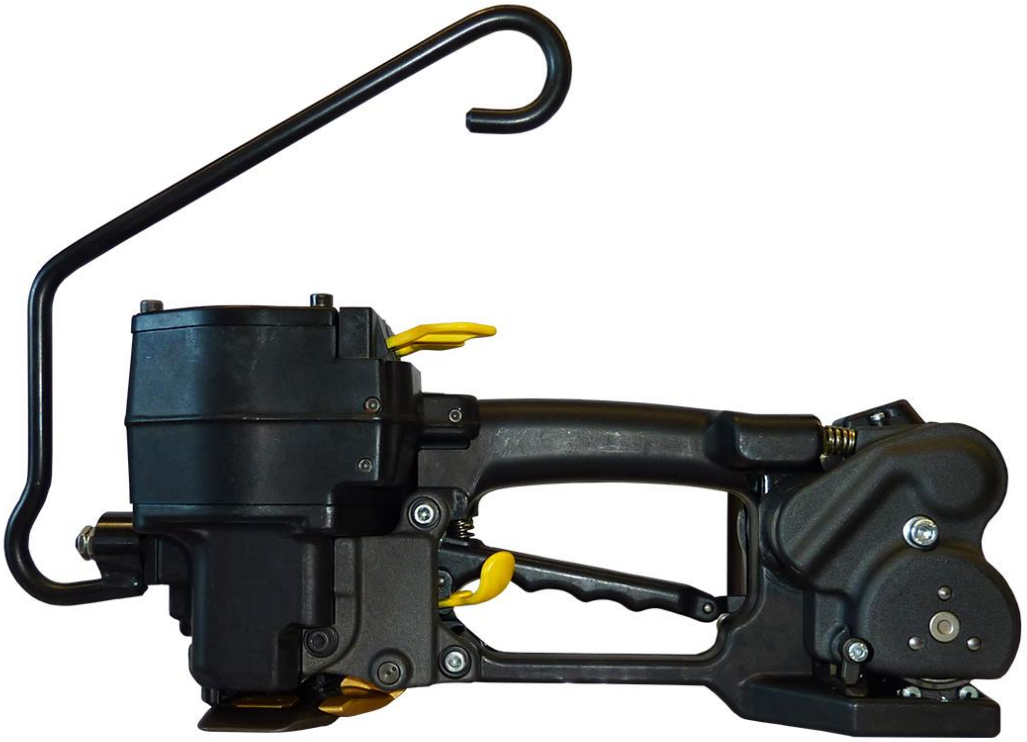
FROMM | PACKAGING AUSTRALIA

P380 Pneumatic Powered Plastic Strapping Tool

OPERATION MANUAL



Machine	Pneumatic Powered Plastic Strapping Tool
Model	P380
Date	April 2018
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1. GENERAL INFORMATION

Congratulations on the purchase of your Fromm Pneumatic Powered Plastic Strapping Tool. We trust you will have many years of packaging efficiency.

Before proceeding with the operation or installation of your new tool please read this manual thoroughly and gain a full understanding of the requirements, features and operation of your new tool.

1.1 Note of Installation

To ensure your tool operates in a safe manner please review the following requirements:

1. Tool power is pneumatic air, 6.0 bars / 87 psi.
2. Keep work area clean.
3. Tool can operate in temperatures between -10℃ and 45℃.
4. Please ensure you download and read our Install Guide before attempting it yourself.

1.2 Notice of Operation

Before you start using the pneumatic tool, please review the following conditions:

1. Before operating, please read the operational manual carefully.
2. Ensure the switch is in the off position before connecting the air hose.
3. Avoid any damp object or water around the electric parts.
4. When a problem does occur, please check the troubleshooting section for more information and advice.

2. SPECIFICATION

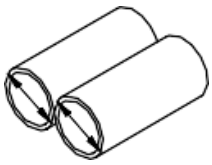
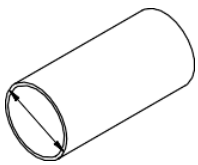
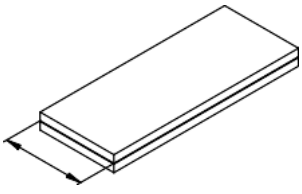
2.1 Specification table

Model	P380
Strap Width	13-19mm
Strap Thickness	0.4-1.35mm
Strap Tension	600-2000 Newtons
Tensioning Speed	120-260mm/s
Joint Strength	Approx. 75%
Tool Size with Suspension Bracket	390mm(L)x135mm(W)x305mm(H)
Weight	6.8kg
Sound level	78dB
Air Pressure	6.0 bars / 87 psi
Joining Thread	G 1/4
Air Flow of Air Unit	Min. 520 NI/min with a maximum pressure drop of 0.5 bar / 7.25 psi
Air Consumption	Tensioning: Approx. 6.5 NI uncompressed air /sec Sealing: Approx. 10.9 NI uncompressed air /sec
Oil for Air Unit	HL / CL ISO VG 10

Accessories:

- Protection Plate

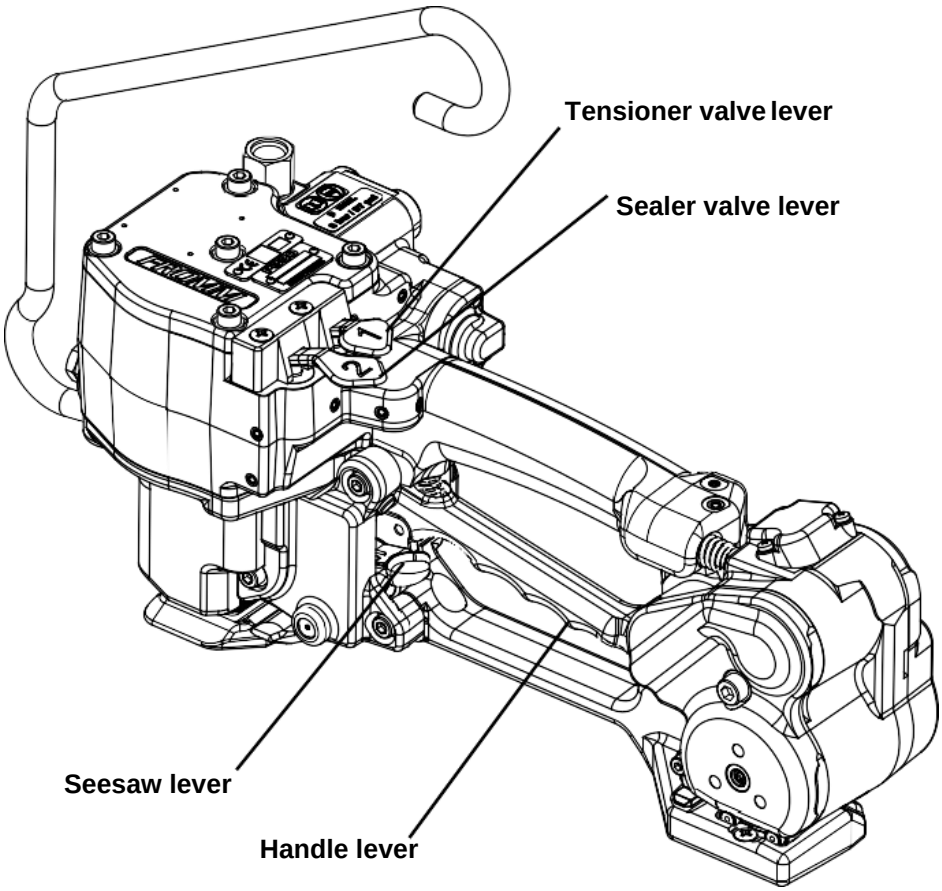
Package Dimensions

Diameter of round / circular goods	Min 2 x Ø70mm  Min Ø240mm 
Width	Min 80mm 

2.2 Chart of Types

Item No.	Model	Strap Width	Strap Thickness
49.3801	P380/13/0.40-0.64	13.0 mm	0.40 - 0.64 mm
49.3802	P380/13/0.64-1.05	13.0 mm	0.65 - 1.05 mm
49.3811	P380/15/0.40-0.64	15.0 mm	0.40 - 0.64 mm
49.3812	P380/15/0.65-1.05	15.0 mm	0.65 - 1.05 mm
49.3821	P380/16/0.40-0.64	16.0 mm	0.40 - 0.64 mm
49.3822	P380/16/0.65-1.05	16.0 mm	0.65 - 1.05 mm
49.3831	P380/19/0.40-0.64	19.0 mm	0.40 - 0.64 mm
49.3832	P380/19/0.65-1.05	19.0 mm	0.65 - 1.05 mm
49.3833	P380/19/1.06-1.35	19.0 mm	1.06 - 1.35 mm

2.3 Tool Description

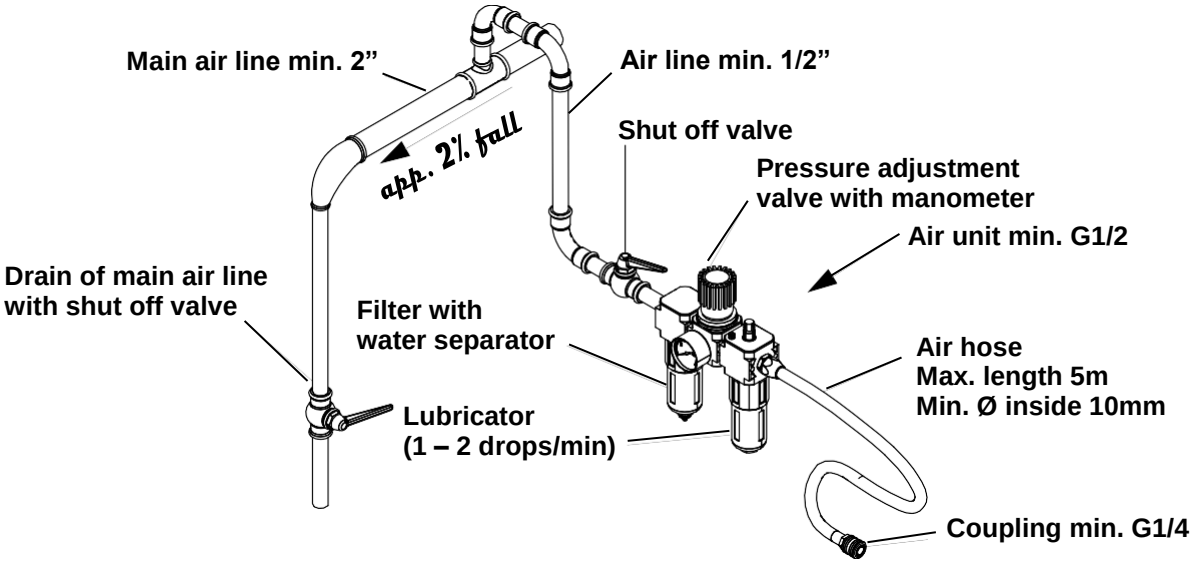


3. OPERATION DESCRIPTION

3.1 Installation

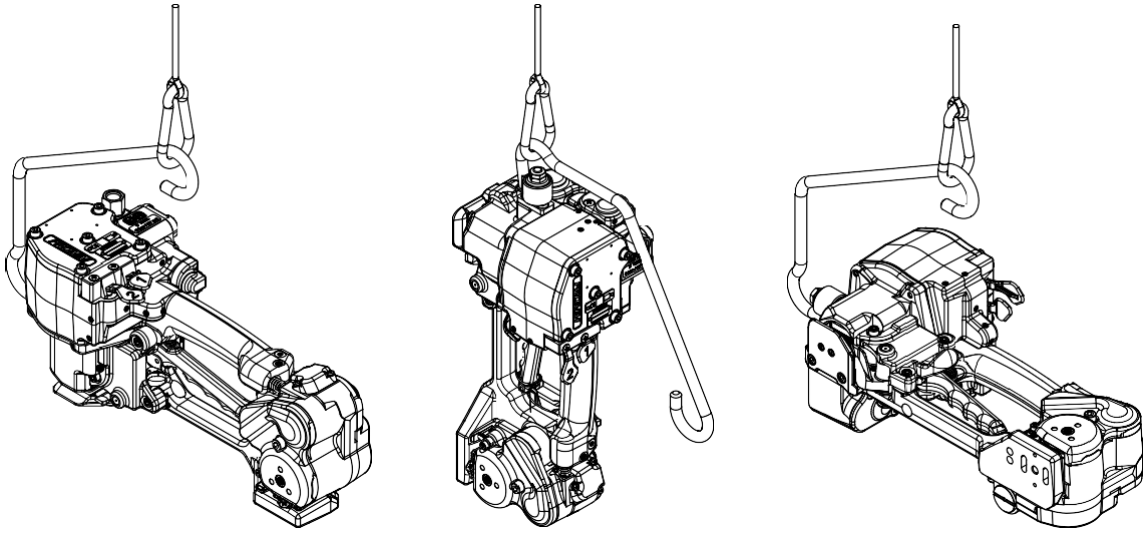
Compressed Air Connection

The compressed air should be connected to the tool preferably by a quick coupling. It is very important to clean the compressed air with an air unit consisting of a separator for water and dirt, a pressure regulator with a manometer and a lubricator (see sketch).



3.2 Suspension of Tool

It is possible to suspend the tool on a spring loaded balancer using the suspension bracket which is supplied with the tool. The suspension bracket has been designed in such a way, that the tool can be used for all three working positions.



3.3 Adjustments

3.3.1 Preselecting of Strap Tension and Tensioning Speed

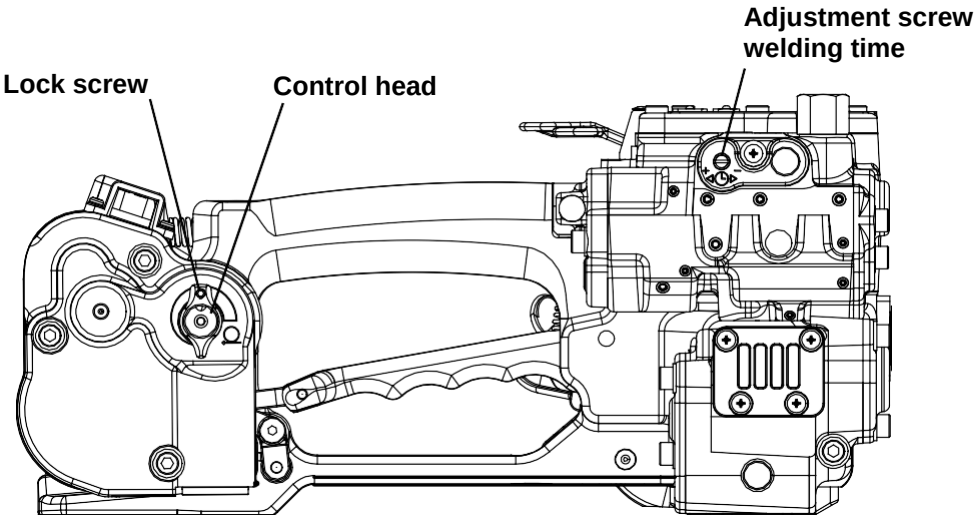
Do not adjust the tensioning force too high.
If the tensioning force is higher than the tensioning strength of the strap, the strap will tear while tensioning.

Tensioning force and tensioning speed can be preselected at the control head.

- Loose lock screw;
- Press the control head against the tool and turn it.

Turning clockwise increases; turning counterclockwise decreases the tensioning force and the tensioning speed resp..

- Tight lock screw



3.3.2 Adjusting the Welding Time

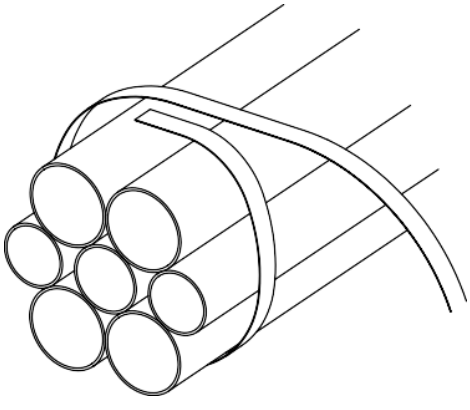
Depending on the size and quality of the strap, different welding times are required. The welding time can be set at the adjusting screw.

- Turning clockwise increases the welding time.
- Turning counterclockwise decreases the welding time.

3.4 Feeding the Strap Around the Package

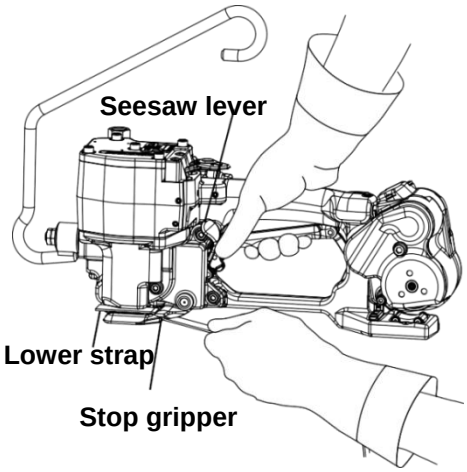
The strapping is fed around the package as illustrated.

Warning! The plastic strap which will be welded must be free from oil, grease and other dirt.
Dirty plastic straps can't be welded correct.



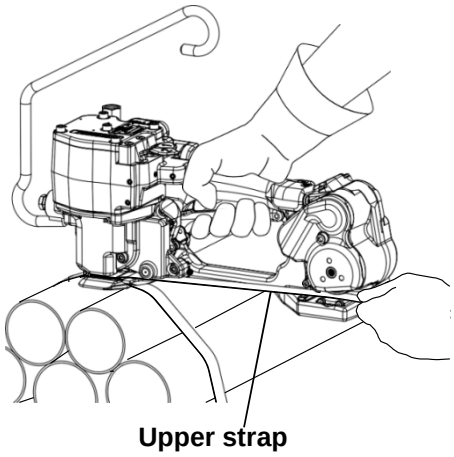
3.5 Inserting the Lower Strap

Lift and hold the handle lever with the right hand. The left hand inserts the free end of the strap.
First between welding gripper and the welding stop gripper and then under the stop gripper until it hits the strap stop.
Make sure that the strap is well aligned to both strap stops!
With the thumb move the seesaw lever up. The strap is locked.
Do not release the handle lever.



3.6 Inserting the Upper Strap

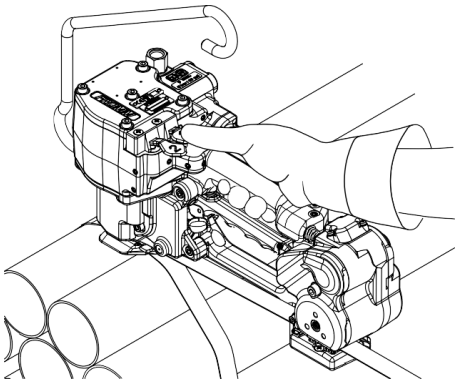
The left hand inserts the upper strap under the welding gripper, over the stop gripper and between tensioning wheel and sliding jaw until it hits the strap stop.
Pull on the strap until the strap sling touches the package.
Release the handle lever
The strap guides close and the tensioning wheel will move down to the strap.



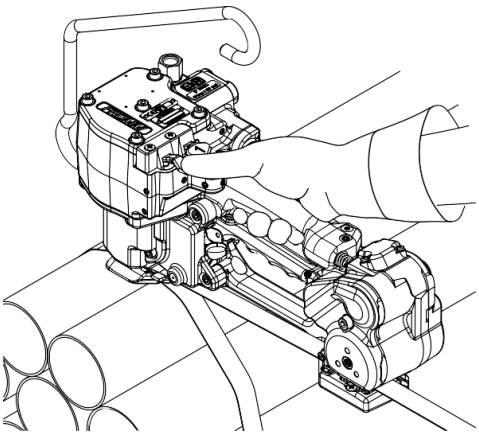
3.7 Tensioning the Strap

- Press down the tensioner valve lever and then release it again after the desired strap tension has been reached.

The tensioning operation can be interrupted and restarted at any time.



3.8 Sealing the Straps



- Press down and release immediately the sealing valve lever.

The plastic strap is welded and cut off from the rest of the strap.

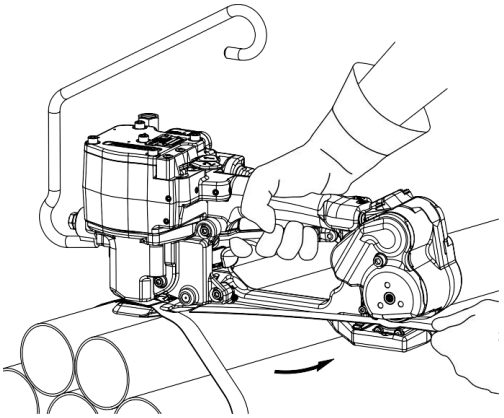
After welding of the strapping it is neither permitted to tension again nor to weld again. After welding and cooling the tool has to be removed from the strapping before a new strapping cycle is started. Disregard of this instruction can cause severe malfunction and damage to the tool.

After the expiration of the adjusted sealing time, the seal has to cool down approx. 2 sec.
During that time the tool cannot be removed from the sealed strap.

After the expiration of the adjusted cooling time the welding jaw move upwards. Now the tool can be removed from the strap.

The tool must not be removed from the strap as long as the cooling time is not finished. Disregard of this regulation is causing insufficient seal efficiencies, which can cause severe injuries.

3.9 Removing the Tool



- Pull up the handle lever,
- Pull the tool right and off the strapping.

3.10 Seal – Control

A regular control of the seal is necessary. The seal can be examined visually. Make a seal, peel it apart and examine it as follows:

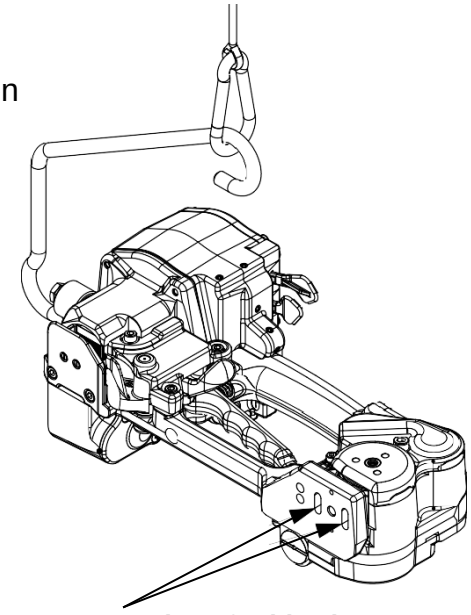
Correct Seal
The seal must be completely welded over the whole width of the strap on a length of ca. 19mm. Minor quantities of fused plastic may overflow on sides.

Welding Time Too Short
The plastic strap is not welded over the whole width of the strap. The seal efficiency is insufficient.
Warning! Straps with insufficient seal strength must be removed from the package. Adjust the welding time (see 3.3.2).

Welding Time is Too Long
If the welding time is too long the straps are overheated. The fused plastic overflows on both sides of the straps. The seal efficiency is affected.
Warning! Straps with insufficient seal strength must be removed from the package. Adjust the welding time (see 3.3.2).

3.11 Cleaning

Clean tension and sealing parts from strap abrasion regularly using compressed air.
Do not use any mechanical tool for cleaning.
When cleaning the surface of the tool do not use water or aggressive solvents.



Openings for blowing out the tensioning elements

3.12 Air Unit

- Checking the air-pressure daily (never exceed 6 bar / 87psi)
- Checking oil-level daily
- The water separator must be emptied before it is full (unless automatic)
- The filter has to be cleaned following the instructions of the manufacturer of the air- unit
- Check the function and proper adjustment of the lubricator daily (approximately 1-2 drops/min.)

4. SAFETY NOTICES

1. It is not recommended to disassemble, modify or not respect the implemented safety measures. In that case, the manufacturer will not be held responsible for any possible damage caused.

2. Do not use the tool in a place where water and oil might splash.

3. Use personal protective equipment. Always wear eye protection.

4. Check tool regularly for broken or worn parts. Do not operate a tool with broken or worn parts.

5. Do not use the tool in any way which is not specified in this manual.

6. It is forbidden to exceed the limits of use and operation with regards to weights and sizes of loads.

7. For use with plastic (PET) strapping only.

5. SAFETY RULES FOR STRAPING TOOLS

5.1 Joints

You are fully responsible to review the joints made by your tool. Become familiar with the seal control and seal adjustment described in this operation manual. Misformed joints may not secure the load and could cause serious injury. Never handle or ship any load with improperly formed joints.

5.2 Dispensing Strap

Only dispense strap from a dispenser specifically designed for strap.
Tuck strap end back into dispenser when not in use.

5.3 Strap Warnings

Never use strap as a means of pulling or lifting loads. Failure to follow these warnings can result in severe personal injury.

5.4 Strap Breakage Hazard

Improper operation of the tool, excessive tensioning, using strap not recommended for this tool or sharp corners on the load can result in a sudden loss of strap tension or 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.

Note as follows:

- 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.
- Use the correct strap quality, strap width, strap gauge and strap tensile strength recommended in this manual for your tool. Using strap not recommended for this tool can result in strap breakage during tensioning.

5.5 Cutting Tensioned Strap

When cutting strapping, use the proper strapping cutter and keep other personnel and yourself at a safe distance from the strap. Always stand to side of the strap, away from the direction the loosened strap end will fly. Use only cutters designed for strap and never hammers, pliers, hacksaws, axes, etc.

5.6 Fall Hazard

Keep your working area tidy. Untidiness of your working area may cause a risk of injury. Maintaining improper footing and/or balance when operating the tool can cause you to fall. Before tensioning and especially in elevated areas, always establish good balance. Both feet should be securely placed on a flat, solid surface, especially when working in elevated areas. Do not use the tool when you are in an awkward position.
Pay attention to the rules and regulations for preventions of accident which are valid for the work place.

6. SUGGESTED MAINTENANCE & TROUBLE SHOOTING

6.1 Suggested Maintenance

Fromm Packaging Australia recommends servicing every six months as a minimum, but many tools have different service intervals depending on condition and throughput. It's best to discuss your servicing requirements with Fromm Packaging.

6.2 Warranty Periods

To provide you with peace of mind all Fromm stretch wrapping, strapping and carton taping equipment includes a two year warranty from the date of delivery to your site. The warranty includes all deficiencies clearly resulting from poor manufacturing or faulty materials. Damage claims as a result or production shutdowns and claims for damage to persons and to property resulting from warranty deficiencies covering structural components and non-wearing parts effective from date of delivery to your site.

The warranty excludes:

- Wearing parts (tensioning wheels, cutters, punches, dies, notching knifes, grippers and motors),
- Deficiencies resulting from improper installing, incorrect handling and maintaining the tool,
- Deficiencies resulting from using the tool without or with defective security – and safety devices,
- Disregard of directions in the operation manual,
- Arbitrary modifications of the tool,
- Deficient control or wearing parts,
- Deficient repair work to the equipment,
- Use of consumable products not recommended by the supplier of the equipment.

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

Please visit the Fromm website for the full terms of sale - www.fromm-pack.com.au/terms-of-sale/

6.3 Fromm Service Solutions

Fromm service technicians are trained to service all stretch wrapping, strapping and carton taping machines which we sell and are your on-site expert support to optimise the performance and reliability of your packaging equipment.

With technical offices in Sydney, Brisbane and Melbourne metro areas we are on hand to ensure your equipment is running smoothly. Customers located outside metropolitan areas we offer phone support and can organise onsite technical support when needed.

6.4 Possible troubleshooting causes and remedies

Troubleshooting

Tool Trouble	Possibilities	Solution
Tool doesn't tension, Tensioning motor runs	The tensioning wheel is packed with strap residue or is worn and mills on the strap	Clean tensioning wheel with compressed air or replace it
	Wrong tensioning wheel or tensioning wheel is assembled reversed	Correct assembling or use the correct tensioning wheel
	Grippers are dirty, worn or wrongly assembled	Replace grippers, clean them with compressed air or assemble correctly
	Gearing parts from the tensioning gear are defective	Check tensioning gear and replace defect parts
	Return stop unlocked	Assemble correctly
Tensioning motor doesn't run	Tensioning motor defective	Check component parts and replace damaged ones
	Tensioning gear defective	Check component parts and replace damaged ones
	Pneumatic control system is defective	Check component parts and replace damaged ones
	Needle free wheeling assembled reversed	Assemble correctly
Tensioning wheel turns back immediately	Defective needle free wheeling N3.4509	Check and replace if necessary
Tool doesn't weld, motor runs	Welding gripper is dirty or worn	Clean and check welding gripper and replace damaged one
	Welding stop gripper is dirty or worn	Clean and check welding stop gripper and replace damaged one
	Pinion P32.1023 lose at the motor of welding eccentric, resp. The journal at the welding eccentric is broken off	Check component parts and replace damaged ones
	Welding piston P38.0101 not down	Check component parts and replace damaged ones

Tool Trouble	Possibilities	Solution
Welding motor doesn't run	Welding motor defective	Check component parts and replace damaged ones
	Welding mechanism defective	Check component parts and replace damaged ones
	Pneumatic control system is defective	Check component parts and replace damaged ones
Gear noise	Tensioning or welding gear is worn	Check component parts and replace damaged ones
Welding motor does not stop	Turn off valve or welding motor valve jam, resp. the welding time valve is blocked	Check and clean parts, exchange damaged parts
	Diameter of the air supply hose is too small	Install air supply hose with a minimum inner diameter of 10mm
	Not enough air volume	Take care that there is enough air volume
Tool badly cuts the strap or doesn't cut at all	Cutter is worn or damaged	Replace cutter
	Welding gripper is worn	Replace welding gripper
	Welding time too short	Change adjustment (See 3.3.2)
Welding time not adjustable	Welding time valve dirty or damaged	Clean and check component parts and replace damaged ones
Tensioning force not adjustable	Tension force control valve dirty or damaged	Clean and check component parts and replace damaged ones

7. CONTACT FROMM PACKAGING AUSTRALIA

For any questions please contact Fromm Packaging Australia
Phone: 1800 023 890
Email: info@fromm-pack.com.au
Postal Address: PO Box 4016, Mt Ommaney QLD 4074