up when ends are connected.
- 8. Run fingernail across hooks of splice hook loops should not move.

Good Clinch: Hook legs are parallel, half of the wire diameter is embedded into belt, and hook points have penetrated through belt.

Over Clinch: Functional, but not an optimal splice. Try to avoid overclinching in the future.

Under Clinch: Embed fasteners further.

#### Maintenance

- 1. Oiling Oil all moving parts, chain and thread of tie rods, underneath lacer: rack assembly and toggle link pins.
- 2. Cleaning Blow off the lacer with air hose periodically to free dust and dirt.

#### **PARTS LIST** 03118 Hook Retainer to Jaw Assembly 03258 Light Weight #95 & includes: 03016, 03094, 03108, 03153, **#25 XLW Lacer Parts** 03095 03097, 03093, 03106, 03109, 03110, 03079 03122 Welded Handle Assembly 03016 12-24 x 3/8" Round Head Screw 03153 Regular Lacer Pin 03486 1/4 Spring Lock Washer 03188 3/8 Regular Spring Lock Washer 03077 Jaw Bar Assembly #2 03245 Plastic Knob 03078 10-24 x 1-3/4 Zinc Plated Rnd Hd Bolt 03246 Plastic Knob Sleeve G0368 12-24 x 1 Zinc Plated Round Head Screw 03248 3/8-16 Hex Nut 03079 Connecting Cable 03249\* Flanged Nut 3/4-16 03080 End Plate Assy. Includes 03111, 03094, 03258 Nut Jam 3/4-16 Nylon Insert 03016, 03079 03262 3/8-16 x 2-3/4 Rd Hd Screw 03082 Long Rocker Bar 03083 Untapped Flat Pressure Bar G0373 Jaw Plate Spacing Collar 03088 Frame Anchor 03089 Trunnion Washer G0374 10-24 Zinc Plated Square Nut 03091 3/4-16 Hex Jam Nut G0377 Long Jaw Plate Shaft Collar G0378 Medium Jaw Plate Shaft Collar G0379 Short Jaw Plate Shaft Collar 03109 03092 Adjusting Lever 03082 03093 #8-1/16 x 3/64 Lock Washer 03094 #12-1/16 x 1/16 Lock Washer 03095 Spring Washer 03083 03096 Tie Rod Spring 03097 8-32 x 5/16 Zinc Plated Round Head Screw 03485 1/4-20 x 1-1/2 Zinc Plated Hex Head Screw 03100 Long Tie Rod Assembly 03101 Short Tie Rod Assembly 03097 03102 Nut Anchor Assembly 03093 03498 Chain Assembly 03106 Jaw Assembly 03110 03108 Regular Acusteel™ Hook Retainer 03109 L.H. Jaw Wing 03110 R.H. Jaw Wing 03111 03111 End Plate 03112 Jaw Plate 03094 03113 Jaw Bar Assembly #1 03079 03498 3088 03486 03092 03089 03091 03112 03485 G0373 03248 03188 G0374 G0378 G0377 G0379 G0379 G0378 Regular Acusteel™ Hook Retainer Assy includes: End Plate Assy & Loop Pin #1 Acusteel™ Hook Retainer Assy. 03081 includes: End Plate Assy & Loop Pin 03119 #36 Hook Retainer Assy includes: \* Units prior to S/N 02673 use two (2) 03249 and one (1) 03102 End Plate Assy & Loop Pin

03125 #25 Hook Retainer Assy includes: End Plate Assy & Loop Pin if either nut or nut anchor is replaced.

\*\*If either tie rod is required, both tie rods must be replaced.

