

Read all safety instructions and information regarding operation of this product before proceeding

PARTS AND SAFETY MANUAL UST 1360/1365/1370



TOOL SPECIFICATIONS

TOOL NAME	OL NAME WIDTH THICKNESS	
UST 1360	1/2" (13mm)	0.017" - 0.023" (0.43 - 0.58mm)
UST 1365	5/8" (16mm)	0.017" - 0.023" (0.43 - 0.58mm)
UST 1370	3/4" (19mm)	0.017" - 0.025" (0.43 - 0.64mm)

PLEASE NOTE:
READ ALL WARNINGS BEFORE OPERATING THIS PRODUCT



READ THESE UNITED STRAPPING TOOLS (UST) INSTRUCTIONS CAREFULLY. FAILURE TO FOLLOW THESE CAN RESULT IN SEVERE PERSONAL INJURY.

STRAP BREAKAGE HAZARD

Improper operation of the tool or sharp corners on the load can result in strap breakage during tensioning, which could result in the following:

- A sudden loss of balance causing you to fall.
- Both tool and strap flying violently towards your face.

Failure to place the strap properly around the load or an unstable or shifted load could result in a sudden loss of strap tension during tensioning. This could result in a sudden loss of balance causing you to fall.

Read the tool's operating instructions. If the load corners are sharp use edge protectors. Place the strap correctly around a properly positioned load.

Positioning yourself in-line with the strap, during tensioning and sealing, can result in severe personal injury from flying strap or tool. When tensioning or sealing, position yourself to one side of the strap and keep all bystanders away.

TRAINING

This tool must not be used by persons not properly trained in its use. Be certain that you receive proper training from your employer. If you have any questions, contact your UST Representative.

EYE INJURY HAZARD

Failure to wear safety glasses with side shields can result in severe eye injury or blindness. Always wear safety glasses with side shields which conform to ANSI Standard Z87.1 or EN 166.



FALL HAZARD

Maintaining improper footing and/or balance when operating the tools can you to fall. Do not use the tool when you are in an awkward position.

CUT HAZARD

Handling strap or sharp parts could result in cut hands or fingers. Wear protective gloves.

TOOL CARE

Take good care of the tool. Inspect and clean it daily, lubricate it weekly and adjust when necessary. Replace any worn or broken parts.

WORK AREA

Keep work areas uncluttered and well lighted.

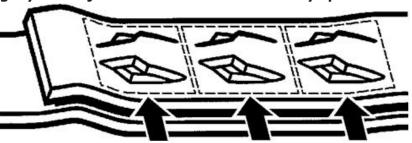
OPERATING SEQUENCE

Use the correct UST products for your application. If you need help contact your UST Representative. Before using this pneumatic tool, read the Operation and Safety Instructions contained in this manual.

JOINT FORMATION

Sealless joints are formed when overlapping straps are punched simultaneously creating interlocking keys. However, the integrity of the joint is obtained when the keys punched

in the upper strap move in relation to the keys on the bottom strap, allowing the straps to interlock. The movement necessary to create the interlock comes from the strap tension release where the top strap moves one direction and the bottom strap moves in the other direction. Therefore, never attempt



to make a sealless joint without having the straps under tension.

This tool is a punch type sealer. A properly formed joint will appear as shown in the illustration. If the joint does not appear as shown, then the operator must proceed as follows:

A.Ensure that the tool's operating instructions are being followed before applying another strap.

B.Ensure that tension has been applied to the straps before the sealer handle is activated. Tension is necessary to ensure that the keys fully interlock.

C.After confirming the above cut the strap off and apply another.

If the joint still does not appear as shown, then inspect the tool for worn and/or damaged parts. Replace tool parts as needed. NEVER HANDLE OR SHIP ANY LOAD WITH IMPROPERLY FORMED JOINTS. Misformed joints may not secure the load and could cause serious injury.

Always tuck the strap end back into the dispenser when not in use.

CUTTING TENSIONED STRAP

Using claw hammers, crowbars, chisels, axes or similar tools can cause tensioned strap to fly apart with hazardous force. Use only UST cutters designed for cutting strap such as the Model UST 1400. Read the instructions in the cutter's manual for proper procedure in

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INTRODUCTION

The UST1360/1365/1370 is a light weight, manually operated hand tool intended for use with Apex and Magnus strapping. The tool is easy to load, tension and seal.

Once the strap has been placed around the package, the operator puts both layers of strap into the tool, lowers the feed wheel, removes any strap slack and tensions the strap. The keyed sealless joint is then created and the strap is cut free of the supply.

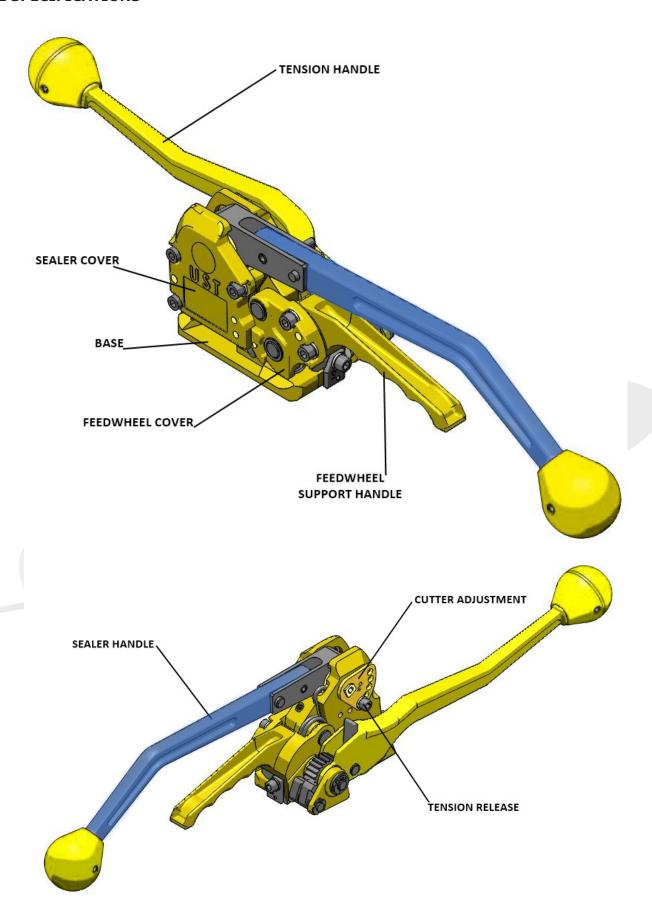
This manual provides the information necessary for the operation of the UST1360/1365/1370 hand tool and lists all of the parts in the event maintenance is needed. Therefore, it is valuable and should be saved.

Extra care should be taken in performing maintenance on the UST1360/1365/1370 since fasteners and other small components used on this tool are a combination of SAE and metric sizes.

TOOL SPECIFICATIONS

MODEL	STRAP			
MODEL	ТҮРЕ	WIDTH	THICKNESS	
UST 1360		1/2" (13mm)	0.017" 0.022"(0.42.0 E9mm)	
UST 1365	Apex Plus, Magnus	5/8" (16mm)	0.017"-0.023"(0.43-0.58mm)	
UST 1370		3/4" (19mm)	0.017"-0.025"(0.43-0.64mm)	

TOOL SPECIFICATIONS





WARNING!

Wear safety glasses. Stand to one side of the strap while tensioning.

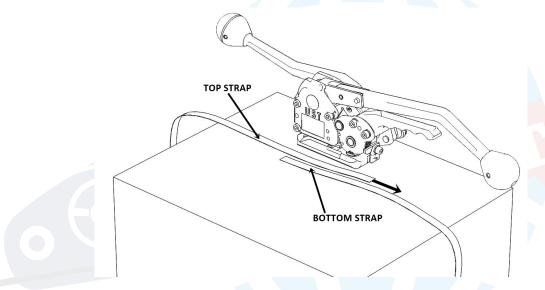
Make sure all bystanders are clear before proceeding.

Apply tensions that are proper for the size and type of strap being used and is compatible with the loads being strapped.

Tuck the cut strap back into the dispenser when not in use to prevent accidents.

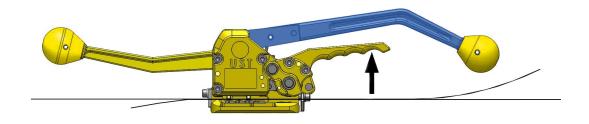
1. STRAP PREPARATION

Encircle the package with strap by passing the loose end over the top and bringing it back around. This will result in a top strap and a bottom strap.



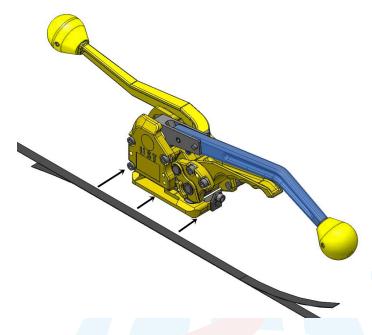
2. TOP AND BOTTOM STRAP INSERTION

Squeeze the sealer handle and the feedwheel support handle together with the right hand. With the left hand, align the top and bottom straps. Then, with a sideways motion, insert them into the tool, making sure both straps are fully seated in and against the front and back strap guides. Note that both straps must be placed between the feed wheel and the clutch plug. Make sure the lead end of the bottom strap extends about 1'' to $1\ 1/2''$ (25 - 40mm) beyond the front of the tool.



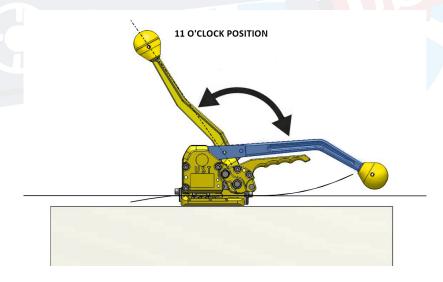
3. REMOVING SLACK STRAP

After the straps have been inserted into the tool, release the feedwheel support handle. With the left hand, grasp the top strap and pull back on it to remove slack strap. Pull it snug around the package. The feed wheel will rotate as the strap is being pulled back.



4. APPLYING TENSION

While standing to one side of the strap line, grasp the tension handle with the right hand and the sealer handle with the left hand. Move the tension handle forward and back between the 11 o'clock and 2 o'clock positions repeatedly, until the strap is tensioned around the package.





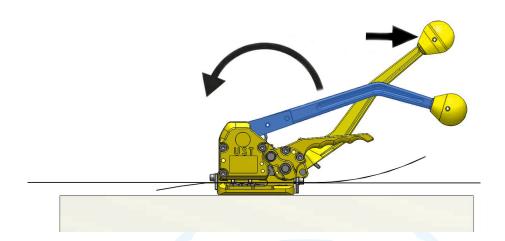
WARNING!

Never push the tension handle all the way forward past the 11 o'clock position as the feedwheel will lift and the tensioned strap will release from the tool.

Never squeeze the feedwheel support handle and sealer handle together while tensioning strap.

5. SEALING THE STRAPS

After the strap has been tensioned, grasp the sealer handle with the left hand. Move the sealer handle fully forward while pulling back on the tension handle to punch completely through both layers of strap.

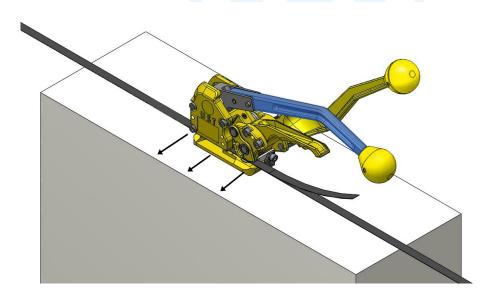


NOTE:

If the sealer handle is not cycled fully forward the strap will not be completely punched or cut off. If this occurs the tool cannot be removed from the tensioned strap. To remove the tool cycle the sealer handle completely forward a second time. If the tool still fails to completely cut or punch the straps, cut the straps and tool from the package. Check the tool for worn or broken parts. Inspect the strap joint for proper formation of interlocking keys.

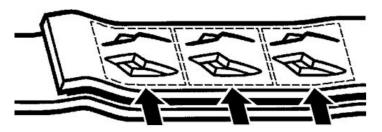
6. REMOVING THE TOOL

Hold the cut-off end of the top strap with the left hand and squeeze the feedwheel support handle and the sealer handle together with the right hand. Swing the rear end of the tool to the right to remove it from the tensioned tie. The strapping cycle is now complete. Inspect the strap joint for proper formation by reviewing Joint Appearance and Formation below.



STRAP JOINT APPEARANCE & FORMATION

A properly formed joint will appear as shown in the following illustration.





WARNING!

If the joint does not appear as shown, then the operator must proceed as follows:

Make sure that the tool's operating instructions are being followed before applying another strap.

Make sure that tension has been applied to the straps before the sealer handle has been actuated. Tension is necessary to ensure that the keys fully interlock.

After confirming the above, cut off the strap and apply another.

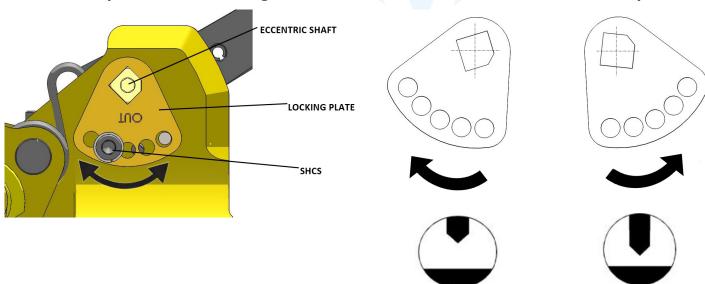
ADJUSTMENTS

The cutter may have to be adjusted if the tool has been altered to accept a different width or thickness of strap or an adjustment may be needed if the cutter has been replaced due to wear or damage.

Run a cycle with strap of the size to be used. A properly adjusted cutter will sever the top strap completely but the lower strap will have minimal impression, at the most. Excessive scoring of the lower strap is an indication of over cutting and this is not acceptable.

Lay the tool with the strap loading side down, remove the socket head cap screw (SHCS) that attaches the locking plate to the base (it is not necessary to remove the locking plate). Insert a 5.0 mm hex wrench into the end of the eccentric shaft.

Rotate the shaft clockwise a few degrees for thinner strap or counterclockwise for heavier strap. There are two mounting holes available for the locking plate. Align the "nearest" hole in the plate to the mounting hole in the base and reinstall the socket head cap screw.



FEEDWHEEL AND CLUTCH PLUG

There is no adjustment for feedwheel/clutch plug clearance. The clearance should be .001" to .010" (0.025 to 0.25mm). The most important issue is that the feedwheel does not interfere with the clutch plug.

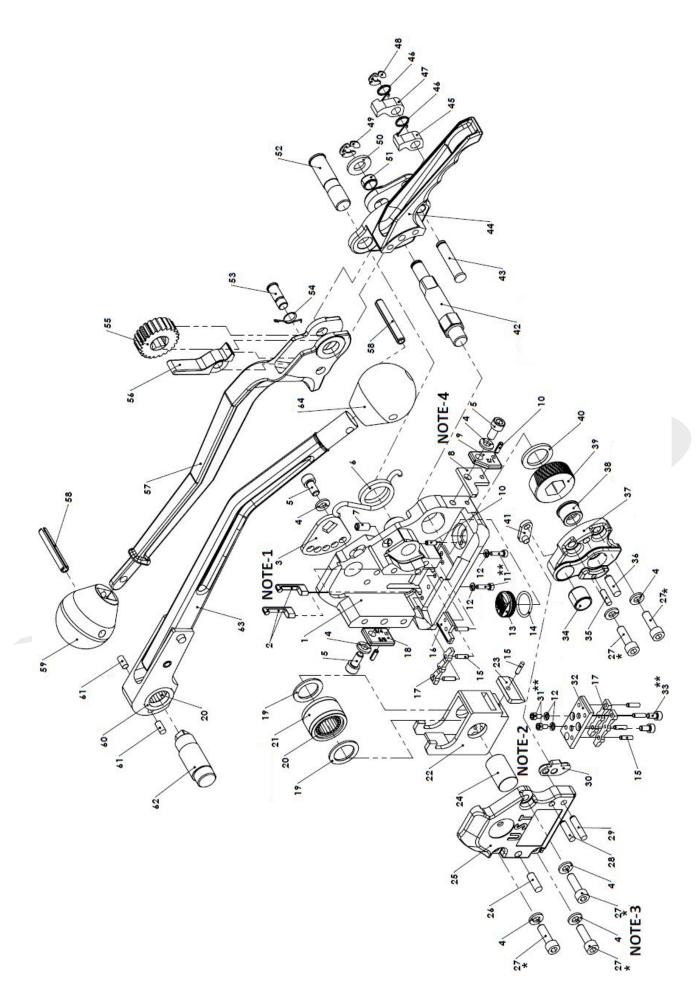
PARTS LIST

ITEM	QTY.	PART NO.	DESCRIPTION	ITEM	QTY.	PART NO.	DESCRIPTION	
1	1	28.424091	Base	36	1	28.274385	Dowel Pin	
2	2	28.424098	Lifter	37	1	28.425410	Feedwheel cover	
3	1	28.424106	Locking Plate	38	1	28.425375	Outer Bearing	
4	8	28.10077	Lock Washer	39	1	28.424240	Feedwheel	
5A	1	28.280830	Socket Head Cap Screw	40	1	28.424309	Feedwheel Spacer	
5	3	28.10032	Socket Head Cap Screw	41	1	28.424120	Link	
6	1	28.424241	Energizing Spring	42	1	28.425401	Feedwheel Shaft	
7	1	28.185778	Socket Head Screw	43	1	28.424247	Holding Pawl Pin	
8	1	28.424321	Deflector (Note 6)	44	1	28.424083	Feedwheel Support	
9	1	28.424245	Back Guide	45	1	28.3455	Short Retaining Pawl	
10	3	28.6045	Roll Pin	46	2	28.3483	Retaining Pawl Spring	
11	2	28.259935	Socket Head Cap Screw	47	1	28.3454	Long Retaining Pawl	
12	4	28.162568	Lock Washer	48	1	28.183295	Truarc Ring	
13	1	28.425403	Clutch Plug	49	1	28.423996	Truarc Ring	
14	1	28.2678	O-Ring	50	1	28.424449	Washer	
15	8	28.274931	Dowel Pin	51	1	28.424307	Garlock DU Bushing	
16	1	28.424107	Cutter Anvil	52	1	28.424249	Pinvot Pin	
17	3	28.424300	Punch	53	1	28.424246	H <mark>and</mark> le Pawl Pin	
18	1	28.424244	Front Guide	54	1	28.3467	Pawl Spring	
19	2	28.424117	Washer	55	1	28.424108	Ratchet	
20	49	28.426936	Needle Roller	56	1	2 <mark>8.34</mark> 62	Handle Pawl	
21	1	28.426938	Cam Roller	57	1	28.424317	Tension Handle Assembly	
22	1	28.426397	Die Holder	58	2	28.10057	Roll Pin	
23	1	28.424094	Cutter	59	1	28.306927	Handle Knob	
24	1	28.426939	Cam Roller Pin	60	2	28.424303	Cam Spacer	
25	1	28.424103	Sealer Cover	61	2	28.422831	Dowel Pin	
26	1	28.274047	Dowel Pin	62	1	28.424079	Eccentric Shaft	
27	5	28.10037	Socket Head Cap Screw	63	1	28.426942	Cam/Handle Assembly	
28	1	28.252247	Dowel Pin	64	1	28.10054	Knob	
29	1	28.162391	Dowel Pin	65	1	28.424321	Sealess Sign	
30	1	28.424121	Outer Guide	66	1	28.1345	Warning Label	
31	2	28.262456	Socket Head Cap Screw	67	1	28.424312	UST 1360 Name Plate	
32	1	28.424099	Die Support			28.424314	UST 1365 Name Plate	
33	2	28.162383	Socket Head Cap Screw			28.424316	UST 1370 Name Plate	
34	1	28.424308	Garlock DU Busing	68	1	28.1348	Danger Label	
35	1	28.253433	Dowel Pin	69	1	28.1345	Warning Label	

- 1. Locking Plate (Key 3) must be installed with the text "OUT" facing away from base.
 2. Outer Guide (Key 30) must be installed with chamfer side out.
 3. Socket head cap screws (Key 27) which secure the Sealer Cover (Key 25) must be torqued to 85-95 in-lbs.
 4. The Deflector (Key 8) is an optional part which is used to prevent the strap from curling around the feedwheel from severe high tension applications.
- 5. Lubricate all moving parts with Molith No. 2 or Lubriplate 3000W Grease

^{*} Use Loctite #242

^{**} Use Loctite #222



TROUBLESHOOTING

The following items are the most common tool symptoms if problems should occur. For symptoms or remedies not shown, contact your UST service representative for additional information and details. The following tool symptoms are shown in this manual:

- 1 SYMPTOM: Difficult strap slack removal.
- 2 SYMPTOM: Poor tensioning
- 3 SYMPTOM: Joint fails after tool is removed or joint not made properly.
- 4 SYMPTOM: Excessive effort needed to seal straps together.
- 5 SYMPTOM: Tool will cut-off strap after sealing, or bottom strap cut too deep.
- 6 SYMPTOM: Tool cannot be removed from strap after cycle is completed.
- 7 SYMPTOM: Feedwheel slips during tensioning.9 Seal pulls open during tensioning.

1. SYMPTOM: Diffucult strap slack removal.			
CAUSE	REMEDY		
1. Strap not lubricated or not waxed adequately.	Purchase only lubricated (waxed) strapping.		
2. Strap not inserted properly (strap caught by outer guide)	2. Insert and align straps in tool properly.		
3. Damaged parts in tension sub- assembly.	3. Inspect the tension assembly's ratchet wheel and pawls for damage or broken parts.		

2. SYMPTOM: Poor tensioning.			
CAUSE	REMEDY		
1.Feedwheel or clutch plug packed with dirt or grit.	1.If top strap is slipping, clean dirt from the feedwheel or replace worn feedwheel if necessary.		
2.Feedwheel or clutch plug teeth are worn.	2. If bottom strap is slipping, clean dirt from the clutch plug or replace worn clutch plug if necessary.		
3.Strap not properly aligned when inserted into tool.	3.Insert strap into tool carefully aligning strap.		

2. SYMPTOM: Joint fails after tool is removed or joint does not appear to have been made properly.			
CAUSE	REMEDY		
1.Low joint strength caused by chipped or worn sealer parts.	1.Inspect sealing parts for wear or chipped edges.		
2.Strap not strong enough to contain Adjust cutter as required.	2.Review application to determine proper strapping to use. If necessary contact your UST sales		
3. Joint made on strap that had not been tensioned to a proper level.	3.Make sure that tension is applied to the straps before the sealer handle is operated.		
4.Strap not inserted properly- 3 punches must penetrate both straps.	4.Insert straps with bottom strap extending 1" to 1 1/2" (25-40mm) past the front of the tool.		
5.Bottom strap being cut by the cutter.	5.Adjust cutter as required.		

4. SYMPTOM: Excessive effort needed to seal straps together.			
CAUSE	REMEDY		
1.Broken needles within the sealer handle assembly.	1.Carefully inspect sealer drive for worn or broken parts.		
2. Worn dies, punch or cutter.	2.Replace appropriate dies, punch or cutter.		
3.Poor tool lubrication.	3.Lubricate eccentric shaft, bearing needles, sealer cam and cam roller.		

5. SYMPTOM: Tool will not cut-off strap after sealing (cannot remove tool) or bottom strap cut too deeply.			
CAUSE	REMEDY		
1.Cutter blade damaged or worn. Cut strap manually from package too release tension and deenergize feedwheel.	1.Inspect cutter for wear or damage, replace as necessary.		
2.Different gauge (thinner) strap requires cutter adjustment. 2.Adjust cutter blade for gauge of strap being adjustment.			

6. SYMPTOM: Tool cannot be removed from strap after cycle is completed.			
CAUSE	REMEDY		
1.Upper strap was not cut off.	1.Inspect both the cutter for damage or adjustment. Cut strap manually from package to release tension and de- energize feedwheel.		
2.Chipped or worn parts (punches and dies).	2.Inspect and replace worn sealer parts.		

7. SYMPTOM: Feedwheel slips during tensioning.			
CAUSE REMEDY			
Flat spot on feedwheel. Replace feedwheel.			

CHANGING STRAP SIZE

The following table illustrates the unique parts to a particular strap size for the UST1360/1365/1370 tool. If the strap size of the tool is to be changed, this table must be used to coordinate all the respective parts which must be reconfigured or replaced.

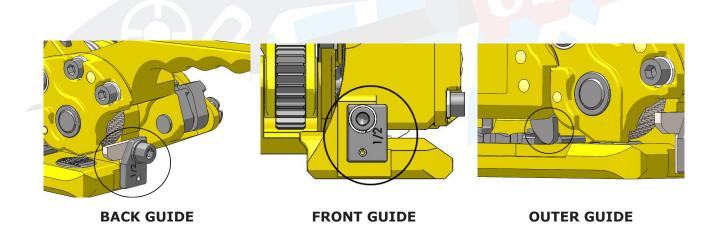
Follow all specified parts removal, replacement & adjustment procedures found in this manual when changing any of the strap conversion parts.



WARNING!

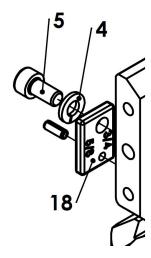
Do not attempt to convert a tool's strap size without replacing/reconfiguring all of the specified parts for the conversion. Failure to replace/reconfigure all required parts may cause severe personal injury.

KEY	QUANTITY	DESCRIPTION	1/2" (13mm)	5/8" (16mm)	3/4" (19mm)
18	1	Front Guide	28.424244	28.424244	28.424244
9	1	Back Guide	28.424245	28.424245	28.424245
30	1	Outer Guide	28.424121	28.424121	28.424121

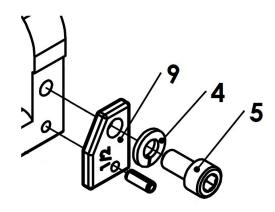


NOTES:

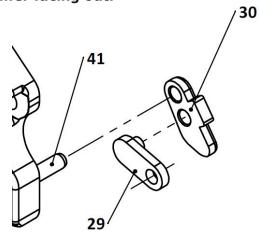
1. Install guide (Key 18) with text "1/2" facing outward from tool.



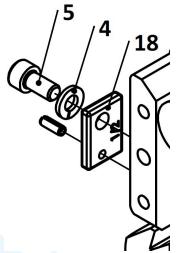
3. Install guide (Key 9) with text "1/2" facing outward from tool.



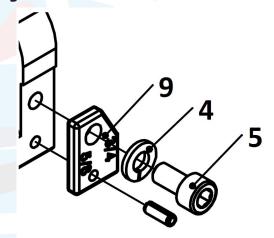
5. Install the guide (Key 30) in the inward position. Install the link (Key 29) in the outer position with the stem facing inwards. NOTE: Always install guide (Key 30) with the chamfer facing out.



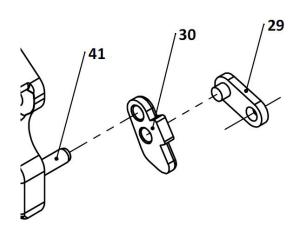
2. Install guide (Key 18) with text "5/8 3/4" facing outward from the tool.



4. Install guide (Key 9) with text "5/8 3/4" facing outward from tool.



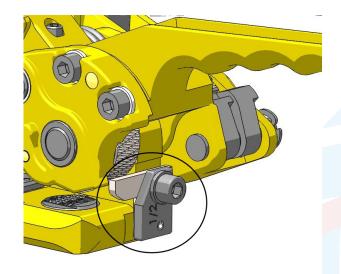
6. Install the guide (Key 30) in the outer position. Install the link (Key 29) in the inner position with the stem facing outwards. NOTE: Always install guide (Key 30) with the chamfer facing out.

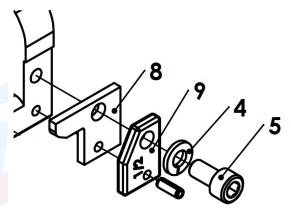


TOOL OPTIONS

STRAP DEFLECTOR (Part No. 28.424321)

The strap deflector (Key 8) is an optional part which is used to prevent the strap from curling around the feedwheel from severe high tension applications. The deflector is installed on the tool behind the back guide (Key 9) as shown using the existing hardware.





THE STRAP DEFLECTOR IS INSTALLED BEHIND THE BACK GUIDE.

INSTALL THE DEFLECTOR USING THE EXISTING

SAFE USE

TOOL MAINTENANCE

The most common reason for poor performance of tools and incorrectly formed straps is improper tool maintenance. The easiest way to determine if a tool is performing optimally is by inspecting the strap joint. Maintaining the tool is a task that consists of three parts. First, a quick daily inspection for any worn or broken parts. Second, keep the tool on a service schedule for cleaning and lubricating. Third, when problems occur, use the troubleshooting guide to diagnose and solve and issues before they lead to more serious problems. Each of these three steps have been outlined and further explained below.

TOOL INSPECTION

Visually inspect the exterior of the tool on a daily basis. Fixing and preventing broken or worn parts early on will increase the life span of the tool. Replace any broken or worn parts with new parts. Review the Parts Removal & Adjustments portion of this manual for more details.

SERVICE INTERVALS

This tool can be used with various sizes of strap which can each cause different rates of component wear. All critical moving components of the tool should be inspected at particular intervals, with some components being inspected more than others. Broken or worn parts can decrease sealing strength, which can further lead to component wear and produce lower joint strength.

Inspect the components of the sealing mechanism when:

- Joint not as shown in this manual or it is detected that the joint is not well formed.
- Sealing effort requires higher air pressure, or the tool is difficult to remove from strap.
- When the date for inspection has arrived.

If there is any question that the joint formations are not as shown, it is important to contact your UST Representative immediately.

The feedwheel and wear plug are subject to wearing and chipping. A daily cleaning of these parts is important for the tool to maintain a long life. The first indication of wear will be the strap slipping during tensioning. Sometimes the teeth need to be cleaned with a wire brush, but if slipping is till occurring, the parts may need to be replaced. Using the tool in a dirty environment will increase the feedwheel wear.

Inspect the components of the tensioner mechanism when:

- Strap slips when being tensioned.
- Evidence of the feedwheel milling on the strap surface.
- When the date for inspection has arrived.



WARNING!

Strap breakage will cause the tool to suddenly release tension in the strap.

Never extend the handle's length as this will increase the risk of strap breakage.



UNITED STRAPPING TOOLS NEW TOOL WARRANTY

United Strapping Tools (UST) warrants that a new UST product will operate per functional specifications for a period of **sixty** (60) days after the date of shipment to the owner's place of business. Normal wearing parts, as outlined in the manual are covered by a **thirty (30)** day warranty unless these parts have been subject to abnormal or extreme usage. Damage claims because of production shutdowns and claims for damage to persons and to property resulting from warranty deficiencies cannot be asserted by the customer.

UST's sole liability will be to replace or repair, without charge, any tool that proves to not operate per functional specifications within the stated period. UST reserves the right to replace any tool which proves not to operate per functional specifications with a new or like-new tool of the same model if in UST judgment. Any new replacement tool provided will carry a **sixty (60)** day warranty. Any warranty repaired tool will carry a warranty for the balance of the time remaining on the initial **sixty (60)** day warranty. The warranty will be extended to compensate for the time the tool is in the possession of UST for warranty repairs.

This warranty will be void to any tool that has been: (I) subjected to mis-use, misapplication, accident, damage, repaired with non-genuine UST replacement parts; (II) improperly maintained or adjusted, damaged in transit or handling; (III) used with improperly filtered, unlubricated air or improper strapping material; (IV) altered or repaired in a way that affects or detracts from the performance of the tool; (V) removal of the name plate off of the tool;

The removal, tampering or breaking of the security seal indicated by its blue color on or in select assembly points will indicate tampering of the tool and the warranty will be voided.

The warranty excludes:

- Wearing parts (tension wheels, cutters, punches, dies, notchers, grippers, batteries, motors),
- Deficiencies resulting from improper installing, incorrect handling and maintaining the tool,
- Deficiencies resulting from using the tool without or with defective security or safety devices,
- Disregard of directions in the operation manual,
- Arbitrary modifications of the tool,
- Deficient control of wearing parts,
- Deficient repair works of the too,
- Use of consumable products not recommended by United Strapping Tools.

We reserve the right to modify the product at any time in order to improve its quality.

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