# Maxi-lift Inc. MAXI-SPLICE ULTRA INSTALLATION INSTRUCTIONS

# **TOOLS RECOMMENDED**.

- MAXI-LIFT ULTRA belt punch for 11/16" diameter holes.
- Torque wrench capable to 150 foot pounds torque rating
- 15/16" diameter deep socket •
- 15/16" wrench ٠
- Impact wrench .
- Ultra Splice template tape
- C-clamp vise grips to hold belt in position •
- Silver pencil or Sharpie to mark belting

# INSTALLATION \_

- 1. Follow established procedures for Lockout/Tag out of the bucket elevator.
- 2. Ensure that belt ends are square and even. Find and mark belt center line with the silver pencil or Sharpie.
- 3. Apply Maxi-Splice Ultra Template tape using the marked center line as a guide. See instructions on the tape backing for full details. Make sure template is squarely applied. Trim template tape excess off of belt edges.
- 4. Use the Ultra belt punch to cut holes through the belt in the marked position.
- 5. Pull the ends of the belt together, square up and clamp in place. Once clamped, check for square on both ends. Use the holes through the first belt as your guide to cut the holes through the second.
- 6. Prepare the center section of each splice by installing the rubber wedge, with any required shims per below. A. Up to 5/16" thick belting, mount the rubber wedge, without shims, directly to the aluminum center section B. 5/16" to 3/8" thick belting, insert one shim between the wedge and aluminum center section. C. 3/8" to 1/2" thick belting, insert two shims between the wedge and aluminum center section.
- 7. Secure the wedge/shim assembly using the supplied allen key bolts and the allen wrench supplied. If reusing the bolts, a fresh application of a thread lock compound is required.
- 8. Insert the center Ultra splice wedge between the two belt ends, aligning with the drilled holes. The center wedge should be placed so the rubber wedge is toward the pulley side. Place one of the two outer plates on the belt top and align with the holes drilled in the belt. The larger radius end should be toward the pulley side of the belt. Apply one of the washers to the 5/8" grade 5 bolt and insert bolt through the holes. Bolt head should be up to protect the threads from wear during use.
- 9. Apply the bottom plate, adding the second washer, and thread on the locking nut. Tighten until lightly snug. You will want the splices to be relatively loose at this point so they may be repositioned and squared prior to final tightening. Due to the stiffness of thicker belting, it may be necessary to use clamps to pull the belt ends together to allow the nut to be applied.
- **10.** Repeat this process until all units are in place and ready for final tightening.
- 11. While still loosely fastened, make sure all of the Ultra splice plates are squared and properly aligned. Use the impact wrench to snug the bolts to 50 foot pounds, beginning with the outer splices, first on one side, then the other. Next, go to the center splice, tighten, and then alternate from left to right until all units are tight. Final torque should be 125 foot pounds, checked with a torque wrench.
- 12. Once all units are fully tightened, slowly release tension on the clamps and let the belt pull into its natural position. Replace the access panels and operate the elevator for 30 minutes, running empty and recheck the torque on the splice bolts. Adjust as necessary.
- 13. Operate the elevator under load and recheck torque again. As with any belt splice, after installation, continued inspection of the total installation is required or failure can occur.

IMPORTANT- Due to the inherent compression properties of thicker rubber belts, it will be necessary to inspect the splice often for the first week of operation, as the belt will compress causing loss of bolt torque. Failure to do so could result in splice failure. Splice inspection should be a regular part of any maintenance program. Continue to inspect splices regularly to verify the fasteners remain in torque specification.

16400MidwayRd. Dallas,TX75001 • Ph:(972)735-8855 Fx:(972)735-8896 • info@maxilift.com

#### For Additional Details Please Call 1-800-527-0657 or Visit Us Online at: www.maxilift.com



NBR Rubber Wedge





Aluminum Wedge

# Maxi-lift Inc. MAXI-SPLICE ULTRA INSTALLATION INSTRUCTIONS









# MAXI-SPLICE ULTRA KIT \_



Each Maxi-Splice Ultra Kit Contains:

- 2 Outside Aluminum Gripping Plates
- 1 Inside Aluminum Gripping Plate
- 1 Replaceable NBR Rubber Wedge
- 1 Grade 5 Hex Head Bolt 4-1/2" Length by 5/8" diameter
- 2 SAE 5/8 Diameter Zinc Plated Flat Washers
- 1 Nylon Insert Locking Nut 5/8" Diameter
- 2 Aluminum Shims
- 2 M5x12 mm Size Allen Head Bolts
- 1 M5 Allen Wrench
- Installation Instructions

# **ULTRA PUNCH**



- Made with Durable Heat Treated Carbon Steel
- Reinforced Blade Easily cuts 11/16" Diameter holes
- Impact Adapter Available if Necessary
- Use with Hand-Held Mallet, Impact Wrench, or Drill
- Always Wear Eye Protection

# ULTRA TEMPLATE TAPE (FREE) \_\_\_\_\_



- Peel and Stick Directly on Belt
- Improves Punching Accuracy
- Marks Hole Locations
- Application Directions on Backing
- Included with Every Order

#### WARNING: DO NOT USE MAXI-SPLICE ULTRA ON MAN-LIFTS

• Maxi-Lift, Inc. does not solicit nor recommend the use of any Maxi-Splice in splicing manlift belts. Maxi-Splices were not designed for this purpose, and any installation of the Maxi-Splices in this application may cause serious harm or even death. Do not use on steel cable belts.

• Do not re-use nylock nuts on any Maxi-Splice. When reinstalling splices, please use new nylock nuts.

16400MidwayRd. Dallas,TX75001 • Ph:(972)735-8855 Fx:(972)735-8896 • info@maxilift.com

For Additional Details Please Call 1-800-527-0657 or Visit Us Online at: www.maxilift.com