# **Safety, Operation & Maintenance Instructions** Long & Short Nose Upholstery Air Stapler (NSG10 & NS11)

#### **IMPORTANT:**

# Drop 3 drops of oil into the stapler air inlet BEFORE first use. See page 2.

Please read the safety, operation and maintenance instructions **BEFORE** using the Air Stapler.



## Short Nose Upholstery Air Stapler (NS11):



#### SPECIFICATIONS:

- Operating air pressure range: 70 ~ 100 psi.
- Fastener type: 22 gauge fine wire 71 series staples.
- Fastener leg length range: 1/4" to 5/8"
- NSG10 and NS11 staplers use the same fasteners Rowley Company sells (SKU# NS32/E, NS33/E, NS34/E, NS35/E).
- House fitting: 1/4" NPT Milton
- Magazine capacity: 160 staples

#### **APPLICATIONS:**

- For upholstery: cornice boards, head boards, sofas, chairs, ottomans, upholstered walls, etc.
- For Window treatment: covering dust boards, mounting soft treatments to dust boards, etc.

#### IMPORTANT:

This manual contains safety warnings, operation, maintenance, parts lists and diagrams. Keep the manual in a safe place for future reference. The instructions will help you maximize the service life of your stapler.

#### Safety Instructions:

1. Do not use oxygen, flammable gas, or any other type of gas as a power source. Use regulated and filtered compressed air only.

- 2. Do not use gasoline or any other flammable liquid to clean the tool.
- 3. Do not exceed the maximum operation air pressure of 100 psi.

4. Always disconnect the tool from the air supply before loading staples, clearing a jam or servicing.

5. Always disconnect the tool from the air supply when not in operation. Never leave tool unattended while connected to air supply.

6. Do not carry tool by hose or move tool by pulling hose. Keep hose away from heat, oil, solvents and any sharp edges. Replace any damaged, weak or worn hoses.

7. Do not use tool as a hammer. Do not drop, drag or throw tool. If tool is dropped, discontinue use and carefully examine for any bent, cracked or broken parts. Listen for air leaks. Do not use tool until the damage is repaired.

8. Always wear safety glasses and ear protection when using tool.

9. When connecting tool to air supply, only use a coupling that will release all air pressure from the tool when disconnected.

10. Do not point the tool at yourself or at any person. Always assume that the tool is loaded and powered. Never engage in horseplay.

11. Keep hands, or any body parts away from the stapler nose area when the tool is connected to the compressed air.

12. Do not drive a staple on top of another staple.

13. Turn the trigger safety so the stapler will not fire accidentally when connecting or disconnecting tool to compressed air.

- 14. Always keep firm footing when using tool.
- 15. Do not modify or disable trigger safety.
- 16. Do not modify any part of tool.
- 17. Keep tool out of reach of children.

# **R** Rowley

## **OPERATION INSTRUCTIONS:**

#### 1) Set up Compressed Air:

The following diagram shows a simple compressed air set-up.

Connect a filter to air compressor through a straight air hose. Connect the stapler to the filter with a coiled air hose. Straight air hose is ideal for long distances. A coiled air hose gives the user more freedom while using stapler and is safer when the tool is not in use. Use quick couplers for easy connecting/disconnecting. Make sure all the air hoses are rated with working pressure exceeding 200 psi. The air compressor usually has two air pressure gauges: One indicates the tank pressure; the other output air pressure. Use the regulator knob to adjust the output air pressure starting at 70 psi and increase if necessary.

The filter removes moisture and debris from compressed air and protects the interior parts of the stapler from unnecessary wear (**Fig 3**). Without filter, the stapler may shoot rusty water. The rusty water is from the tank. Empty water from the tank regularly by following the air compressor manufacturer's instruction.



An in-line lubricator and regulator can also be added as shown in Fig. 4.

The in-line lubricator is a convenient way to lubricate the tool. If an in-line lubricator is installed, do not lubricate the stapler manually. Check the lubricator's oil level frequently. The air pressure regulator regulates output air pressure. It is better than the one on the air compressor since it is closer to the tool.

A separate regulator is especially useful when there are several tools connected to the same air compressor, or when the air hose spans a long distance. Always install an air regulator as close to the tool as possible.



### 2) Lubricate The Stapler:

Note: Stapler requires lubrication before first time use, or after a long period of no use.

- 1. Disconnect the stapler from air supply.
- 2. Turn the stapler so that air inlet faces up. Squeeze three drops of pneumatic oil into the air inlet (Fig. 5).
- 3. Wipe off any excess oil at the exhaust cap.
- 4. Connect the stapler to the compressed air. Without loading staples, press trigger several times to shoot empty, wipe off any excess oil.

**Note:** Use pneumatic oil only. If the stapler is not connected to an in-line lubricator, it needs to be lubricated regularly. Add one or two drops of oil at the start of each work day.

If tool is connected to an in-line lubricator, manual lubrication is not needed.

**Warning:** If the stapler is not sufficiently oiled, the piston blade may stick and misfire. Fail to oil the stapler may damage the tool.

Warning: Over oiling can damage O-rings and cause air leak.



## **OPERATION INSTRUCTIONS (cont.):**

#### 3) Make Sure All the Screws Are Tight:

Make sure the screw holding the L bracket (**Fig. 6**) is tight. If not, tighten it. If the screw is missing, it may be found at a home center. Its size is a M4x0.7x6 metric screw.



#### 4) Load Staples (Fig. 7):

- 1. We strongly suggest using staples from Rowley Company. See size chart below.
- 2. Make sure tool is *not* connected to air supply.
- 3. Turn tool upside down. Depress the magazine latch, and magazine cover will slide open.
- 4. Drop in a strip of staples with staple legs pointing up.
- 5. Push the magazine cover forward until latch catches.



#### Staples:

The following Rowley Company staples fit both NSG10 and NS11.

Stock #	Leg Length	Approx. Leg Length
NS32/E	6mm	1/4"
NS33/E	10mm	3/8"
NS34/E	13mm	1/2"
NS35/E	16mm	5/8"

#### 5) Shoot Staples:

#### Caution: Always wear safety glasses and ear plugs.

- 1. Connect the stapler to the air supply.
- 2. Regulate air pressure starting at 70 psi.
- 3. Rotate trigger safety to the side. Test stapling action by driving a few staples into a piece of wood.
- **Note:** Do not press the stapler firmly against the stapling surface to fire staples. The compressed air is sufficient to drive the staples in. Just lightly rest the stapler nose against the stapling surface and press the trigger. Pressing stapler firmly against the surface will cause the staples to penetrate too deep, cut fabrics and could damage both stapling surface and stapler piston. Apply slightly more pressure only when stapling through very thick layers of fabrics to wood.
- 4. If staples are still driven too deep, first try to tilt the stapler slightly, so stapler nose is at an angle from the stapling surface.
- 5. If staples do not penetrate sufficiently, especially when stapling into hardwood or if stapler misfires occasionally, or the piston does not return to full up position at the end of cycle, the air pressure may be too low. Adjust regulator to increase air pressure gradually and try again.

Warning: Do not exceed maximum operating pressure of 100 psi.

6. After use, always disconnect stapler from air supply and unload the staples.

## TROUBLESHOOTING:

Problem:	Possible Cause:	Corrective Action:					
1) Trigger can not be depressed.	Trigger safety is in the way.	Turn the trigger safety to the side.					
		Warning: Do not remove or tamper with the trigger safety. It is there to prevent accidental firing.					
2) Stapler fires but does	2. Air pressure is too low.	Make sure staples are loaded correctly in the stapler (Fig. 7).					
not shoot staples.		Adjust the regulator to increase output air pressure. The optimum air pressure range for each stapler may vary. It also de- pends on the type of wood one is stapling into.					
		Warning: Do not exceed maximum operating pressure of 105 psi. Note: Most air compressors have two gauges: one gauge displays the tank pressure and the other indicates the stepped down output air pressure. After turning on the air compressor, wait until the air compres- sor cuts off and the tank gauge stabilizes, then adjust the regulator. Set initial air pressure to 70 psi and increase by 5 lb. increments until correct pressure is achieved.					
		The only way to test this is to replace the gauge and/or the regulator.					
	3. Worn or cracked washer.	Open the stapler magazine cover, remove the staples and shoot the stapler several times while the magazine cover is open. If the piston blade does not retract fully (totally disappears into the stapler body) at the end of the cycle, it is very likely that the washer is worn and need to be replaced. See <b>How to Replace Washer</b> or call Rowley Company.					
	4. Stapler has an air leak.	Listen carefully for any air leak from the stapler. If air leak is detected from air inlet plug, unscrew the inlet plug, wrap a strip of Teflon® sealing tape around the threads, screw in the inlet plug. If air leaks from other parts of the stapler, call Rowley Company for further information.					
	5. Damaged piston.	A damaged piston blade often damages the bumper. Replace both (See H <b>ow to Replace Piston and</b>					
2) Stanlar daga not fully	1 Air progrum in too low	Bumper), or call Rowley Company.					
drive staples.							
4) Piston blade appears stuck, or sticking out of the nose when not shoot- ing, or stapler cycles sluggishly.	1. Stapler does not have adequate lubrication.	Add 2 drops of pneumatic lubricating oil through the stapler air inlet, or install an in line lubricator and make sure the oil level in the lubricator is adequate. <b>Note:</b> Add one to two drops of oil at the start of each work day.					
5) Stapler drives the staples too deep and/ or damages the stapling surface or cuts fabric or make the fabric appear buckled.	1. Operator presses the stapler too firmly against the stapling surface.	Unlike an electrical stapler, one does not need to and should not hold the stapler firmly against the stapling surface. Rest the stapler nose lightly on the stapling surface, then press the trigger. If the staples are still too deep, tilt the stapler slightly, so stapler nose is at an angle from the stapling surface. <b>Caution:</b> Pressing hard on the stapler will not only damage the stapling					
		surface but could also damage the stapler piston and shorten the stapler life.					

# TROUBLESHOOTING (Cont.):

Problem:	Possible Cause:	Corrective Action:					
6) Stapler intermittently	1. Worn washer	See corrective action for problem (2).					
misfires staples	2. Incorrect staples.	Check the staples, make sure the correct staple type is loaded in the stapler.					
	3. Debris in magazine cham- ber prevents pusher from pushing staples forward smoothly.	Slide the magazine cover off the stapler (See <b>Step 1 &amp;</b> <b>2</b> in <b>How to Replace Pusher and Pusher Spring</b> ). With a soft cloth or air gun, clean the pusher, magazine chamber and the magazine cover.					
	4. Worn pusher and/or pusher spring.	See <b>How to Replace Push and Pusher Spring</b> . Or call Rowley Company.					
	5. Low air pressure	See corrective action for problem (2).					
7) Staples appear stuck. Staples are not feeding	1. Incorrect staples.	See corrective action for problem (6).					
properly	2. Debris in magazine chamber.	See corrective action for problem (6).					
	3. Worn pusher and/or pusher spring.	See corrective action for problem (6).					
8) Stapler is jamming	1. Incorrect staples.	See corrective action for problem (6).					
	2. Debris in magazine chamber.	See corrective action for problem (6).					
	3. Shooting one staple on top of another staple	Do not shoot one staple over other staples.					
	4. Worn pusher and/or pusher spring.	See corrective action for problem (6).					
	5. Staples jam in the nose tip.	The driver guide (part # 32) is bent or the latch spring (part # 39) is too loose. Call Rowley Company.					
9) Stapler has an air leak		See corrective action for problem (4).					
10) Stapler spits water and/or rust	1. Air compressor tank has condensation water and/or is rusted.	Empty out the air compressor tank and purge the air supply line according to the manufacturer's instruction. Add a filter to the compressed air line (Fig. 3).					
11) Stapler magazine cov- er slides off the stapler. Pusher and pusher spring falls out.	1. The screw holding the L bracket is loose and falls off.	See How to Replace Pusher and Pusher Spring. Or call Rowley Co. To prevent this problem from happening again, check the screw ( <b>Fig. 6</b> , page 3) before use and make sure the screw is tight.					

#### **REPAIR & MAINTENANCE INSTRUCTIONS:** How to Replace Pusher and Pusher Spring

With use, the pusher and pusher spring will be worn and need to be replaced. Call Rowley Company to order the parts.

1. Undo the screw (Fig. 8) and remove the L bracket holding the magazine cover.



2. Press the magazine latch (Fig. 9) to slide the magazine cover off the stapler.



Look closely inside the magazine cover slot, at the nose end, there is a tension roller for the pusher spring to go around. In the bottom of the magazine cover slot there is a hook for hooking one end of the pusher spring. Spring goes around the tension roller and the other end of the pusher spring connects to the hook on the pusher. See (**Fig. 10**).

#### Spring Go Around Tension Roller



3. Thread the spring behind and around the tension roller into the magazine cover slot (Fig. 11).



4. Connect one end of the spring to the hook on the pusher (Fig. 12).



5. Use a straightened paper clip or a T-pin to pull the other end of spring out of the magazine cover slot, while firmly holding the pusher (Fig. 13).



 Hold the pusher firmly in one hand, with the other hand, slightly stretch the spring, bend slightly, and hook the spring onto the hook in the magazine cover slot (Fig. 14). be careful not to over stretch the spring.



 Now one end of the spring is connected to the hook in the magazine cover slot (Fig. 15-(1)) and the other end goes around the tension roller and hooked on to the pusher (Fig. 15-(2)). Slide the magazine cover on the stapler while

pressing the magazine latch (Fig. 9)

Replace the bracket and fasten in the screw (Fig. 8).



### How to Replace Other Parts

With use, some parts may break or wear out. See the table below for stock numbers of most replacable parts. Order Lubricant Syringe (AS65) also. AS65 will be used in the following steps.



Parts Stapler	NSG10	NS11				
Piston	NSG10/P15	NS11/P13				
Bumper	NSG10/P16	NS11/P14				
Washer	NSG10/P19	NS11/P17				
Metal Washer	NSG10/P20	no metal washer				

1. Unscrew the three bolts as shown in Fig. 16.



To remove the screw at the back end of the stapler, use a wrench to keep the nut from spinning (Fig. 17).



2. Remove the magazine/nose assembly (1) and washers (2) (Fig. 18).



3. Unscrew the four bolts as shown in Fig. 19.



4. Remove the bolts (1) and exhaust cap (2). Carefully remove the entire cylinder cover assembly (3), so the parts do not fall apart. Remove the sealing gasket (4). If the parts fall apart, see the diagram in Step 10 on page 9 to reassemble.



5. Pull the piston (1) out. A pair of pliers can be helpful. Wrap the jaws of a pair of pliers with fabrics and pull the cylinder (2) out with a slight twist. Remove the old bumper (3) from the bottom of the cylinder.



6. Apply small mount of lubricant grease (AS65) to the outer surface of a new bumper. Place the new bumper into the bottom of the cylinder.

Insert the cylinder into the stapler. Push the cylinder down and make sure it is all the way down inside the stapler body (**Fig. 22**).

#### Grease here



 Make sure the new piston is clean. Apply lubricant grease (AS65) to the disk part of the piston, especially around the O-ring. Insert the piston, and make sure that the blade is oriented in the correct direction (As indicated by the arrow in Fig. 23).





 Make sure the new washers are clean, free of any debris or cracks. Apply lubricant grease (AS65) around the outer edge of the new rubber washer. First place the new rubber washer, then the metal washer on the stapler and make sure the washers are oriented properly (See Fig. 24).



9. Replace the magazine/nose assembly as shown. Take care to line up the piston blade with the slot in the magazine/nose assembly. Be careful not to bend the piston blade. Do not force! Replace and tighten the three screws as shown below.



 Make sure the entire cylinder cover assembly is intact, all the parts are on, including compressed spring (3), rectangle washer (4), cylinder cover (5), O-Rings (6 & 7), piston stop (8) and sealing gasket (17). Place the cylinder cover assembly on as shown (Fig. 26).



11. Place the exhaust cap on as shown (Fig. 27).



 Insert the four bolts. Tighten the bolts while pressing down the exhaust cap. Connect the stapler to the compressed air. Try to shoot a few staples. Make sure there is no air leak.



#### **Limited Warranty**

- The warranty covers material and workmanship defects of the Long and Short Nose Upholstery Stapler (NSG10 & NS11) sold by Rowley Company.
- The warranty period is 90 days from the date of purchase.
- During the warranty period, replacements or repairs (at Rowley Company's discretion) of the tool will be made free of charge.
- The warranty does not cover damages by accident, misuse or due to using staples not recommended by Rowley Company. Unauthorized repair or modification of the tool will void the warranty.
- After warranty period expires, customers can still receive repair services from Rowley Company. The customer will be charged the labor and parts cost.
- To receive the repairs or replacements under warranty or to obtain repair services after warranty period expires, the tool must be returned to Rowley Company at the customer's expense.
- The user of the tool must read and understand the safety, operation and instructions. Rowley Company is not liable for any personal injuries or material damages associated directly or indirectly with using this tool.



#	Part Name	#	Part Name	#	Part Name	#	Part Name	#	Part Name	#	Part Name
1	Bolt M5X50	11	O-Ring 29.2X3.55	21	Rectangle Washer	31	Trigger Lever	41	Movable Magazine	51	Self-lock Nut M5
2	Exhaust Cap	12	O-Ring 20.3X3	22	Trigger Valve Seat	32	O-Ring 1.7X2	42	Pusher	52	Rubber Handle Sleeve
3	Compression Spring	13	Cylinder	23	Valve Stem Spring	33	Bolt M5X20	43	Tension Roller	53	O-Ring 35.5X2.3
4	Rectangle Washer	14	O-Ring 2.65X18	24	Trigger Valve Stem	34	Spring Washer 5	44	Roller Pin	54	End Cap
5	Cylinder Cover	15	Piston Assembly	25	O-Ring 5X1.5	35	Driver Guide	45	Pusher Spring	55	Air Inlet Plug
6	O-Ring 11.7X2.4	16	Bumper	26	Trigger Valve Guide	36	Spacer	46	Step Pin	56	Air Inlet Cover
7	O-Ring 26.2X2.4	17	Sealing Gasket	27	O-Ring 11.2X2	37	Fixed Magazine	47	Latch		
8	Piston Stop	18	Gun Body	28	Trigger Safety	38	L-Bracket	48	Latch Spring		
9	Bumper Washer	19	Rubber Washer	29	Compression Spring	39	Bolt M4X6	49	Support		
10	O-Ring 21.3X3	20	Metal Washer	30	Step Pin	40	Bolt M4X16	50	Spring Washer 4		

## PARTS DIAGRAM & LIST FOR NS11:



#	Part Name	#	Part Name	#	Part Name	#	Part Name	#	Part Name	#	Part Name
1	Bolt M5X20	10	O-Ring 2.65X30.2	19	Trigger Valve Seat	29	C-Clip 2.5	38	Support	47	Tension Roller
2	Exhaust Cap	11	Cylinder	20	Trigger Valve Stem	30	Bolts M5x20	39	Latch Spring	48	Roller Pin
3	Compression Spring	12	O-Ring 2.65X18	21	O-Ring 1.7X2	31	Spring Washer 5	40	Latch	49	Pusher Spring
4	Rectangle Washer	13	Piston	22	Trigger Valve Guide	32	Driver Guide	41	Step Pin	50	Nut M5
5	Cylinder Cover	14	Bumper	23	O-Ring 11.2X2	33	Spacer	42	Pin M2X10	51	Rubber Handle Sleeve
6	O-Ring 11.7X2.1	15	Sealing Gasket	24	Trigger Safety	34	Fixed Magazine	43	Bolt M4X12	52	O-Ring 35.5X2.3
7	O-Ring 16.2X2.1	16	Gun Body	25	Compression Spring	35	L Bracket	44	Pin M2X8	53	End Cap
8	Piston Stop	17	Washer	26	Step Pin	36	Bolt M4X6	45	Movable Magazine	54	Air Inlet Plug
9	Collar	18	Rectangle Washer	27	Trigger Lever	37	Spring Washer 4	46	Pusher		