STOCK-ade™
makes fencing

PNEUMATIC ST-400 FENCING STAPLER USER GUIDE

ST-400™

WARNING    CE

- **READ ALL SAFETY INSTRUCTIONS BEFORE OPERATION**
- **INJURY MAY RESULT FROM INCORRECT TOOL USE**
- **ALWAYS WEAR EYE AND HEARING PROTECTION WHEN OPERATING STAPLING TOOL**
- **NEVER CONNECT PNEUMATIC TOOL TO OXYGEN CYCLINDERS**
- **ALWAYS KEEP THIS MANUAL WITH THE TOOL FOR EASY REFERENCE**

TECHNICAL DATA

Applications…….. For stapling fencing wire to wooden posts. Ideal for heavy duty rural wire fencing, high tensile livestock fences, woven and fixed know fences, mesh fencing, predator fencing, horticulture, highway boundaries and rural utility applications.

Features……... Rugged, Versatile Pneumatic Power
Aluminum Alloy Housing
High Impact Hardened Steel Driver Blade
Drives 40 to 52 x 4.0mm Fencing Staples
Staple Wire Angle Guide and V shaped Guide
Adjustable Depth of Drive
Top Load Magazine
Adjustable Air Deflector
Sequential Trigger System
Swivel Coupling
Staple Lock Out Bar
Belt Hook / Wire Hook Option
Two-Hand Operation Handle Option

Dimensions (WxHxD)…… ……..	120 x 360 x 390mm
Weight…….. ……..	3.7kg
Air Inlet…….. ……..	10mm
Maximum Permissible Operating Pressure……	8.3 bar (120psi)
Recommended Operating Pressure……	6.75 - 7.3 bar (98 – 105psi)
Recommended Operating Pressure – Hard Lumber……	7.6 – 8.3 bar (110 – 120psi)

Noise characteristics NZS6801: 1999 acoustic measurement of sound:

A-weighted single-event sound pressure level at operator's position: $L_{PA,\ 1s} = 93.3$dBA
A-weighted single sound pressure level: $L_{pA,1s,1m} = 85.66$dBA

Vibration characteristics ISO 8662, part II:

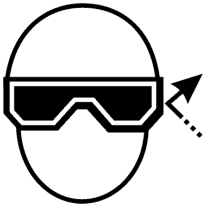
Weighted root mean square acceleration $= 3.69 m/s^2$

CAUTION! AT THE WORKPLACE, ALWAYS WEAR HEARING PROTECTION EQUIPMENT

SAFETY INSTRUCTIONS

WARNING

READ ALL INSTRUCTIONS. Do not operate the tool until you have read and understood all safety precautions and tool operation instructions.



ALWAYS WEAR EYE PROTECTION. Always wear approved eye protection with side shields that conform to ANSI Z87.1 (USA) and AS/NZS 1337: 19 (ANZ). Free-flight fasteners may cause injury.

Always wear hearing protection when operating the tool.

AVOID COMPUSTABLE PROPELLANTS. Never use Oxygen (O_2), Carbon Dioxide (CO_2) or combustible gas as a power source for the tool.

Always use clean, dry and filtered compressed air.

Ensure compressed air source is regulated and lubricated.

Do not use gasoline or other flammable liquids to clean the tool.

Vapours trapped in the tool can ignite and may result in tool failure and operator injury.

AVOID OVERPRESSURE. Do not exceed maximum permissible operating pressure 8.3 bar (120psi).

SAFETY INSTRUCTIONS (continued)

WARNING

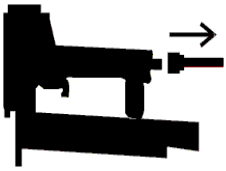
Exercise extreme care when moving from one location to another to avoid accidental staple discharge.

Only carry the tool by the handle.

Do not carry the tool with your finger on the trigger.

Do not carry the tool by the hose or pull the hose to move the tool.

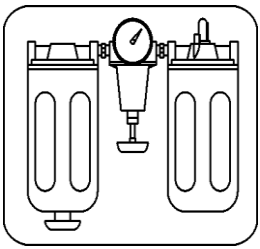
A sequential trigger is fitted to prevent accidental staple discharge.



Always disconnect air supply before loading and unloading the tool magazine, clearing staple jams or before undertaking any tool maintenance.

Never point the tool at yourself or at any other person at any time.

Injury may result from accidental tool discharge.



Do not exceed the maximum recommended air pressure Be sure the air pressure gauge is operating properly; check it at least twice a day. Always use a pressure regulator. Always use a supply hose rated for min 13.8 bar (200psi).

Do not use a check valve or any other fitting that allows air to remain in the tool chamber.

TOOL OPERATION

1. Before operation of tool ensure:

a) You have selected the appropriate hose fitting from selection supplied and screw hose fitting into the tool by first removing the plastic plug

b) Smooth operation of the work contact element

c) Smooth operation of the trigger

d) All screws are tightened

e) A complete visual inspection of the tool for loose, damaged or missing components

Never operate a damaged tool. Only STOCK-ade Accredited Service Agents are authorized to repair STOCK-ade tools

f) Always wear eye and hearing protection when operating tool

g) Employers and tool operators are responsible for ensuring the safety of anyone near or operating the tool

2. Prolong tool life with daily oiling and inspection

a) STOCK-ade recommends Paslode Pneumatic Tool Oil (R20128)

b) Add ten drops of pneumatic tool oil into the hose inlet before operation

c) Wipe off excess oil from tool air exhaust

Never use detergent oils to lubricate the tool as these will damage O-rings and result in tool malfunction

3. Tool air line hose connection

a) Install a quick connect fitting to the tool

b) Connect air line hose to an air compressor using a 10mm (3/8”) internal diameter air hose that has been connected to the compressor outlet

c) Connect the stapling tool to the 10mm (3/8”) inlet diameter hose using a female connection on the hose

WARNING ⚠

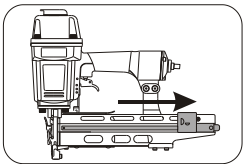
Ensure that the tool magazine is empty and the hose has a rated working pressure that is no less than 13.8 bar (200psi)

TOOL OPERATION (continued)

4. Air Pressure Adjustment

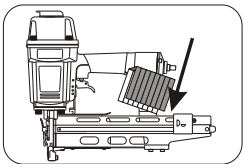
a) Adjust air line pressure to obtain **6.9 bar (100psi)** at the tool. Note this will be indicated on the **air line** pressure gauge located on the compressor

Note: This is not the compressor tank pressure gauge



5. Staple loading

a) Draw the staple follower on the magazine back until it locks in the rear position



6. Staple loading continued

a) Insert the STOCK-ade ST-400 fencing staple onto the magazine rail

b) Control the release of the staple follower and gently allow it to move forward until it contacts the staple

8. Test fire depth of drive

a) It is recommended that the operator test the staple depth of drive on waste timber prior to commencing work

b) Depress work contact element against the timber and squeeze trigger

c) Note depth of drive

d) Adjust depth of drive (see Tool Operation step 9 for instructions)

TOOL OPERATION (continued)

9. Adjusting staple depth of drive

a) Disconnect stapling tool from air supply

b) Loosen cap crew located on the tip of the lower work contact element

c) Slide the work contact element to the desired position

i. Sliding the work contact element away from the body of the tool will reduce the depth of drive

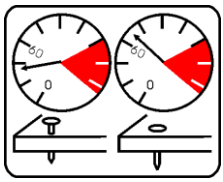
ii. Sliding the contact element towards the body of the tool will increase the depth of drive

d) Tighten the cap screw.

e) Reconnect the air supply.

f) Repeat depth of drive test until desired depth of drive is achieved.

10. Staple depth of drive for hard timbers



a) If the staple depth of drive remains incorrect after adjusting the work contact element, it is possible to adjust depth of drive by increasing or decreasing the air pressure being delivered to the tool

Caution: Do not exceed 8.3 bar (120psi) at the tool

b) Repeat depth of staple drive test

c) For best results it is recommended that the air pressure is set between 6.75 to 7.3 bar (98 to 105psi)

WARNING

Do not attempt to fire the stapling tool without staples in magazine.

TOOL MAINTENANCE

1. Tool Cleaning

Regular cleaning and internal oiling of the tool will prolong tool life.

a) Disconnect the tool from air supply

b) Remove all staples

c) Clear the magazine and nose sections with an air duster gun to remove accumulated debris

d) Ensure the smooth operation of the trigger

e) Ensure smooth operation of the work contact element

f) Ensure smooth operation of the staple follower

g) Carefully clean away obstructions for smooth operation of all moving components

2. Compressor

Empty compressor air tanks daily to prevent moisture buildup in the air lines. Moisture in the air lines can dilute lubricants that will dry the tool chamber and damage the tool.

If water is present in tool oil, the oil will have an opaque appearance.

3. Tool Lubrication

a) STOCK-ade recommends Paslode Pneumatic Tool Oil (R20128)

b) Add ten drops of pneumatic air tool oil into the hose inlet before operation

c) Wipe off excess oil from tool air exhaust

Caution: Never use detergent oils to lubricate the tool. These will damage O-rings resulting in likely tool malfunction

d) Do not lubricate magazine or work contact element as these moving components are designed to run dry

4. Visual Tool Inspection

a) Inspect and replace any damaged or worn components.

b) Tighten any loose nuts or cap screws.

c) Replace any illegible or damaged safety warning labels on the tool.

TROUBLESHOOTING

Cease tool operation immediately if any of the following symptoms are evident.

Failure to address symptoms could result in tool damage and personal injury.

Never operate a tool suspected of being damaged.

Only STOCK-ade Accredited Service Agents are authorised to repair STOCK-ade tools.

Symptom	**Likely Cause**	**Possible Solution**
Weak drive	Tool not lubricated	Lubrication
	Broken spring in cap assembly	Replace spring
	Exhaust port in cap is blocked	Clean exhaust port – Check air pressure and compressor
Tool jams	Worn or damaged work contact element	Replace work contact element
	Damaged driver blade	Reface or replace driver blade
	Incorrect size of staples	Use only STOCK-ade ST-400 staples
	Damaged staples	Replace staple strip
	Magazine or nose screws are loose	Tighten any loose components
Tool does not fire	Staples jammed in magazine or discharge area	Remove any jammed staples Inspect and clean magazine
	Piston shaft is damaged	Refer to an Accredited STOCK-ade Service Agent
	Air pressure too low	Check increase air pressure ***Do not exceed 8.3 bar (120psi) at the tool***

TROUBLESHOOTING (continued)

Symptom	Likely Cause	Possible Solution
Air leaking at trigger valve area	Worn or damaged O-rings in trigger valve housing	Replace O-rings and ensure smooth operation of the upper work contact element safety mechanism
Air leak between housing and nose	Loose housing screws	Tighten housing screws
	Worn / damaged O-ring	Replace O-rings / lubricate
	Damaged bumper	Replace bumper
Air leak between housing and cap assembly	Loose screws	Tighten screws
	Damaged seal	Replace seal / lubricate
Tool skips or misses driving fastener	Worn bumper	Replace bumper
	Contaminated work contact element	Clean work contact element
	Contaminants or damaged staples preventing operation of the magazine	Clean magazine and / or replace damaged staples
	Inadequate air inflow	Inspect hose fitting, hose line, compressor and air pressure
	Worn O-ring on piston	Replace O-rings
	Damaged O-rings on trigger valve	Replace O-rings
	Air leaks	Tighten screws and fittings
	Air leakage due to worn cap seal	Replace seal and correctly torque bolts

Contact your nearest STOCK-ade Service Agent or Distributor for self service spare parts.

STOCK-ade ST-400 STAPLER TOOL FEATURES

Tool Features

1. Adjustable Air Deflector

The STOCK-ade ST-400 deflects discharged air away from the operator with the adjustable air deflector

a) Simply loosen the retaining cap screw
b) Rotate the air deflector shield until you reach the desired position
c) Retighten the cap screw

2. Staple Lock-Out Lever

The lock-out lever engages with the lower work contact element and prevents the tool from firing if there are no staples on the magazine rail

a) It is important to note that the tool will not discharge the last 2 staples. This is to protect the fencing wire from damage caused by the tool driver blade
b) The lever also prevents damage to the tool caused by excessive dry firing if no staples are present on the rail
c) Note: always make sure the lever is in working condition and free of dirt of timber fibers

3. Sequential Trigger

Your STOCK-ade ST-400 Fencing Stapler has been fitted with a sequential trigger

a) Protects the operator from accidental discharge
b) Assists with wire damage protection

4. Belt or Wire Hook

Your STOCK-ade ST-400 Fencing Stapler has been fitted with an adjustable wire or belt hook for left or right-handed users

STOCK-ade ST-400 STAPLER TOOL FEATURES

5. Wire Guide Attachment – Work Contact Safety

Your STOCK-ade ST-400 Fencing Stapler comes with two types of lower work contact elements, the V-Notch and the Angled Wire Guide. Both types can be raised or lowered for depth of drive adjustment

a) Simply loosen the cap screw and select from any of the nine positions available for the appropriate depth of drive for both guides. Retighten the screw

Caution: Always remove tool from air supply when adjusting guides

6. V-Notch Wire Guide Attachment Applications

Your STOCK-ade ST-400 Fencing Stapler comes standard with a V-Notch Wire Guide fitted to the tool

a) This is designed to neatly fit over the wire and accurately place the staple at 90 degrees to the wire leaving the wire free to move through the staple eye

b) The V-Notch Wire Guide assists with very accurate staple placement and protects fence wire from damage

7. Angled Wire Guide Attachment Applications

The Angled Wire Guide comes as standard and is used to replace the V-Notch attachment on the tool nose when required

a) This is designed to neatly place staples at a fixed angle across the wire, while protecting the fence wire from potential damage

8. Two-Handed Tool Operation

The STOCK-ade ST-400 Fencing Stapler has the option of using a second, front-mounted handle with the tool. This handle standard with the tool

a) Used for high volume applications to reduce operator fatigue

STOCK-ade ST-400 STAPLER FENCING TIPS

1. Dry Fence Timber / Lumber

For best results, use air or kiln dried timber.

Air or kiln drying timber reduces shrinkage after installation. Green timber shrinks away from embedded staple legs over time. This phenomenon loosens the staples in the timber and weakens the fence.

Air drying also prolongs the life of the fence wire and staples by dramatically reducing the moisture content of the timber is caused by Copper based timber treatments such as ACQ and CCA. This is also evident in some highly acidic native timbers. Contact your local timber merchant for advice on timber acidity.

Use timber spacers when drying timber to increase the airflow around the timber and speed the drying process.

2. Improve Staple Holding Power

a) Alternate the staple angle[1] across the grain to avoid splitting as the timber dries

b) Dual stapling at the top and bottom of the fence may improve fence stability in high stock pressure installations

[1] For best results use the Angled Wire Guide Attachment supplied with the tool