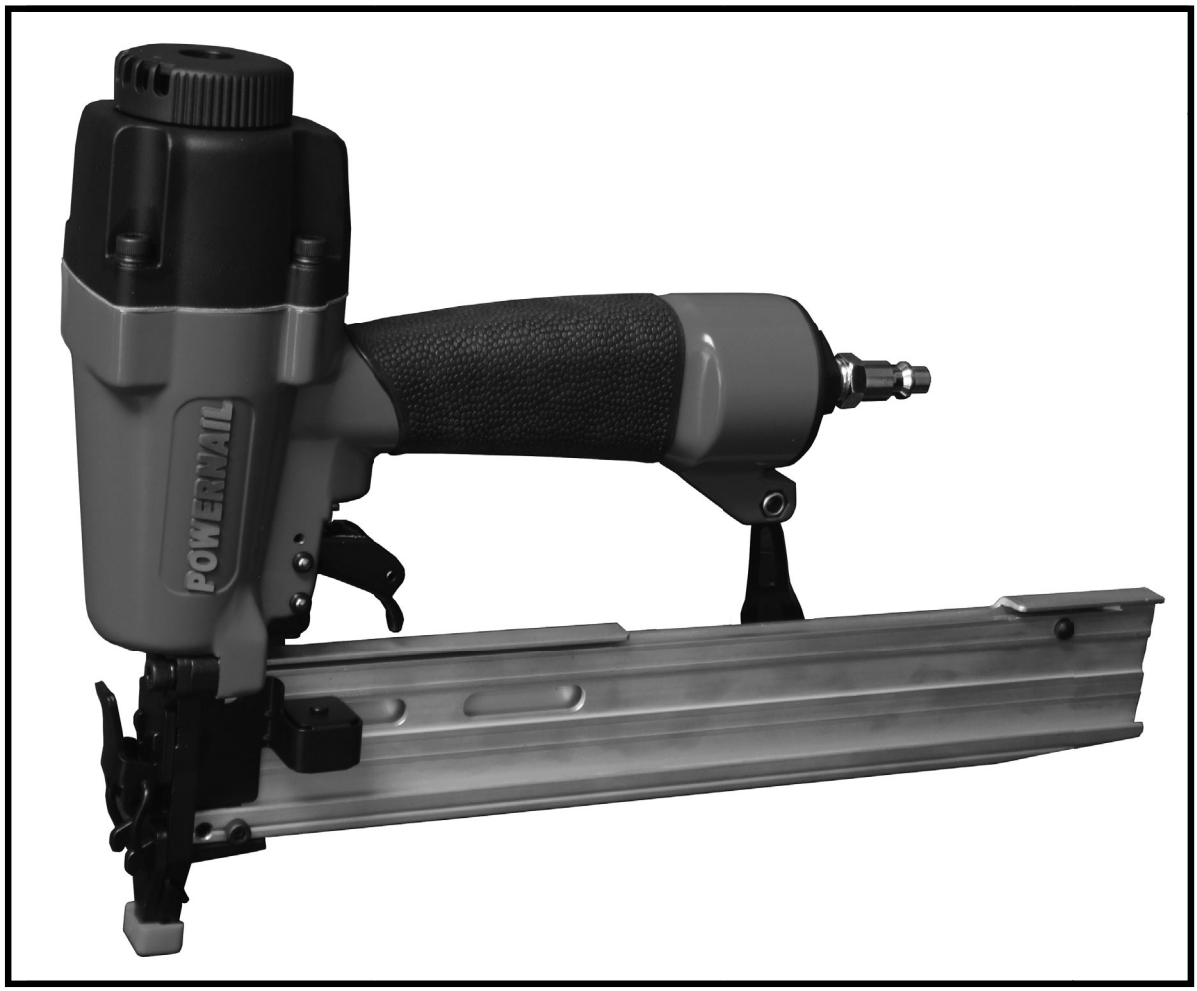
POWERNAIL® CO.

Model 1890U PowerStapler™



OPERATION AND MAINTENANCE MANUAL
MANUAL DE OPERACION Y DE MANTENIMIENTO
MANUEL D'INSTRUCTIONS ET D'ENTRETIEN

WARNING

Read this manual before you use this Powernailer®. Follow all safety warnings and instructions. If you are uncertain about the operation of the nailer, call us directly at 1-800-323-1653 for assistance or contact the closest Powernail Dealer for help. Please retain this information for future reference.

REV 15.08.07

INTRODUCTION

The 1890U PowerStapler® is a trigger-pull stapler designed to bring Powernail quality and flooring expertise to a pneumatic stapler. The 1890U is designed for use with 1/4” crown, 18 GA staples from 7/8” to 1-1/2” in length.

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LIMITED WARRANTY

POWERNAIL® Company, Inc. warrants to its customer, and to the first end-use purchaser of POWERNAIL 1890U PowerStapler purchased from an authorized POWERNAIL distributor, that each serialized manufactured 1890U PowerStapler by POWERNAIL®, for a period of 12 months from the date of purchase; shall be free of defects in materials and workmanship and will meet POWERNAIL’S specifications in effect at the time of product shipment. POWERNAIL will repair or replace, at its option, any 1890U PowerStapler that does not conform to this warranty. Claims must be made no later than fifteen (15) days after the end of the warranty period. POWERNAIL will perform all repair or replacements itself or through its authorized contractors. POWERNAIL is not responsible for shipping, labor or other direct or indirect costs. Damage caused by abuse, misuse, unusual or excessive wear is excluded. Repair or modification of the Products by unauthorized parties will void this warranty. The customer is responsible for returning Products to POWERNAIL for verification of nonconformance. Warranties for Products not manufactured by POWERNAIL are limited to warranties provided to POWERNAIL by the manufacturer of such product that are assignable to customer.

THESE WARRANTIES AND REMEDIES ARE EXCLUSIVE OF ALL OTHERS, EXPRESS OR IMPLIED. THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PURPOSE ARE EXPRESSLY EXCLUDED. IN NO EVENT SHALL POWERNAIL’S LIABILITY FOR A WARRANTY CLAIM EXCEED THE PRICE PAID TO POWERNAIL FOR THE NONCONFORMING PRODUCT, REGARDLESS OF THE FORM OR BASIS OF THE CLAIM OR CAUSE OF ACTION.

SAFETY INSTRUCTIONS

When operating this Nailer, the operator and others in the work area should ALWAYS wear approved SAFETY GLASSES, with front and side eye protection. Eye protection will help guard against flying nails and debris, which could cause severe eye injury.

EAR PROTECTION should be used to prevent hearing damage when there are high noise levels in the work area. ALWAYS use ear plugs with a noise reduction rated at 29 db or higher at a construction site.

Noise characteristic values in accordance with ENxx1:
A-weighted single-event sound pressure level at operator's position: LPA, ls94dBA
A-weighted single sound pressure level:LpA,ls,lm89dBA
Vibration characteristic values in accordance with ISO 8662, PART II
Weighted root mean square acceleration 3.2m/s²

Always **DISCONNECT THE AIR SUPPLY** before making any adjustments, repairing, clearing jams or when the Nailer is not in use. Do not use on scaffolding or ladders and disconnect nailer from air supply when transporting between installation areas.

Never attach the female end of a quick disconnect to the Nailer. This will trap air inside the Nailer and permit it to be discharged. Only the unrestricted male connection should be attached to the Nailer.

Nailer requires an air source that can continuously deliver 70 to 100 psi at 3-1/2 cubic feet of air per minute for operation.
Normal air pressure should not exceed 100 psi or damage to the Nailer and seals may occur. Excess air pressure can cause the Nailer to explode.

To prevent fire or explosion, use only regulated compressed air—do not use bottled gases of any kind (no oxygen or combustible gasses) to power this Nailer.

Nailer is intended for use installing wood flooring and is not to be used for purposes not specified in the operations manual.

Do not use any nails other than Powernail® Powercleats which are 20 gage L-cleat nails specifically designed for use in any 20 gage Powernailer. Powercleat nails are available in lengths of 1" and 1-1/4". Contact your Powernail Dealer for the correct Powercleats for the Model 2000.

Use only Powernail replacement parts in the repair or maintenance of this nailer. Parts or repair services are available from the manufacturer or from agents authorized by the manufacturer. Repairs should be carried out only by trained service personel in the field of fastener driving tools who will observe proper safety controls while performing maintenance. Service personel should be qualified to assess the safe working condition of fastener driving tools.
Always make sure Nailer is empty of nails before connecting air hose, so as to prevent any accidental discharge from occurring. ONLY CONNECT AIR TO AN UNLOADED NAILER.

Do not depress the trigger when loading. If the fasteners are jammed, disconnect the tool from the air supply before you remove the jammed nails.

Never place any part of the body in the discharge path of the Nailer when air is connected to the Nailer. Never point the tool at yourself or others, even if the tool is not loaded. For safety, keep out of reach of children. Never leave the Nailer unattended while it is connected to an air supply.

Do not fire into hard materials or attempt to use on hard or brittle material such as concrete, steel or tile. Before using this tool, carefully check that all parts are working correctly. Do not use the tool if it is not operating correctly, check for causes and adjust as necessary for proper operation. When not in use, the tool should be cleaned, fully assembled and then stored in a dry location. This will extend the life of the tool and reduce any oxidation.

OPERATION

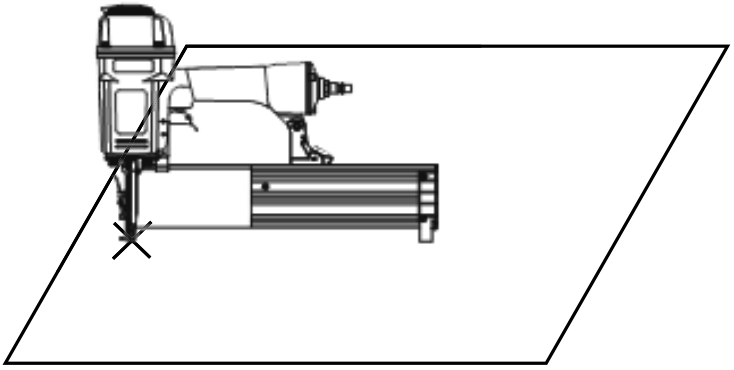
The Model 1890U is designed for use with 18 gauge, 1/4” crown staples in lengths from 7/8” to 1-1/2”.

APPLICATIONS: Carpet and Carpet Pad Installation,
Home Insulation Installation

*Only use tool for its intended purposes. Drive fasteners into work surfaces only; never into materials too hard to penetrate.

Single-fire Procedure

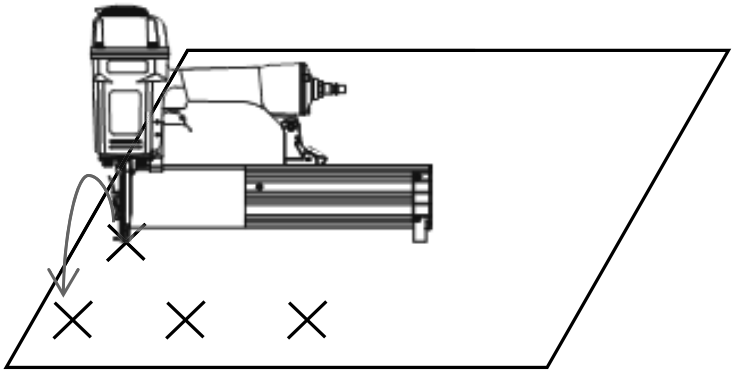
1. Set the nailer to the work surface with the nose pressed down to release the safety.
2. Squeeze the trigger once for single-fire operation.



“Bump-fire” Procedure

1. First squeeze and hold the trigger in the fire position.

2. Then push nailer-nose to the surface in the exact spot you wish to nail. The nailer will fire each time the nailer nose is pushed to the work surface when you hold the trigger in the fire position.



OPERATION, *continued...*

CONNECTING THE TOOL TO AN AIR SUPPL

Your air tool is fully assembled when you receive it. Before using it, attach the air lin and desired air system accessories. Be sure the air hose is depressurized when installing or removing adapters to the air line. To prevent misfire, do not connect air a loaded nailer.

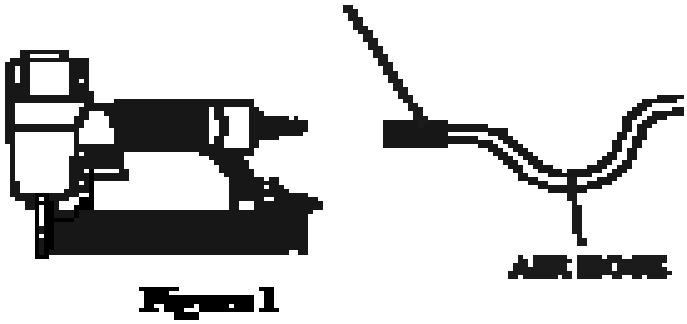


Figure 1

1. An automatic airline oilier is recommended but oil may be added manually before every operation or after about 1 hour of continuous use.

2. Place two (2) drops of air-tool oil into the air plug at the rear of the nailer. If you are using an automatic in-line oiler, check and add oil if necessary.

3. Turn your compressor on and set the compressors pressure regulator to the proper pressure for the size and type of fastener being used. Normal operating pressure should be adjusted between 70-100 psi based on fastener and wood being used.

4. Connect the tool to the air supply (Figure 2).

Figure 2

OPERATING TIPS

Before using this tool, carefully check that all parts are working correctly. Do not use the tool if it is not operating correctly, check for causes and adjust as necessary for proper operation.

Secure your work. Use clamps or a vise to hold your work project in place. It is safer than using your hands and it frees both hands to operate tool.

Do not drive fasteners on top of other fasteners or with tool at too steep of an angle; the fasteners may ricochet and injure someone.

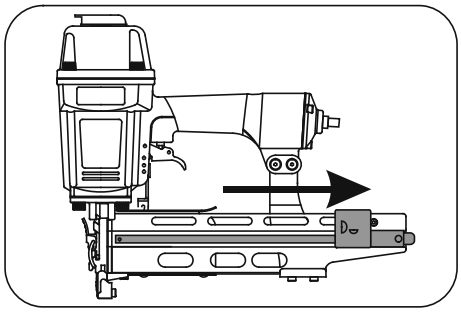
Do not drive fasteners too close to the edge of the work surface. The work piece is likely to split and the fastener could fly free or ricochet and injure someone.

Do not fire into hard materials or attempt to use on hard or brittle materials such as concrete, steel or tile.

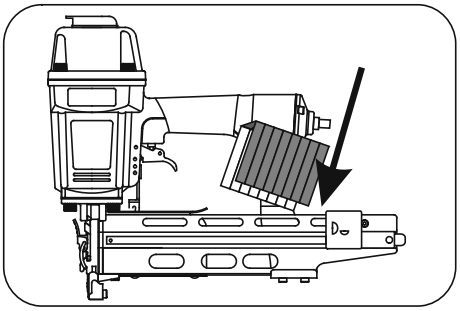
LOADING STAPLES

1. Disconnect air supply.

2. Pull back on staple pusher in the magazine unit until it locks over the spring loaded stopper.



3. Load a clip of staples over the top of the staple channel.

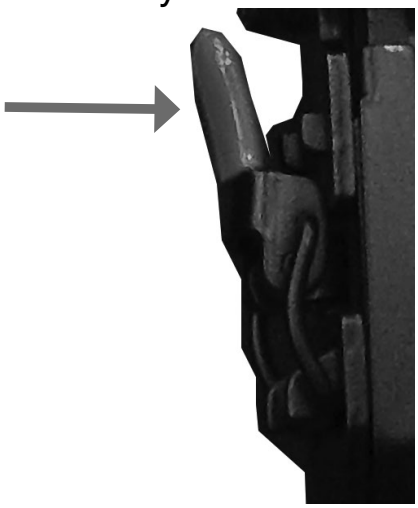


4. Release the staple pusher from the spring loaded stopper and gently allow it to move forward to engage the fasteners in the magazine.

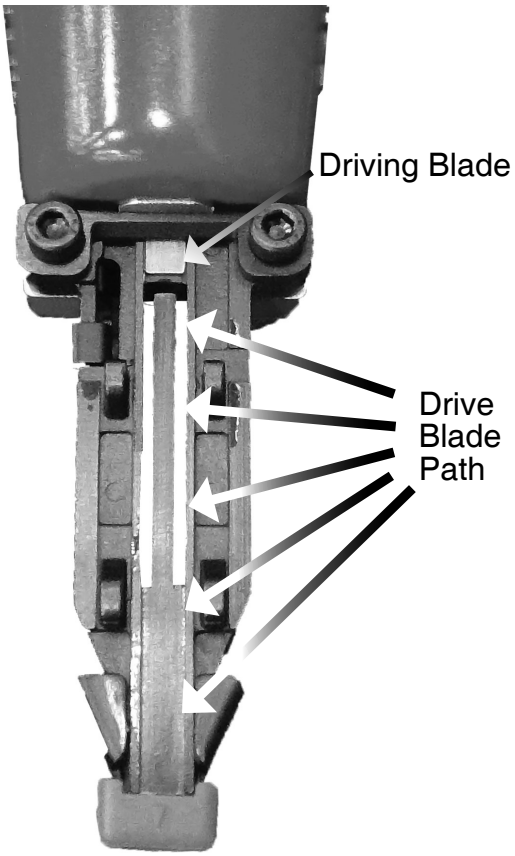
5. Connect air supply to the tool.

CLEARING JAMS

1. **Disconnect air supply.**
2. Pull the release lever to unlatch magazine cover and slide it to the rear
3. Use the release lever to remove the nose-cover assmebly.



4. Inspect and clear the driveblade path of any material or debris.



NAILER SAFETY LABELS

Operating Pressure
70 - 100 psi

WARNING!

1. Read and understand operating manual before using.
2. Operator and all the by-standers must wear ANSI approved safety glasses, ear and head protections.
3. Never use oxygen or other flammable gases. Only choose clean dry regulated compressed air below 100 PSI pressure.
4. Remove finger from trigger while not operating.
5. Never trip over the hose. Make sure all connections are tight.
6. Disconnect the tool from air supply before clearing jams, serviceing, adjusting or during non-operation.
7. Don't point tool at people or animals while operating.

TROUBLE SHOOTING CHART

Here are some common issues that may occur during use.
If the nailer is not working as it should, stop using the tool immediately and resolve the issue before continuing.

	PROBLEM	POSSIBLE CAUSE	SOLUTION
1	Air leaking at Trigger valve area	1. Damaged O-rings in trigger valve housing	1. Replace O-rings and check the operation of safety yoke mechanism
2	Air leaking between housing and nose	1. Loose screws in housing	1. Tighten screws
3	Air leaking between housing and cap assembly	1. Loose screws 2. Damaged seal.	1. Tighten screws. 2. Replace seal.
4	Tool skips driving fastner	1. Worn bumper. 2. Dirt in nose. 3. Dirt or damage prevents fasteners from moving freely in magazine. 4. Inadequate air flow. 5. Worn O-ring on piston or lack of lubrication. 6 Damaged O-rings on trigger valve. 7. Air leaks. 8. Air leakage due to worn cap seal.	1. Replace bumper 2. Clean nose. 3. Clean magazine and inspect and repair damage. 4. Check fitting, hose and air pressure. 5. Replace O-rings and lubrication. 6. Replace O-rings. 7. Tighten screws and fittings. 8. Replace seal.
5	Weak drive	1. Tool not lubricated. 2. Broken spring in cap assembly. 3. Exhaust port in cap is blocked.	1. Lubrication. 2. Replace spring. 3.Clean or replace damaged internal parts.
6	Tool jams	1. Worn or damaged nose. 2. Damaged driver. 3. Incorrect size of fastners. 4. Bent fasteners. 5. Magazine or nose screws are loose.	1. Replace nose. 2. Replace driver. 3. Use recommended fasteners. 4. Replace with new fasteners. 5. Tighten screws.
7	Tool does not fire	1. Fasteners jammed in magazine or discharge area. 2. Piston shaft is damaged. 3. Air pressure too low.	1. Inspect and clean magazine. 2. Replace piston shaft. 3. Check/increase air pressure.

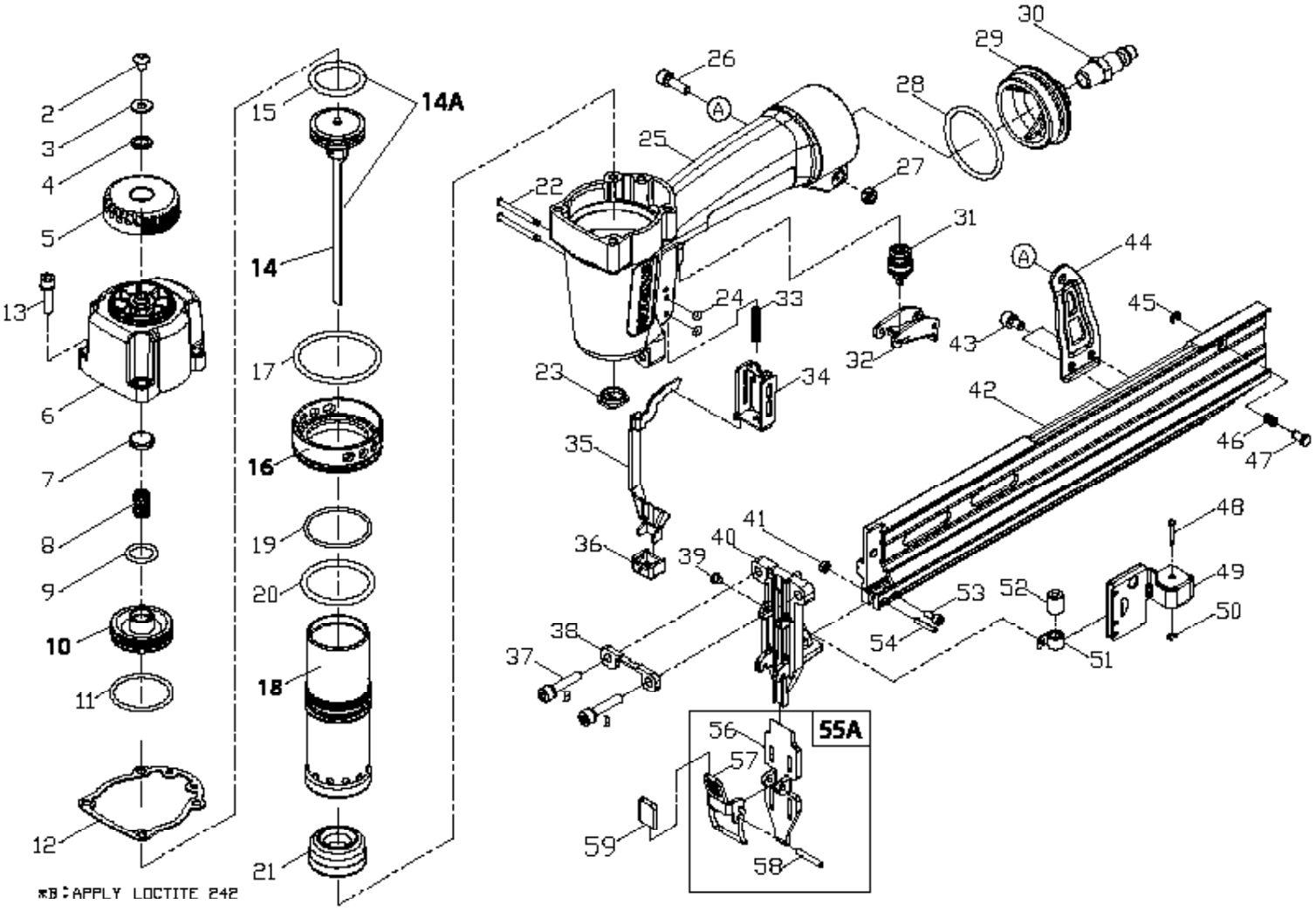
MODEL 1890U PARTS LIST

ITEM	DESCRIPTION	Req	PART #
2	UM HD Bolt	1	n/a
3	Flat Washer	1	n/a
4	Seal	1	n/a
5	Exhaust Cover	1	n/a
6	Cap	1	n/a
7	Seal	1	n/a
8	Spring	1	n/a
9	O-Ring	1	09-18U009
10	Head Valve	1	09-18U010
11	O-Ring	1	09-18U011
12	Cap Gasket	1	09-18U012
13	Hex Soc HD Bolt+SW	4	n/a
14	Drive Blade	1	n/a
14A	Drive Blade Asm. w/O-Ring	1	09-18U014A
15	O-Ring	1	09-18U015
16	Collar	1	n/a
17	O-Ring	1	09-18U017
18	Cylinder	1	09-18U018
19	O-Ring	1	09-18U019
20	O-Ring	1	09-18U020
21	Bumper	1	09-18U021
22	Stepped Pin	1	n/a
23	Joint Guide	1	09-18U023
24	O-Ring	1	09-18U024
25	Body	1	n/a
26	Hex Soc HD Bolt	1	09-18U026
27	Lock Nut	1	09-18U027
28	O-Ring	1	n/a
29	Rear Cover	1	n/a
30	Air Plug	1	n/a
31	Trigger Valve Asm	1	n/a
32	Trigger Assembly	1	n/a
33	Trigger Spring	1	n/a
34	Guide Safety Lever	1	n/a
35	Safety	1	09-18U035
36	Rubber Safety Pad	1	09-18U036

ITEM	DESCRIPTION	Req	PART #
37	Hex Soc HD Bolt+SW		09-18U037
38	Plate		n/a
39	Anchor		n/a
40	Gate		09-18U040
41	Locknut		n/a
42	Fixed Magazine		n/a
43	Hex Soc HD Bolt		09-18U043
44	Bracket		n/a
45	E-Clip		09-18U045
46	DetentSpring		09-18U046
47	Stopper		09-18U047
48	Stepped Pin		n/a
49	Pusher		09-18U049
50	E-Clip		n/a
51	Pusher Spring		09-18U051
52	Roller		n/a
53	Hex Soc HD Bolt		09-18U053
54	Rolled Pin		n/a
55A	Nose Cover Assembly		09-18U055A
56	Driver Guide Cover		n/a
57	Latch		n/a
58	Rolled Pin		n/a
59	Rubber Release Pad		09-18U059

KEY: S=Sold Separately, n/a Not available separately, KIT=Sold as part of a Kit

MODEL 1890U SCHEMATIC



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