## **MEDIUM CROWN STAPLER**

## Instruction manual



MODEL MS200

#### IMPORTANT

Please make certain that the person who is to use this equipment carefully reads and understands these instructions before starting operations.



## **SAFETY GUIDELINES / DEFINITIONS**

This manual contains information that is important for you to know and understand. This information relates to protecting YOUR SAFETY and PREVENTING EQUIPMENT PROBLEMS. To help you recognize this information, we use the symbols below. Please read the manual and pay attention to these sections.

- **ADANGER** indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.
- **AWARNING** indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
- **ACAUTION** indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.
- **CAUTION** used without the safety alert symbol indicates potentially hazardous situation which, if not avoided, may result in property damage.

## IMPORTANT SAFETY INSTRUCTIONS

#### SAVE THESE INSTRUCTIONS!

**AWARNING** Improper operation or maintenance of this product could result in serious injury and property damage. Read and understand all warnings and operating instructions before using this tool. When using pneumatic tools, basic safety precautions should always be followed to reduce the risk of personal injury.

#### **READ AND FOLLOW ALL INSTRUCTIONS.**

There are certain applications for which this tool was designed. Porter-Cable strongly recommends that this tool NOT be modified and/or used for any application other than for which it was designed. If you have any questions relative to its application DO NOT use the tool until you have written Porter-Cable and we have advised you.

## **GENERAL SAFETY RULES**

**1. Read and understand tool labels and manual.** Failure to follow warnings could result in **DEATH** or **SERIOUS INJURY**. Fig. 1.

2. Operator and others in work area MUST wear safety glasses with side shields. These safety glasses must conform to ANSI Z87.1 requirements (approved glasses have "Z87" printed or stamped on them). Fig. 2.

# 3. Keep fingers AWAY from trigger when not driving fasteners to avoid accidental firing.

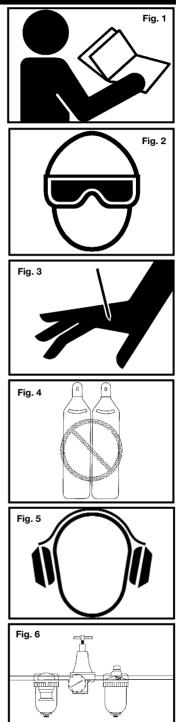
4. Choice of triggering method is important. Check manual for triggering options. See "Using the Tool with Selectable Triggering Options" section of this manual.

5. Never point tool at yourself or others in work area. Fig. 3

6. ADANGER Never use oxygen or other bottled gasses. Explosion may occur. Never use combustible gases or any other reactive gas as a power source for this tool: explosion and serious personal injury could result. Fig. 3 & Fig. 4.

7. Wear ear protection to safe-guard against possible hearing loss. Ear protection equipment must conform to ANSI S3.19 requirements. Fig. 5.

8. Use clean, dry, regulated, compressed air at 70 to 120 PSI, (4.8 to 8.3 BAR). Fig. 6.



**9.** Do not connect tool to pressure which potentially exceeds 200 PSI (13.7 BAR).

**10. Only use air hose that is rated** for a maximum working pressure of at least 150 PSI (10.3 BAR) or 150% of the maximum system pressure, which ever is greater.

**11. Connect tool to air supply hose** with a coupling that automatically removes all pressure from the tool when the coupling is disconnected. Fig. 7.

**12. Disconnect tool from air supply hose** before doing tool maintenance, clearing a jammed fastener, leaving work area, moving tool to another location, or handing the tool to another person. Fig. 7.

**13.** Never use a tool that is leaking air, has missing or damaged parts, or requires repair. Make sure all screws and caps are securely tightened. Fig. 8.

**14.** Never use tool if safety, trigger or springs are inoperable, missing or damaged. Do not alter or remove safety, trigger, or springs. Make daily inspections for free movement of trigger and safety mechanism. Fig. 8.

**15. Do not use tool without safety warning label.** If label is missing, damaged or unreadable, contact your Porter-Cable Service Center for a replacement. Fig. 9.

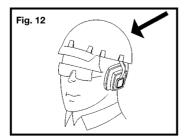
**16. Only use parts, fasteners and accessories** approved by Porter-Cable.

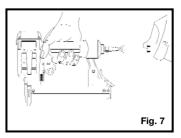
**17. Connect tool to air supply before** loading fasteners, to prevent a fastener from being fired during connection. The tool driving mechanism may cycle when tool is connected to the air supply. Fig. 10.

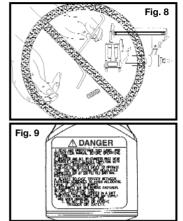
**18. Always assume the tool contains fasteners.** No horseplay. Respect the tool as a working implement. Fig. 11.

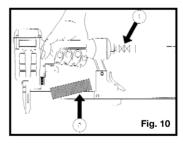
**19. Operator and bystanders wear hard hat** to safeguard against possible injuries. Fig. 12.

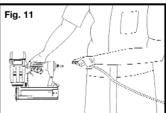
**20. Do not load fasteners** with trigger or safety depressed, to prevent unintentional firing of a fastener. Fig. 13

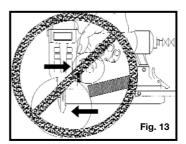












**21. Remove finger from trigger** when not driving fasteners. Never carry tool with finger on trigger. In "Contact Actuation Mode" tool will fire a fastener if safety is bumped while trigger is depressed. Fig. 14.

**22.** Do not overreach. Keep proper footing and balance at all times when using or handling the tool.

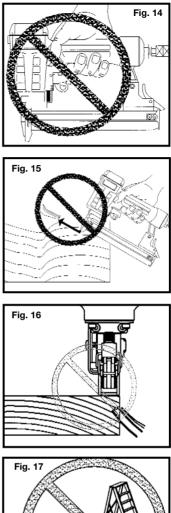
**23. Fire fasteners into work surface only:** never into materials too hard to penetrate. Fig. 15.

24. Grip tool firmly to maintain control while allowing tool to recoil away from work surface as fastener is driven. In "Contact Actuation Mode" if safety element is allowed to recontact work surface before trigger is released an unwanted fastener will be fired.

**25.** Do not drive fasteners on top of other fasteners, or with the tool at too steep an angle: the fasteners can ricochet causing personal injury. Fig. 15.

**26.** Do not drive fasteners close to the edge of the workpiece. The workpiece is likely to split allowing the fastener to fly free or ricochet causing personal injury. Fig. 16.

27. FOR CONTACT ACTUATION TOOLS ONLY, Do not use on scaffoldings or ladders or for tasks in which changing location involves the use of scaffoldings, stairs, ladders, and the like. Do not use for specific tasks such as closing boxes or crates or fitting transportation safety systems on vehicles and wagons. Fig. 17.





#### **TECHNICAL SPECIFICATIONS**

Noise level

A - Weighted sound impulse ... power level ..... 95.1 dBA P - Emission sound pressure

pressure level . . . . 86.3 dBA

Typical Mean effective Acceleration .... 3.91 m/s<sup>2</sup>

## **EMPLOYER'S RESPONSIBILITIES**

**ADANGER** Employer must enforce compliance with the safety warnings and all other instructions contained in this manual.

Keep this manual available for use by all people assigned to use this tool.

For personal safety and proper operation of this tool, read and understand tool labels and manual. Failure to follow warnings could result in DEATH or SERIOUS INJURY. Read and follow all of these instructions carefully.

## FUNCTIONAL DESCRIPTION

#### FOREWORD

Porter-Cable Model Porter-Cable Model MS200 is a heavy duty pneumatic stapler. It is designed to install medium crown (7/16" wide), 16 ga. wire staples of various lengths (from 1" to 2" long).

**AWARNING** Use approved Porter-Cable fasteners only.

#### **POWER SOURCE**

This tool is designed to operate on clean, dry, compressed air at regulated pressures between 70 and 120 PSI (Pounds per Square Inch)(4.8 to 8.3 BAR). The preferred system would include a filter, a pressure regulator, and an automatic oiler located as close to the tool as possible, within 15 ft/4.6 m is ideal.

All compressed air contains moisture and other contaminates that are detrimental to internal components of the tool. An air line filter will remove most of these contaminates and significantly prolong the life of the tool. If an in-line oiler is not available: place five or six drops of Porter-Cable Air Tool Oil into the tool's air inlet at the beginning of each workday.

The tool is equipped with a 1/4" male "quick connector". A 3/6" male "quick connector" is available from Porter-Cable and may be used in situations where a 1/4" supply line is not available. A 3/6" supply line (and fittings) are required for maximum tool performance. The tool must always be connected to the air supply with a coupling such that all pressure is removed from the tool when the coupling is disconnected.

- ▲ DANGER All air line components (hoses, connectors, filters, regulators, etc.) must have a minimum working pressure rating of at least 150 PSI (10.3 BAR) or 150% of maximum system potential, whichever is greater.
- Do not connect tool to pressure which potentially exceeds 200 PSI (13.7 BAR).
- Only connect tool to air supply hose with a coupling that automatically removes all pressure from the tool when the coupling is disconnected.
- Disconnect tool from air supply before performing maintenance, clearing a jammed fastener, leaving work area, moving tool to another location, or handing the tool to another person.

#### PREPARING THE TOOL

1. After reading and understanding this entire manual, connect tool to <u>air supply (Fig.</u> 18).

**ADANGER** Never point tool at yourself or others.

- Always connect tool to air supply before loading fasteners (Fig. 18).
- Do not load fasteners with trigger or safety depressed.

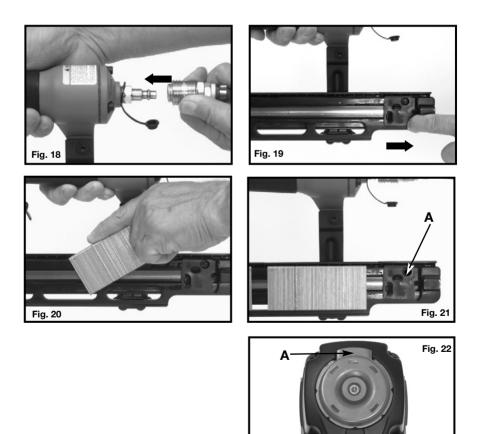
- Only use approved Porter-Cable fasteners.
- Operator and others in work area MUST wear safety glasses with side shields. Always wear ANSI Z87.1 approved safety glasses, and ANSI S3.19 approved hearing protection when preparing or operating the tool.
- Never use a tool that is leaking air, has missing or damaged parts, or requires repair.

2. Pull staple follower all the way to the rear (see Fig. 19), allowing follower to lock in the open position.

3. Drop a strip of staples onto the guide rail (see Fig. 20).

4. Depress the follower latch button (A) Fig. 21, to unlock the follower and slide forward against staples.

5. Adjust directional exhaust deflector (A) Fig. 22, so that the exhaust air blast will be directed away from the operator. The exhaust deflector provides seven detented positions for directing the exhaust blast away from the operator. Grasp the deflector and rotate it to the desired position for the current application.



#### USING THE TOOL WITH SELECTABLE TRIGGERING OPTIONS

Complete all steps of PREPARING THE TOOL before using the tool.

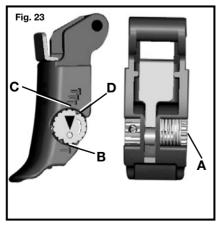
This tool is shipped from the factory with a selectable trigger set in the **"SINGLE SEQUENTIAL ACTUATION"** firing mode as described in number 1 below. The selectable trigger can be set for the **"CONTACT ACTUATION"** firing mode as described in number 2 below;

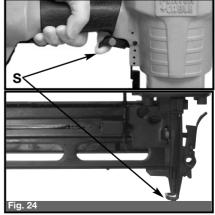
1. To use the tool in the SINGLE SEQUENTIAL ACTUATION MODE depress trigger lever pivot pin (A) Fig. 23, rotate arrow to position (B), and release. Note: Trigger lever pivot pin is spring loaded and held in position by locking tab (D) Fig. 23 to prevent movement during operation. To fire, grip tool firmly to maintain control, position nose of tool onto work surface, push tool firmly against work surface to depress safety, as shown at (S) Fig. 24, and then squeeze trigger to fire a fastener. Allow tool to recoil away from work surface as fastener is driven. This "single sequential actuation" method provides the most accurate fastener placement.

#### -OR-

2. To use the tool in the **CONTACT ACTUATION MODE** depress trigger lever pivot pin (A) Fig. 23, rotate arrow to position (C), and release. **Note:** Trigger lever pivot pin is spring loaded and held in position by locking tab (D) Fig. 23 to prevent movement during operation. To fire, grip tool firmly to maintain control, **squeeze and hold trigger, push tool firmly against work surface to depress contact safety, as shown at (S) Fig. 24, and fire a fastener**. Allow tool to recoil away from work surface as fastener is driven. If safety element is allowed to recontact work surface before trigger is released an unwanted fastener will be fired. The tool will fire a fastener each time the contact safety is depressed. This method is known as "**contact actuation**" and allows very fast repetitive fastener placement.

**IMPORTANT:** A " single sequential actuation" trigger, which will limit the tool to method number 1 only. For identification purposes: the single sequential actuation trigger is red.



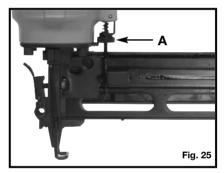


- ADANGER Keep fingers AWAY from trigger when not driving fasteners to avoid accidental firing. Never carry tool with finger on trigger. In "Contact Actuation Mode" tool will fire a fastener if safety is bumped while trigger is depressed.
- Never point tool at yourself or others.
- Never attempt to drive a fastener into material that is too hard, or at too steep an angle, or near the edge of the workpiece. The fastener can ricochet causing personal injury.
- **AWARNING** Disconnect tool from air supply before performing maintenance, clearing a jammed fastener, leaving work area, moving tool to another location, or handing the tool to another person.

**AWARNING** Clean and inspect tool daily. Carefully check for proper operation of trigger and safety mechanism. **Do Not** use the tool unless both the trigger and the safety mechanism are functional, or if the tool is leaking air or needs any other repair.

The depth to which a fastener is driven is controlled by the depth adjustment knob (A) Fig. 25. The depth of drive is factory adjusted to maximum depth. Test fire a fastener and check depth. If a change is desired, rotate the adjustment knob (A) Fig. 25: the adjustment knob has detents every <sup>1</sup>/<sub>4</sub> turn. Rotate the knob

counterclockwise to decrease the depth of drive, rotate the knob clockwise to increase depth of drive. Repeat as necessary to achieve desired results. The amount of air pressure required will vary depending on the size of the fastener and the material being fastened. Experiment with the air pressure setting to determine the lowest setting that will consistently perform the job at hand. Air pressure in excess of that required can cause premature wear and damage to the tool.

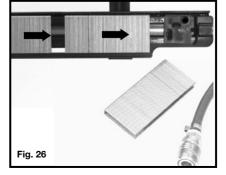


#### **CLEARING A JAMMED FASTENER**

**AWARNING** Disconnect tool from air supply.

- 1. Open magazine and remove any remaining fasteners (see Fig. 26).
- 2. Open the quick release latch and
- hinge fastener guide plate open (see Fig. 27).
- 3. Remove the jammed fastener (see Fig. 28).

4. Close the fastener guide plate and secure with the quick release latch.





## MAINTENANCE

### CLEAN AND INSPECT DAILY

**AWARNING** Disconnect tool from air supply before cleaning and inspection. Correct all problems before placing the tool back in use.

Wipe tool clean and inspect for wear or damage. Use non-flammable cleaning solutions to wipe exterior of tool only if necessary. DO NOT SOAK tool with cleaning solutions. Such solutions can damage internal parts.

Inspect trigger and safety mechanism to assure system is complete and functional: no loose or missing parts, no binding or sticking parts.

Keep all screws tight. Loose screws can cause personal injury or damage tool.

If tool is used without an in-line oiler: place 5 or 6 drops of Porter-Cable Air Tool Oil into the air inlet of the tool at the beginning of each workday.

#### SERVICE AND REPAIRS

All quality tools will eventually require servicing or replacement of parts due to wear from normal use. These operations should ONLY be performed by either an AUTHORIZED PORTER-CABLE SERVICE STATION or a PORTER-CABLE•DELTA FACTORY SERVICE CENTER. All repairs made by these agencies are fully guaranteed against defective material and workmanship. We cannot guarantee repairs made or attempted by anyone other than these agencies.

Should you have any questions about your tool, feel free to write us at any time. In any communications, please give all information shown on the nameplate of your tool (model number, type, serial number, etc.).

## TROUBLESHOOTING

AWARNING Disconnect tool from air supply before performing any Service Procedure.

	SYMPTOM	PROBLEMS	SOLUTIONS
1.	Air leak near top of tool or in trigger area.	Loose screws. Worn or damaged o-rings or seals.	Tighten screws. Install Overhaul Kit.

2.	Tool does nothing or operates sluggishly.	Inadequate air supply. Inadequate lubrication. Worn or damaged o-rings or seals.	Verify adequate air supply. Put 5 or 6 drops of oil into air inlet. Install Overhaul Kit.
3.	Air leak near bottom of tool.	Loose screws. Worn or damaged o-rings or bumper.	Tighten screws. Install Overhaul Kit.
4.	Tool jams frequently.	Incorrect fasteners.	Verify approved fasteners of correct size.
		Damaged fasteners. Magazine or nose screws loose.	Replace w/undamaged fasteners. Tighten screws.
		Magazine is dirty.	Clean magazine.
		Driver is worn or damaged.	Install "DRIVER" Maintenance Kit.
5.	Other.		Contact a Porter-Cable Service Facility.