
PHOENIX

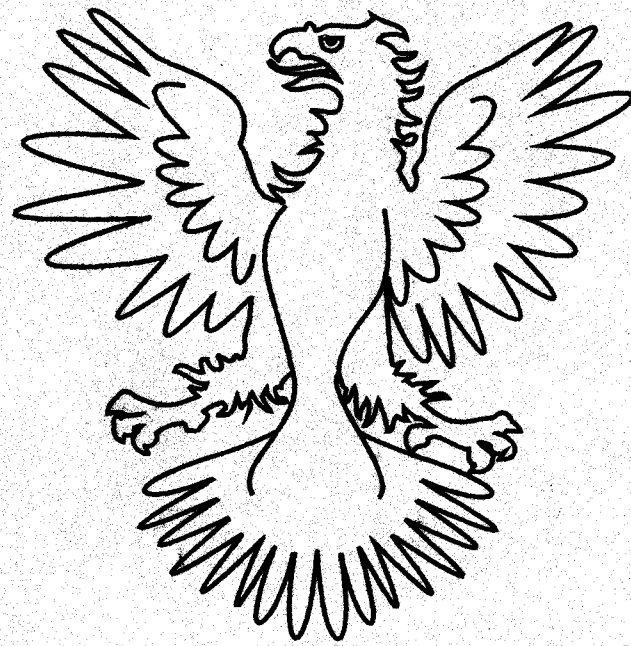
Paintball Gun

Manufactured By SOUTHERN PNEUMATICS, Inc.

1312 Commerce Lane Unit 7-A
Jupiter, Florida 33458

PHOENIX

Paintball Gun



Owner's Manual

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PHOENIX SEMI-AUTO PAINTBALL GUNS ARE
MANUFACTURED EXCLUSIVELY FOR:
PAINTBALL HEAVEN, INC.
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for Southern Pneumatics

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Paintball Gun

Manufactured by Southern Pneumatics, Inc.
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1. INTRODUCTION

Thank you for purchasing the Phoenix. The Phoenix is a pneumatic designed gun which uses only CO2 to operate and propel the ball, thus eliminating the hammer, bolt and heavy springs. The Phoenix is designed to operate in all temperatures as high 100 degrees and down to below minus 25 degrees. It is completely rust proof and in fact will operate under water if necessary.

Read and familiarize yourself with all the instructions and procedures before attempting to operate your gun. Follow the instructions correctly and you should not experience any difficulty. The manual is a supplement with examples to assist you. Contact your paintball dealer/distributor if you have any questions regarding these procedures.

WARNING:

A large number of bulk CO2 tank's contain dirt and rust particles. The Phoenix is a precision pneumatic gun. O-ring damage can occur if this contamination is allowed to enter the gun. It is therefore recommended that you ask your CO2 distributor to use an in-line filter in his fill station or ask your paintball distributor about the miniatur filters that are available for use in bottom line aand backpack hoses to use with your gun.

2. WARNING

SOUTHERN PNEUMATICS COULD NOT POSSIBLY ANTICIPATE EVERY CIRCUMSTANCE THAT MIGHT INVOLVE A HAZARD. FOR THAT REASON THE WARNINGS IN THE MANUAL AND ON THE GUN ARE NOT ALL-INCLUSIVE.

THIS GUN IS NOT A TOY! ANY MISUSE OR CARELESSNESS CAN CAUSE SERIOUS INJURY, BLINDNESS OR DEATH. DO NOT SHOOT THIS GUN WHERE INJURY TO PERSONS, ANIMALS OR DAMAGE TO PROPERTY COULD OCCUR. THIS PAINTBALL GUN WAS DESIGNED AND MANUFACTURED FOR PAINTBALL USE ONLY. NEVER ALLOW UNQUALIFIED PERSONS, UNDER THE AGE OF 18 TO OPERATE OR SERVICE THIS GUN. DO NOT ATTEMPT TO MODIFY THIS GUN OR USE IT FOR ANY APPLICATION IT WAS NOT DESIGNED FOR. IF YOU INTEND TO HANDLE/OPERATE OR SERVICE YOUR GUN BY A PROCEDURE NOT SPECIFICALLY RECOMMENDED BY SOUTHERN PNEUMATICS, FIRST MAKE SURE THAT SUCH A PROCEDURE OR METHOD WILL NOT RENDER YOUR GUN UNSAFE AND POSE A THREAT TO YOU AND OTHERS. ANY PERSON USING THIS GUN SHOULD NOT DO SO UNLESS THEY HAVE READ THIS OWNER'S MANUAL IN IT'S ENTIRETY FIRST.

3. DANGER/SERIOUS INJURY OR DEATH MAY RESULT

- A) THERE IS NO SUCH THING AS A SAFE GUN! (TO AVOID INJURY TO YOURSELF AND OTHERS, NEVER ASSUME THAT YOUR GUN IS SAFE).
- B) TO MAKE SURE YOUR GUN IS SAFE, YOU MUST REMOVE THE CO2 TANK, THE BREECH AND BARREL. POINT YOUR GUN IN A SAFE DIRECTION AND FIRE UNTIL IT IS CLEARED OF ALL CO2, PAINTBALLS AND YOUR GUN IS INOPERABLE. USE THIS METHOD WHEN MAINTENANCE, ETC. IS REQUIRED.
- C) NEVER LEAVE your paintball gun UNATTENDED with the CO2 tank attached and loaded with paintballs.
- D) NEVER ASSUME that your gun is NOT COCKED AND LOADED. There is always CO2 left in the air chamber when you remove the CO2 tank and paintballs left in the breech when you remove the ammo box. Point your gun in a safe direction and fire until it is cleared and inoperable.
- E) DO NOT put your FINGERS in the BREECH or BALL FEED TUBE areas of your gun.
- F) NEVER LOOK down the BARREL of your gun.
- G) NEVER POINT or SHOOT your gun at ANYONE not PROPERLY ATTIRED. See additional safety rules.
- H) KEEP your gun AWAY and out of reach of CHILDREN at all times.
- I) NEVER PUT your HAND in front of the BARREL.

4. SAFETY RULES

- A) DO NOT SHOOT your gun ANYWHERE, accept in DESIGNATED paintball areas.
- B) KEEP your gun pointed in a SAFE DIRECTION at all times.
- C) When purchasing your gun ask for a list of safety instructions and game rules.
- D) CHECK what your gun is CHRONOED at before each game. NEVER EXCEED 300 FPS!
- E) ALWAYS use a BARREL PLUG.
- F) NEVER SHOOT at anyone LESS than 25 FEET away.

5. ADDITIONAL SAFETY RULES

- A) PROTECTION: EYES, HANDS, FACE, EARS, AND BODY
- B) WEAR SAFETY CLOTHING AND ACCESSORIES SUPPLIED BY PAINTBALL DEALER/DISTRIBUTORS ONLY.
 - 1) Goggles
 - 2) Face protector
 - 3) Neck protector
 - 4) Pads

6. UNPACKING AND CHECKING CONTENTS

QTY.	DESCRIPTION
1	Phoenix Paintball Gun
1	Owners manual
1	Warranty card
1	Bag of spare parts
1	Bag of loose tools
1	140 round ammo box
1	7 oz. CO2 tank
1	Elbow
1	Butt plate
1	Barrel plug

7. RECOMMENDED

K-C TROUBLE FREE OIL is used and recommended by Southern Pneumatics. Contact your Paintball dealer/distributor nearest you.

8. GUN ASSEMBLY AND OPERATION

A) BARREL

Turn barrel release lever (MARKED ON GUN) and push barrel in. Turn to opposite direction to lock. DOUBLE CHECK that the BARREL is pushed in all the way and locked before you start shooting.

B) BALL FEED TUBE

Left or right handed. Remove the two screws and reverse the ball feed tube. CAUTION: DO NOT OVER TIGHTEN THE SCREWS.

C) ELBOW AND AMMO BOX

Attach elbow and ammo box to the ball feed tube and load with paintballs making sure that the balls have fallen past the elbow and into the ball feed tube.

D) CO₂ TANK

CAUTION: INSPECT CO₂ TANK FOR SIGNS OF DAMAGE BEFORE USE. SCREW CO₂ TANK ALL THE WAY IN AND TIGHTEN.

E) VELOCITY ADJUSTMENT

CAUTION: ALWAYS START THE ADJUSTABLE REGULATOR AT A LOW SETTING. ANY ADJUSTMENT OTHER THAN RECOMMENDED WITH THIS REGULATOR COULD CAUSE SERIOUS INJURY.

Your gun has an adjustable regulator which is used to control the air pressure needed to operate your gun. Turn the set screw COUNTER CLOCKWISE for increased pressure and CLOCKWISE to decrease pressure, using the allen wrench supplied.

F) LUBRICATION

This gun needs NO LUBRICATION, but for maximum life of the o-rings and to improve the cycling speed use the recommended oil. Use 1 or 2 drops when replacing the o-rings. Point your gun down and put 1 or 2 drops into the CO₂ adapter of your gun, screw the CO₂ tank on and fire a few times.

9. MAINTENANCE

CAUTION: BEFORE YOU DO ANY MAINTENANCE OR CLEANING, FOLLOW ALL SAFETY INSTRUCTIONS.

This gun does not contain any parts that can be damaged by water. Clean all exterior and inside parts of the gun with a damp cloth and dry or immerse the gun in water when PRESSURIZED ONLY and fire. Remove and fire down to remove all excess water and dry.

A) ROTARY BREECH

If a paintball breaks in the breech, open the breech cover and pull the breech out with same screw. Rinse the reech and the breech area with water and dry. Remove CO₂ tank and discharge gun in a safe direction.

B) STORAGE

Remove CO₂ tank and discharge gun in a safe direction until all air and paintballs are expelled. Follow the SAFETY INSTRUCTIONS in the manual.

10. O-RING MAINTENANCE

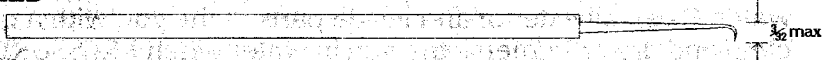
CAUTION: ONLY MECHANICALLY INCLINED PERSONS WITH O-RING EXPERIENCE SHOULD SERVICE THIS GUN. IF YOU NEED HELP OR ADVICE, WE RECOMMEND STRONGLY THAT YOU TAKE IT BACK TO THE PAINTBALL DEALER YOU PURCHASED THE GUN FROM. O-RING TOOLS ARE NEEDED. DO NOT REMOVE THE POWER PISTON UNLESS YOU SUSPECT MALFUNCTION. REASSEMBLING THE POWER PISTON WITH SEAT IN DIFFERENT POSITIONS MAY CAUSE THE SEAL TO LEAK, IN WHICH CASE A NEW PISTON WILL BE REQUIRED. NEVER REMOVE THE BREECH ACTUATOR SCREWS, THIS SHOULD ONLY BE DONE AT THE FACTORY.

O-RING TOOLS DIAGRAM:

POINTED



HOOKED



STEP 1

Remove the CO₂ tank and discharge the gun.

STEP 2

Remove the two socket cap screws.

STEP 3

Remove the barrel guard.

STEP 4

Keeping the gun in a horizontal position, slide the frame towards the rear of the gun.

11. SERVICING CONTROL VALVE

STEP 1

Refer to section 10.

STEP 2

Remove trigger.

STEP 3

Lift control valve out.

STEP 4

Inspect top o-rings and replace only if needed.

STEP 5

Remove control pin.

STEP 6

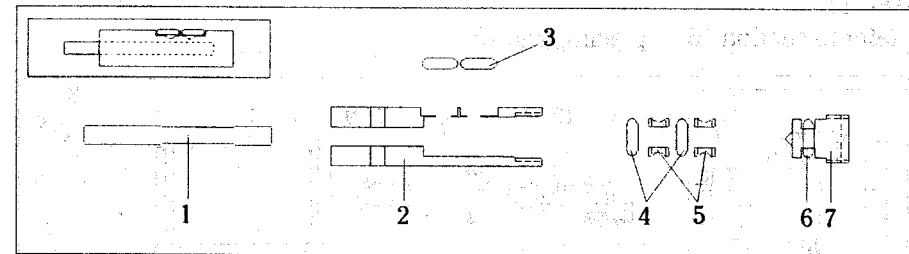
Remove threaded plug, replace o-ring.

STEP 7

Using small o-ring hook, remove the two spacers and the o-rings, being very careful not to scratch soft brass body. Inspect o-rings, replace if necessary and reassemble in reverse order. Lightly seat control valve plug.

STEP 8

Push in control pin, short end first, (THIS MAY BE TIGHT). Pull/push pin in and out with pliers until fairly easy fit is obtained.



1 Control Valve Pin

2 Control Valve Body

3 Control Valve Body O-Rings

4 Control Valve Inner O-Rings

5 Control Valve Spacers

6 Control Valve Plug O-Ring

7 Control Valve Plug

12. SERVICING THE REGULATOR

STEP 1

Refer to section 10

STEP 2

Remove regulator dowel with 8-32 screw. Finger tighten screw and pull dowel straight out.

STEP 3

Slide out regulator assembly and replace front o-ring. It is not necessary to replace rear o-ring. This is for tightening purposed only.

STEP 4

If internal o-rings are suspected of leaking (loss of pressure control, wide churning variation, etc.). Proceed to step 5.

STEP 5

Place the O-ring hook down the center of the regulator piston to small cross hole, pull piston out, being careful not to drop belleville springs (6).

STEP 6

Inspect and replace o-rings and seals if necessary.

STEP 7

Using o-ring hook remove regulator seat, and replace o-rings if needed.

STEP 8

Carefully push regulator seat back into position, using o-ring hook in bottom of hole. CAUTION: DO NOT DAMAGE SEAT.

STEP 9

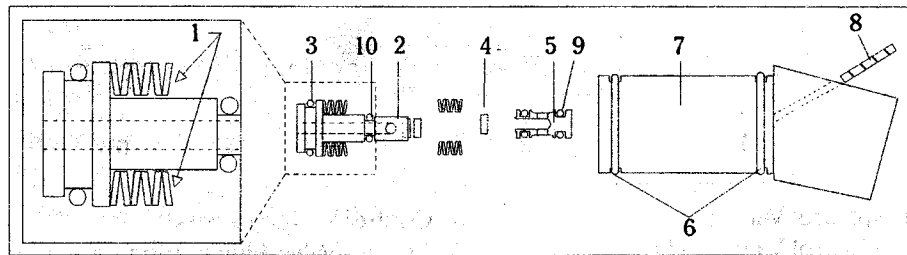
Replace piston.

STEP 10

Lubricate and carefully slide regulator back into place, replace threaded dowel pin with the threaded end out.

STEP 11

Refer to section 16 (replacing frame).



- | | |
|---------------------------------|---------------------------------|
| 1 Belleville Springs | 6 Regulator Body O-Rings |
| 2 Regulator Piston | 7 Regulator Body |
| 3 Front Regulator Piston O-Ring | 8 Regulator Screw |
| 4 Regulator Seal | 9 Regulator Seat O-Ring |
| 5 Regulator Seat | 10 Back Regulator Piston O-Ring |

13. SERVICING POWER PISTON

STEP 1

Refer to section 10.

STEP 2

Remove regulator (refer to section 12).

STEP 3

Using new pencil place erasure end from front of gun through power tube, push until power cylinder exits rear of gun.

STEP 4

Inspect and replace both o-rings if necessary.

STEP 5

CAUTION: FURTHER DISASSEMBLY IS NOT RECOMMENDED UNLESS REPLACEMENT POWER PISTON IS AVAILABLE.

STEP 6

If power piston is suspected of malfunctioning, remove same with finger nails or o-ring hook.

STEP 7

Lubricate and install new power piston.

STEP 8

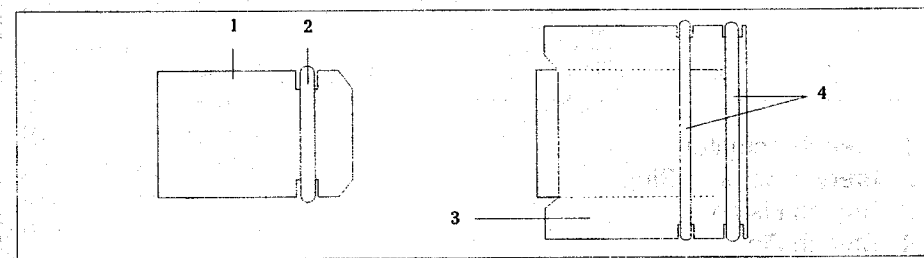
Slide into rear of gun being sure that the hole points to bottom of gun, carefully push in regulator until dowel hole lines up and replace dowel pin with THREADED END OUT.

STEP 9

Refer to section 16 (replacing frame).

STEP 10

Pressurize gun until power piston seals and trigger feels free, then chrone gun.



- | |
|--------------------------------------|
| 1 Power Piston Assembly |
| 2 Power Piston O-Ring |
| 3 Power Piston Valve Cylinder |
| 4 Power Piston Valve Cylinder O-Ring |

14. SERVICING BREECH PISTON

STEP 1

Remove CO₂ tank and discharge gun.

STEP 2

Screw regulator valve screw in, three (3) turns.

STEP 3

Remove breech.

STEP 4

Remove front set screw.

STEP 5

Remove spring, spring pad and breech pin.

STEP 6

Pressurize gun holding rag in front of screw hole in breech actuator, screw regulator valve out until pressure forces piston out. If piston does not come all the way out carefully remove it with suitable tool. remove CO₂ tank.

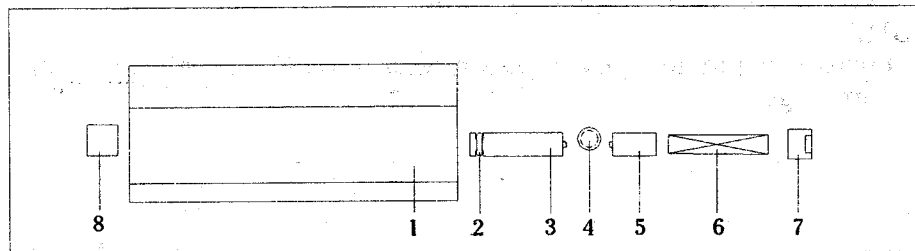
CAUTION: DO NOT REMOVE REAR SCREW, THIS WILL CAUSE LEAKS.

STEP 7

Replace worn o-ring and defective parts, reassemble in reverse order.

STEP 8

Replace CO₂ tank and chrone gun.

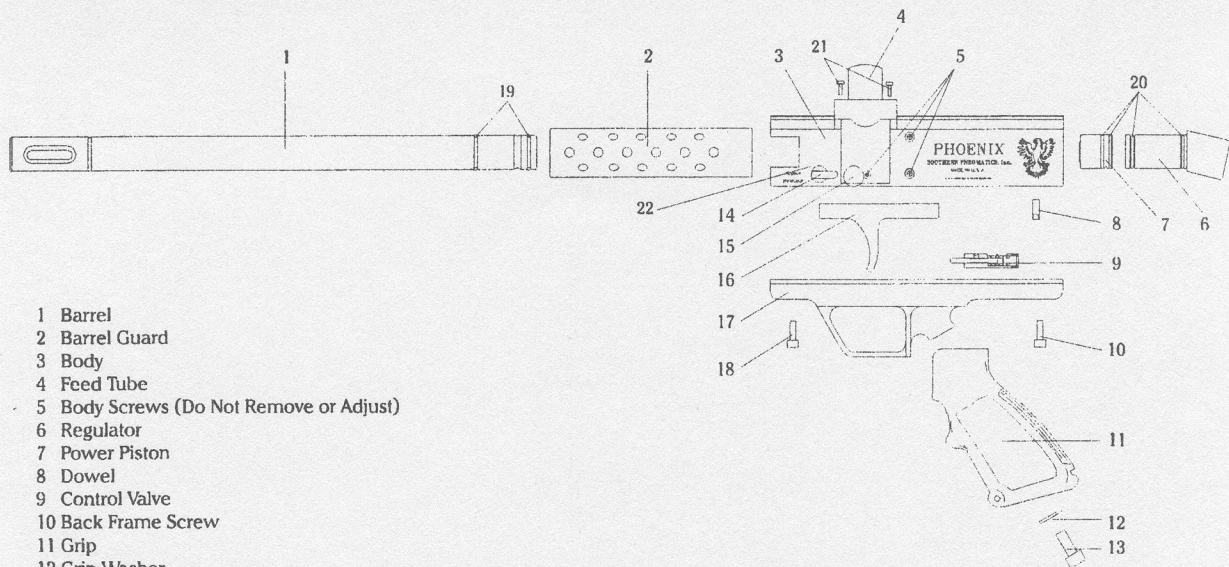


- 1 Breech Actuator
- 2 Breech Piston O-Ring
- 3 Breech Piston
- 4 Breech Pin
- 5 Breech Piston Spring Pad
- 6 Breech Piston Spring
- 7 Front Breech Actuator Screw
- 8 Rear Screw (Do Not Remove or Adjust)

15. REPAIR PARTS LIST

NOTE: TO ORDER PARTS, CONTACT YOUR LOCAL AUTHORIZED DEALER.

DESCRIPTION	ITEM NO.	QTY. NEEDED
Power piston complete assembly	100	1
Power valve cylinder	101	1
Power piston o-ring	102	1
Power valve cylinder o-rings	103	2
Control valve complete assembly	104	1
Control valve pin	105	1
Control valve body	106	1
Control valve plug	107	1
Control valve spacers	108	2
Control valve body top o-rings	109	2
Control valve body inside o-rings	110	2
Control valve plug o-ring	111	1
Regulator valve complete assembly	112	1
Regulator body	113	1
Regulator piston	114	1
Regulator seal	115	1
Regulator seat	116	1
Belleville springs	117	6
Regulator set screw	118	1
Regulator body o-rings	119	2
Regulator seat o-rings	120	2
Regulator piston front o-ring	121	1
Regulator piston rear o-ring	122	1
Breech actuator complete assembly	123	1
Breech actuator	124	1
Breech piston	125	1
Breech pin	126	1
Breech spring pad	127	1
Breech piston spring	128	1
Breech actuator screw	129	1
Breech piston o-ring	130	1
Rotary breech	131	1
Rotary breech o-ring	132	1



- 1 Barrel
- 2 Barrel Guard
- 3 Body
- 4 Feed Tube
- 5 Body Screws (Do Not Remove or Adjust)
- 6 Regulator
- 7 Power Piston
- 8 Dowel
- 9 Control Valve
- 10 Back Frame Screw
- 11 Grip
- 12 Grip Washer
- 13 Grip Screw
- 14 Barrel Release
- 15 Breech Cover Plate Screw
- 16 Trigger
- 17 Frame
- 18 Front Frame Screw
- 19 Barrel O-Rings
- 20 Regulator O-Rings
- 21 Feedtube Screws