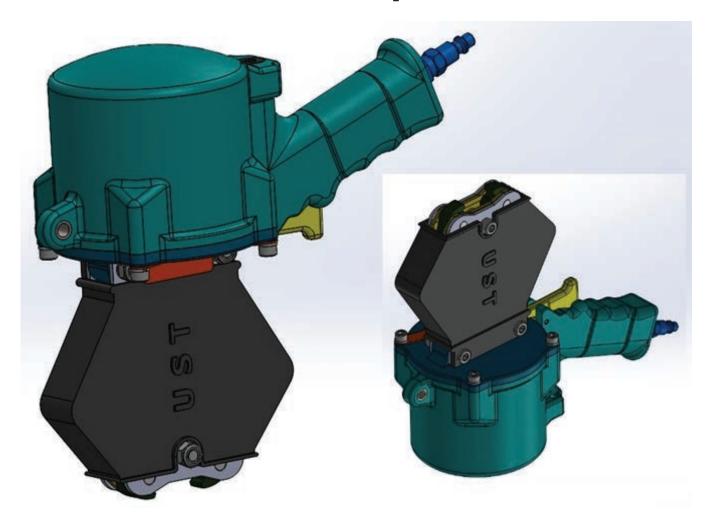


Read all safety instructions and information regarding operation of this product before proceeding

# PARTS AND SAFETY MANUAL UST 1310/1315



# **TOOL SPECIFICATIONS**

TOOL NUMBER	JOINT TYPE	WIDTH	THICKNESS
UST 1310	SINGLE CRIMP	3/4" (19mm)	0.025" - 0.031" (0.64mm-0.8mm)
UST 1315	DOUBLE CRIMP	1 1/4" (32mm)	0.025" - 0.031" (0.64mm-0.8mm)

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.

#### **CLEANING & LUBRICATION**

Clean and apply light weight machine oil to all moving parts on a weekly basis. Refer to the pneumatic information shown in this manual for lubricant recommendations or contact your UST Representative for any questions regarding the air motor.

#### JOINT INFORMATION

The UST 1310 and UST 1315 is a single reverse notching tool. Each notch-joint must be carefully inspected to make certain that good notches are formed. A properly formed notch-joint will appear as shown in the illustration. If the notch-joint does not appear as shown, then the operator of the tool must proceed as follows.

- 1. Make certain that the tool's operating instructions are being followed before applying another strap.
- 2. Cut the strap off and apply a new strap and seal.
- 3. An improperly formed seal which does not have two(2) good notches could result in strap separation. Before moving any package, be certain that the seal is formed as shown. Inspect the joint before proceeding. If the seal is not properly formed, check the tool for worm or broken parts. Repair the tool for worm or broken parts. Repair the tool before applying another strap.

#### **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 cutting strap. Before using any UST product read its Operation and Safety Manual.

#### **SEALER JAW ROTATION**

The cylinder and mounting plate can be rotated to allow the operator to hold the tool in normal vertical position while sealing either horizontal or vertical strap. To do this refer to the exploded views shown using the following instructions:

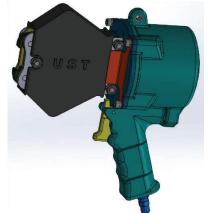
- Loosen the set screw (item #15) an remove the trigger (item #3) and pin (item #18).
- Remove the four socket head cap screws (item #22) which secure the mounting plate (item #2) to cylinder (item #1).
- Removing the four mounting screws will release the boot clamp (item #23). The boot clamp must be reinstalled when replacing the screws.
- Pull the sealer mechanism and mounting plate out from the cylinder just enough for the mounting to clear the trigger's pivot on the cylinder handle.
- Rotate the sealer mechanism and mounting plate 90° and reinstall back into the cylinder. Securely tighten all four mounting screws.

• Reassemble the trigger back into the cylinder handle and securely tighten the set

screw.

Horizontal

Strapping



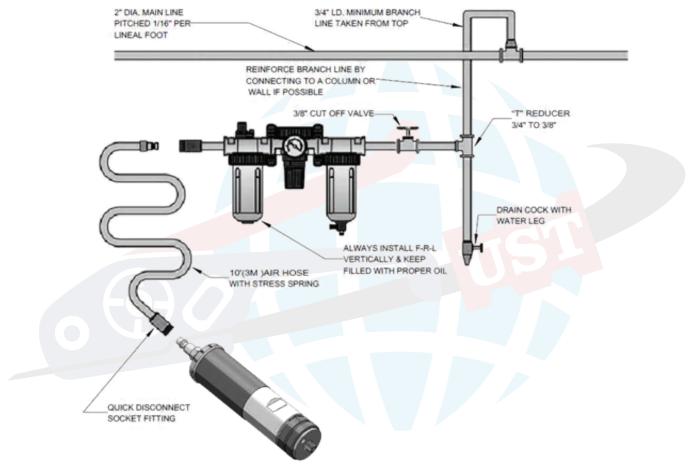
#### PNEUMATIC INFORMATION

#### **AIR SUPPLY INSTALLATION**

If the compressor has a good dryer unit, use black pickled pipe. If a dryer unit is not available, use galvanized or copper pipes.

To perform reliably, a pneumatic tool requires a source of continuous, clean, water-free air at an adequate pressure.

A filter-regulator-lubricator unit (P/N 173111) must be installed as close to the air tool as possible, preferably within 10 feet (3M). It should be placed in a convenient location where it can be easily drained, adjusted and filled with oil. The air hose must have at least a 3/8" (9.5 mm) I.D. A quick-connect press-on socket is installed on the stress spring end of the hose for convenient hookup to the air tool.



Do not install where bowls may be exposed to materials incompatible with polycarbonate. Certain oils, chemicals and fumes can weaken these bowls and cause them to burst. Clean only with warm water.



# **WARNING!**

Never operate this tool using a bottled air or gas source.

Bottled air/gas sources do not provide a consistent operating pressure and could result in air pressures that exceed the maximum allowable pressure for this tool.

#### **MOISTURE**

Steps must be taken to remove water from air lines and keep it from reaching the tool. Moisture will cause corrosion, wash away lubricants and failure of internal parts.

The main line should be pitched so the far end terminates in the water leg. Branch lines are taken from the top of the main, never off the bottom. Ever branch should have a water leg at its lowest point, with a drain that is drained daily.

If these precautions are taken and water is present, an after cooler and a moisture separator are required between the compressor and air tank. A large air line separator can be installed in the air tool line.

Water in air lines is a constant threat to the proper operation of the tools. Even near freezing conditions, a good refrigerant type dryer is essential. A good dryer will remove 95% or more of the water at the compressor. The remaining moisture is removed at the water leg.

#### **LUBRICATION**

The air motor must be lubricated to ensure optimal operating conditions. This is achieved by keeping the air line lubricator filled with oil and correctly adjusted. Without proper lubrication, the motor will become sticky and result in a lower tension force and be difficult to operate.

Install the lubricator as close to the air tool as possible. For proper operation, oil must drop through the lubricator sight glass at a rate of 4 to 10 drops per minute. Only 20% of this oil is delivered to the tool. The rest of the oil goes back to the oil reservoir. If an adjustment is required, the adjusting screw on top of the lubricator may be turned as marked to reduce or increase the flow of oil.

The correct grade of oil must be used in the lubricator. If the oil is too heavy, not enough lubrication will be delivered and will cause sluggish operation of the tool.

Recommended oils are any good grade of rust and oxidation inhibiting oil with a viscosity of 80-120 S.U.S at 100 degrees Fahrenheit.

(0.15 to 0.25 cm<sup>2</sup>/sec at 38 degrees Celsius)

Several drops of lubricator oil added to the inlet of the air motor or into the air line each day will help insure good operation of the tool. A noticeable reduction of air motor performance can usually be corrected by squirting a few drops of oil into the air line.

#### **COLD WEATHER OPERATION**

If a tool does not operate satisfactorily in freezing temperatures, certain steps can be done to correct the problem. The following steps can be taken to improve the cold weather condition operation of the tool:

- An air line dryer adjacent to the compressor.
- Using the correct lubricant. Using anti-freeze for air tools does not work well. The best lubricant for freezing conditions is a 1 to 1 oil and kerosene combination.
- Run the air supply line to an indoor located Filter-Regulator-Lubricator or relocate the F-L-R to a warmer operating area.

Air pressure is assumed to be 90 psig with the recommended size and length of the air hose. Volume of air at room temperature and sea level pressure, or "free air" conditions.

#### **AIR LINE PRECAUTIONS**

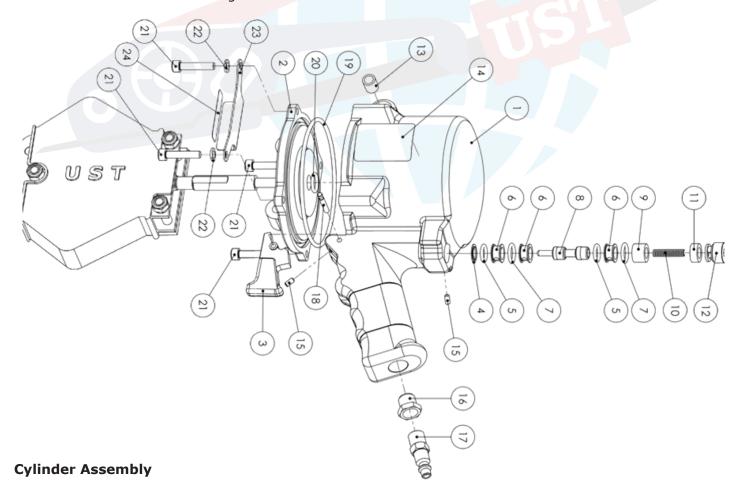
Strap tension is controlled by air pressure. Minimum air pressure is 50 psig with the maximum pressure at 90 psig. Use the proper air line piping and lubrication as specified in this manual. Your air pressure gauge must be accurate and be confirmed of its accuracy by comparing it to a calibrated master gauge.

**PARTS LIST, UST-1300, UST-1305** 

ITEM	QTY.	PART NO.	DESCRIPTION	ITEM	QTY.	PART NO.	DESCRIPTION
1	1	28424139	Cylinder	14	1	281346	Warning Sign
2	1	28424137	Mounting Plate	15	2	28180131	SHSS, M4 x 8
3	1	28424145	Trigger	16	1	28008478	Reducing Bushing
4	1	28424204	Bottom Spacer	17	1	28020704	Hansen Plug
5	2	28008596	O-ring	18	1	28424207	Trigger Pin
6	3	28023040	Valve Sleeve	19	1	28424202	O-ring #243
7	2	28020680	O-ring	20	1	28422858	O-rin
8	1	28424208	Valve Stem	21	4	28280832	SHCS, M6 x 30 Full Thread
9	1	28424205	Sleeve Spacer	22	4	28002187	Lock Washer, 1/4"
10	1	28093839	Compression Spring	23	1	28424142	Boot Clamp
11	1	28424206	Compression Spacer	24	1	28424143	Nameplate (UST1315)
12	1	28424141	Valve Plug		1	28424201	Nameplate (UST1310)
13	1	28008672	Bushing	25	1	281344	Protection Sign
				26	1	281348	Danger Sign

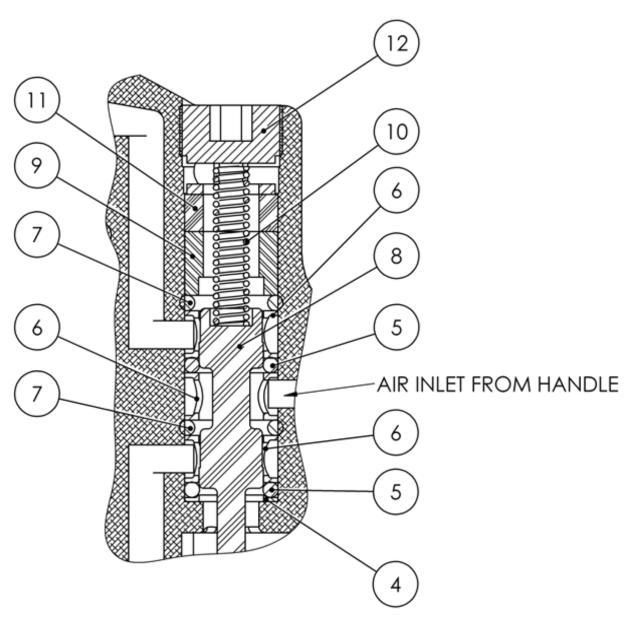
## **NOTE:**

- Bottom spacer (item #4) must be installed with "lip" facing up.
- O-rings (item #5 and item #7) are in different sizes and must be installed in the proper sequence.
- The two o-rings (item #7) are larger than the bore diameter and will not sit flat until the subsequent spacer is pushed into place.
- Lubricate all o-rings with white grease.
- Torque the four M6 cap screws (item #21) to 65-75 in.lbs (7,2-8,5 Nm).
- The lower of the two large o-rings (item #7) must be placed so the portion of the o-ring closest to the handle air inlet is below the inlet when the valve sleeve (item #6) is pushed into place. Failure to do this could result in air leakage.



#### NOTE:

• Install item #12, item #15 and item #21 using Loctite-242 (blue). Install item #16 and item #17 using Teflon pipe tape.



# **VALVE PLUG ADJUSTMENT**

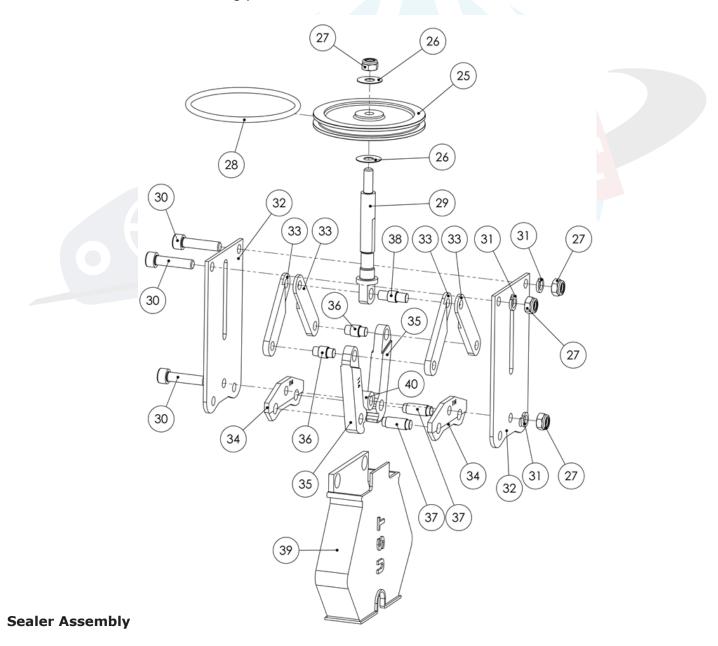
- Turn plug until flush with cylinder casting.
- Connect air to tool and check for leaks with trigger in both the ON and OFF positions.
- If leakage should occur, turn valve plug clockwise (in 1/4 turn increments only) until leakage stops.
- Lock valve plug in place with set screw (item #15).

**PARTS LIST, UST-1300, UST-1305** 

ITEM	QTY.	PART NO.	DESCRIPTION	ITEM	QTY.	PART NO.	DESCRIPTION
25	1	28424136	Piston	33	4	28424128	Sealer Link
26	2	28424214	Washer	34	2	28424127	Notcher (UST1315)
27	4	28276495	M8 Flexloc Nut		2	28424212	Notcher (UST1310)
28	1	28424203	O-ring #342	35	2	28424134	Jaw (UST1315)
29	1	28424129	Ram		2	28424213	Jaw (UST1310)
30	3	28280878	SHCS, M8 x 35 Full Thread	36	2	28424131	Link Pin
31	3	28280807	M8 Lockwasher	37	2	28424132	Jaw Pin
32	2	28424126	Side Plate (UST1315)	38	1	28424130	Ram Pin
	2	28424211	Side Plate (UST1310)	39	1	28424138	Boot
				40	1	28424133	Notcher Spacer

## NOTE:

- Lubricate all o-rings with white grease.
- Lubricate all moving parts (except o-rings) with Molith No.2 or Lubriplate 3000W grease.
- Torque M8 nut (item #27) on ram (item #29) to 140-150 in-lbs (15,8-16,9 Nm).
- Parts with a star \* are wearing parts.



#### **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.

#### Note:

The serial number, located on tool label and part #2(28424187), is required for warranty control or returns



#### 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.

UST MAKES NO WARRANTY, EXPRESSED OR IMPLIED, RELATING TO MERCHANTABILITY, FITNESS OR OTHERWISE EXCEPT AS STATED ABOVE AND UST'S LIABILITY AS ASSUMED ABOVE IS IN LIEU OF ALL OTHERS ARISING OUT OF OR IN CONNECTION WITH THE USE AND PERFORMANCE OF THE TOOL. IT IS EXPRESSLY UNDERSTOOD THAT UST SHALL IN NO EVENT BE LIABLE FOR ANY INDIRECT OR CONSEQUENTIAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES WHICH MAY ARISE FROM LOSS OF ANTICIPATED PROFITS OR PRODUCTION, SPOILAGE OF MATERIALS, INCREASED COSTS OF OPERATION OR OTHERWISE.

The information contained in these documents is confidential, privileged and only for the information of the intended recipient and may not be used, published, modified, or redistributed without the prior written consent of United Strapping Tools.

The customer has the right to examine the products for a span of 15 business days following their delivery. If any products are found not to meet the sale specifications during this Inspection Period, the customer must bring this to UST's attention in writing and allow UST a reasonable chance to inspect these products and rectify any issues. Should the customer neglect to submit such written notice within the Inspection Period, it will be considered that the customer has accepted the products. The customer is prohibited from returning any product without obtaining prior written consent from UST. UST will not accept the return of products that have been used. All costs linked with the return of products, including any potential loss, will fall to the customer, unless UST either stipulates differently in writing or determines that the products are not in accordance with the agreed terms of sale.