Owners & Safety Manual

SM-100 ROBOTIC POWER PACK

SM-100 with optional PGC-2



LENGTH	111.1 mm (4.38")
WEIGHT	283.5 gram (10 oz.)
WEIGHT WITH JAWS (approximate)	385.6 gram (13.6 oz.)
DIAMETER	38.1 mm (1.5")
CFM@30 STROKES MIN.	0.60 cfm
CLOSING FORCE @5.516 BAR (80 PSI)	Finish—800 lb.
MATERIAL	ALUMINUM
САМ	PISTON STYLE



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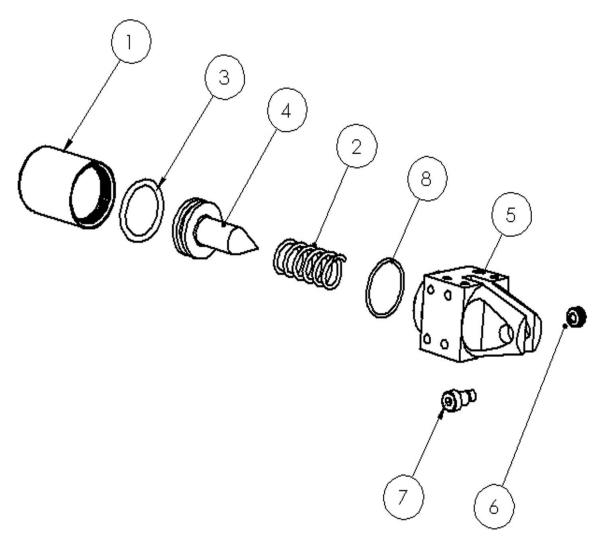
Wear Eye Protection

Read manual carefully.



Made in the U.S.A.





DRWG. NO.	DESCRIPTION	PART NO.
1	PISTON HOUSING	1-F-SM-100
2	RETURN SPRING	16-SM-100**
3	PISTON O'RING	15A-01**
4	PISTON SHAFT	3-SM-100
5	JAW HOUSING	2-SM-100
6	INSERT NUT	33-01
7	PIVOT SCREW	23-01**
8	END CAP O'RING	17-01**

** - Available in repair kit part number - <u>SM-100-KIT</u> Repair kit also has 21B jaw spring, not shown

ASSEMBLY

- Upon receipt inspect box for all parts.
- Remove screw from jaw housing and insert optional jaw. Be sure jaw screw is tight.
- Prior to use attach air hose to air inlet of power pack using proper wrench size. Check that all threads are free of debris.
- Attach air hose to Air filter/Regulator using a quick disconnect device. Be sure that air hose is secure. There should be no air leaks. If there is, remove hose and check threads for damage. Reattach air hose, tighten.

• ISOLATE AIR WHILE ATTACHING HOSE AND JAW HEAD!

• Test unit to assure free movement of jaws. Be sure to follow all safety instructions when testing.

Simonds SM-100 power pack is a pneumatic tool intended to cut or crimp wires and plastics. Simonds power packs are designed to use specific heads or jaws (attachments) for this purpose. These heads are sold separate and rated by the work to be performed.

By pushing the safety latch forward on the hand models the operator is able to push down on the treadle lever to activate the tool. When the tool is activated a piston will push forward causing movement at the head. Without the optional attachment a piston with a cam will operate forward. An attached head will open or close when attached to the power pack.

• Once unit has been tested and safety issues addressed the unit is ready for production line use.



WARRANTY

Simonds Inc. power packs and jaws are warranted to be free from defects in materials and workmanship for a period of one year, barring alterations, abuse or misuse. All products returned for warranty repair must be sent to Simonds Inc., Southbridge, MA at end users expense. Simonds will either repair or replace the tool if it is found defective due to material defect or workmanship at Simonds discretion.

Warranty repairs accepted only through distributors with proper RMA's.

OPERATING INSTRUCTIONS:

- Maximum inlet pressure is 5.516 BAR (80 PSI). The power pack needs to have an inline locking regulator to assure that maximum inlet pressure is not exceeded. Minimum air pressure is 2.758 BAR (40 psi). O-rings may not seat properly and unit can leak air if lower than then 2.758 BAR (40 psi).
- For longer tool life it is recommend to use only enough air to complete the job, never exceeding the recommended pressure.
- Tools should have an in line air filter to remove debris, water and particulates. Inline air filter and regulator should be not more than 1.829 meters (6 feet) from the tool.
- An inline lubricator will help to extend the life of the tool. Only use pneumatic oil in the lubricator. If no
 lubricator is available place a few drops of pneumatic oil in to the air inlet of tool each week. Only lubricants recommended by Simonds are to be used.
- Only tools or jaws recommended and manufactured by Simonds are to be used on this power pack. Use of other tools may constitute a hazard or void warranty.
- The SM-100 requires an air solenoid to activate. Be sure to release start and stop device in case of a failure of energy supply. Keep fingers, hair and clothing away from jaws when activating tool.
- Air hose must be securely fastened to the air inlet prior to using. Be sure hose is tightened using the proper tool. The air hose should have a .25 mm (1/8") NPT thread attached that will screw in to the tool end.
- Air hose should be attached to air supply (air filtration system) securely. It is recommended that a quick disconnect devise be used to attach air hose to air supply.

SAFETY INSTRUCTIONS

- Inspect tools and hoses each day prior to operation. Air hose that is frayed, cut or abraded should be replaced. Be sure that threads are clean and not worn.
- If the tool is not in use and not positively disconnected from the energy supply, the energy supply system must facilitate isolation and dissipation of pressure by a suitable and lockable shutoff device in order to prevent unexpected start-up.
- Beware of hair, fingers, ties, loose clothing etc. when operating the tool. Keep away from moving parts.
- Always wear eye protection when operating the tool. Beware of ejection of cuttings or chips. Turn head to avoid being exposed to this operation.
- Beware that working on brittle material may cause harmful splinters.
- Always disconnect from air supply when changing tool, during repair, adjusting and inserting tools, maintenance and cleaning operations.
- Simonds tools are not designed for use in explosive atmospheres.
- Simonds tools are not insulated for coming in to contact with electric power sources.
- Do not use tools near personnel where risk of flying debris may hit them.
- Do not point or aim tool at another person.
- Unsecured or cut air hose may cause a whipping action which may result in injury.
- Do not use any attachments not manufactured by Simonds for this tool. Injury may result.
- If the tool is used on a bench stand or a work station be sure that the tool is fastened properly.
- Dispose of tool and material as recommended by local disposal regulations.
- Simonds tools are not for use other than on production line. Tool should not be used as a hammer or pry bar. A "two hand control" may be required depending on the attached tool..
- DO NOT EXCEED RECOMMENDED WIRE SIZE OR AIR PRESSURE. Exceeding the recommended wire size for the jaws may cause damage to tool or injury to user.

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