

# THE “BOSS” Spray Gun

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Operators Manual






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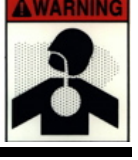

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# WARNINGS

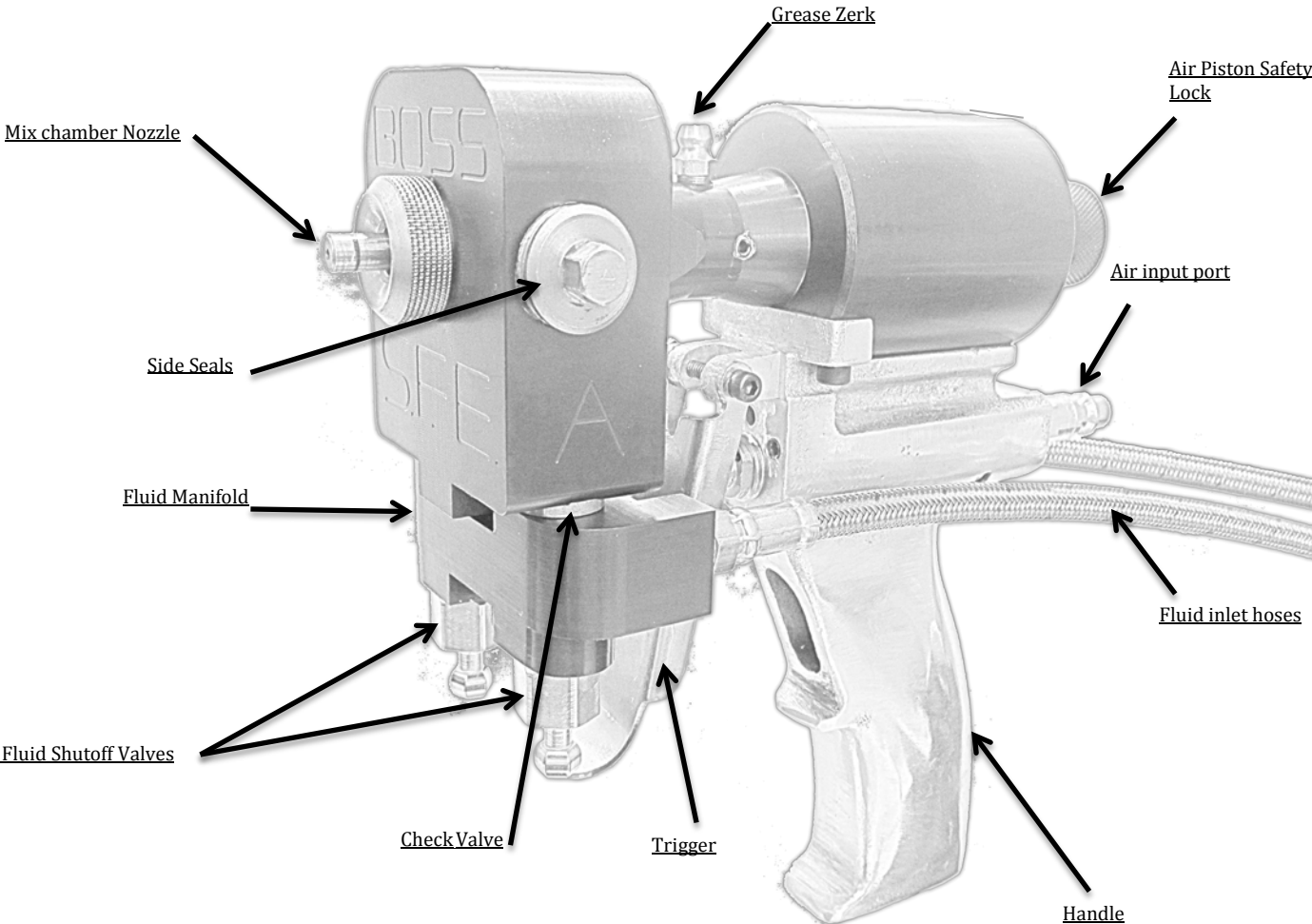
- Read and understand complete owner's manual before using the Boss Spray Gun!

	<p style="text-align: center;"><b>Fire, Electric Shock and Explosion Hazard</b></p> <p>High Voltage components can cause electric shock. Combustible materials and fumes in confined work areas can ignite and explode. To help prevent explosion, fire and electric shock:</p> <ul style="list-style-type: none"> <li>• Use equipment in well-ventilated areas.</li> <li>• Eliminate all ignition sources.</li> <li>• Keep work areas free of solvents, rags, gasoline and other debris.</li> </ul>
	<p style="text-align: center;"><b>Skin Injection Hazard</b></p> <p>High pressure fluid from spray gun, ruptured components, or leaks will pierce skin. This may look minor but is a serious condition. <b>Get immediate emergency treatment!</b></p> <ul style="list-style-type: none"> <li>• Do not point spray gun at anyone or any part of body.</li> <li>• Do not place hand or fingers over gun tip.</li> <li>• Use lowest possible pressure when troubleshooting or flushing equipment.</li> <li>• Check hoses, connections and fittings daily. Tighten or replace loose or worn or damaged parts immediately.</li> <li>• Relieve all pressure from proportioner and all components when you stop spraying and before cleaning or servicing equipment.</li> </ul>
	<p style="text-align: center;"><b>Personal Protective Equipment</b></p> <p>You must wear proper protective equipment when operating, servicing or when in the operating area of equipment. This will protect you from serious injury including but not limited to: eye injury, inhalation of toxic fumes, and loss of hearing.</p> <p>This equipment includes but is not limited to:</p> <ul style="list-style-type: none"> <li>• Protective eyewear</li> <li>• Respirator, gloves, and clothing recommended by fluid and solvent manufacturer</li> <li>• Hearing protection</li> </ul>

	<p style="text-align: center;"><b>Burn Hazard</b></p> <p>This equipment is used with heated fluid, which is hot and will cause some surfaces on equipment to become very hot. To avoid burns:</p> <ul style="list-style-type: none"> <li>• Do not touch fluid or equipment.</li> <li>• Allow fluid and equipment to completely cool before touching or servicing.</li> <li>• Wear gloves and protective clothing.</li> </ul>
	<p style="text-align: center;"><b>Toxic Fumes and Fluid Hazard</b></p> <ul style="list-style-type: none"> <li>• Read Material Safety Data Sheet (MSDS) to know specific hazards of fluid you are using.</li> <li>• Handle and store hazardous fluids according to applicable guidelines.</li> </ul>
	<p style="text-align: center;"><b>Misuse of Equipment Hazard</b></p> <p>Misuse can cause serious injury or death!</p> <ul style="list-style-type: none"> <li>• For professional use only.</li> <li>• Do not exceed the maximum temperature rating or working pressure of equipment.</li> <li>• Check equipment daily replacing worn or damaged parts immediately.</li> <li>• Read manuals, warnings, and labels before operating equipment.</li> <li>• Use only compatible fluids/solvents.</li> <li>• Keep hoses away from traffic areas, sharp edges and hot surfaces.</li> <li>• Comply with all safety warnings and labels.</li> <li>• Service of equipment should be done by qualified personnel only.</li> </ul>

# VIEW OF COMPLETE GUN

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# Isocyanate Warnings/Hazards



Warning: Spraying any material containing isocyanates creates mists or vapors that can be potentially harmful.

Read manufacturer's labels, warnings and MSDS sheets to know specific hazards and precautions that need to be taken related to isocyanates on their specific material!

Do not inhale mists, vapors or atomized particulates! Always provide sufficient ventilation in the work areas.

Wear protective equipment including boots, goggles, chemical impermeable gloves, and spray suits with hoods in the work area to prevent contact with isocyanates!

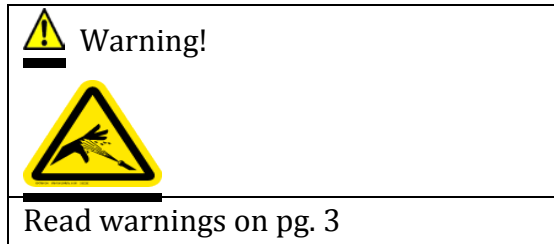
## ALWAYS KEEP A AND B COMPONENTS SEPARATE



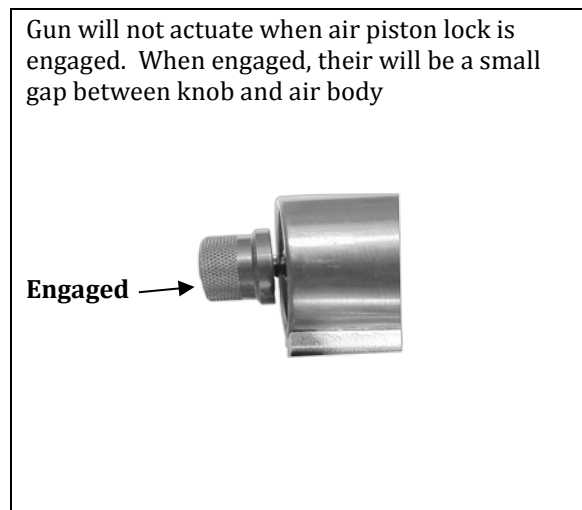
To prevent "cross-over" or cross contamination of guns "wetted" parts, never interchange A component(iso) and B component(resin) parts. All A component "wetted" parts are marked with an A from the factory and are on the left side of the gun.

## Air Piston Safety Lock

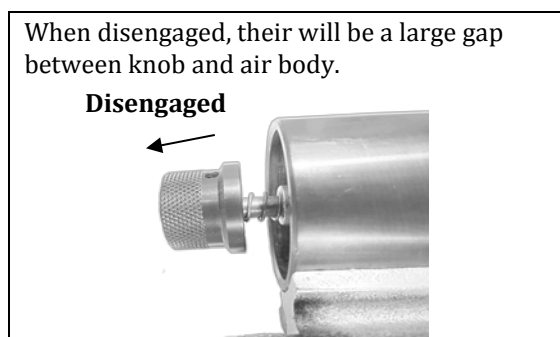
Always engage air piston safety lock each time you stop spraying to avoid accidental triggering, which could result in injury.

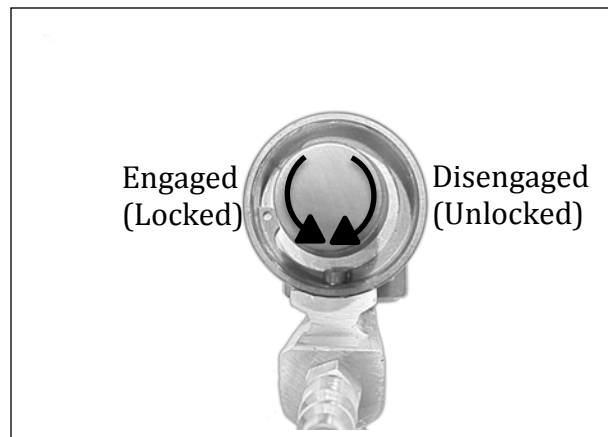


To engage air piston lock, which disables the gun from actuating, push knob in and turn counter clockwise.



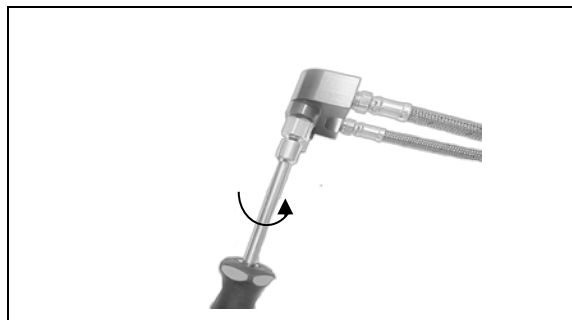
To disengage air piston safety lock, which enables gun to actuate, push knob in and turn clockwise.



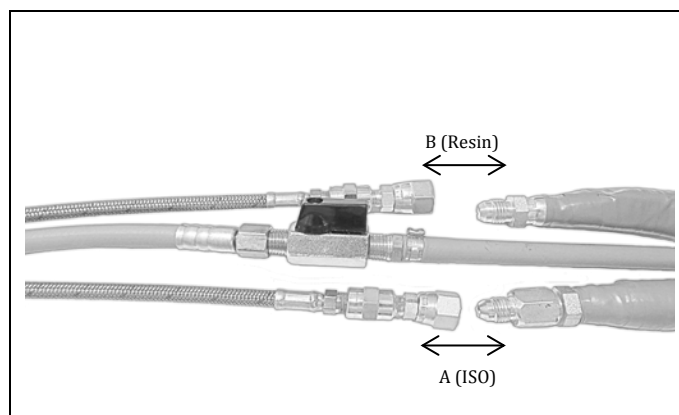


## Setup:

1) Close A and B shutoff valves on fluid manifold.

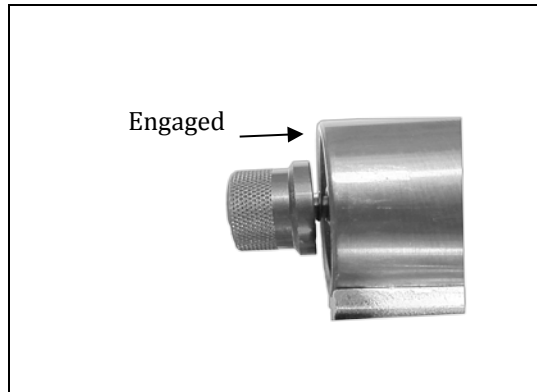


2) Connect fluid hoses from proportioner to fluid manifold A(Iso) and B(Resin)

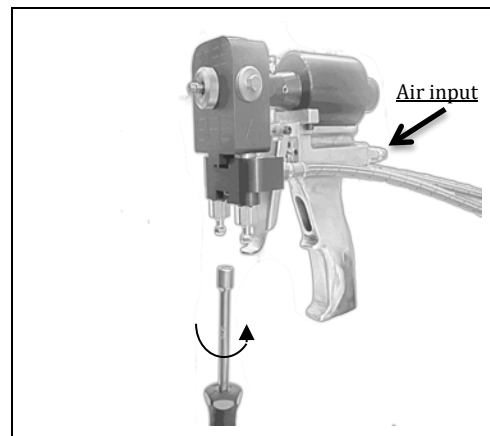
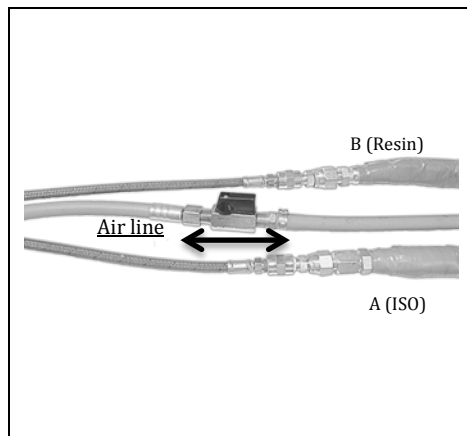




3) Engage air piston safety lock (see p. 7)

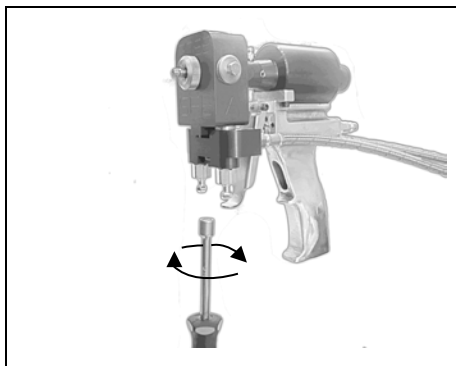


4) Connect air supply from hose to air whip provided.  
Attach fluid manifold to gun .

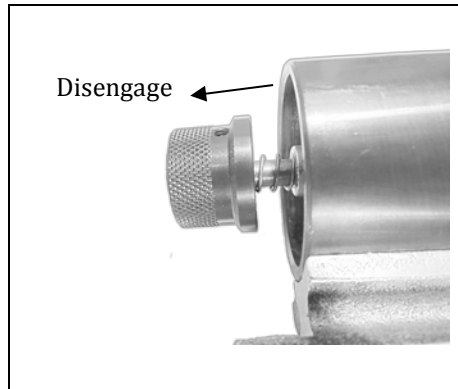


5) Connect quick connect air coupler to gun. Turn on air. Open air valve, which allows air to flow through gun and out of tip.

6) Open A and B fluid shutoff valves.



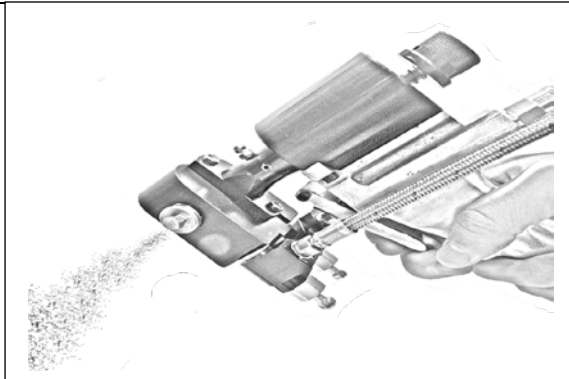
7) Disengage air piston safety lock.




8) Test Spray. Adjust pressure and temperature for desired results.

9) Gun is now ready to spray.


Notice:  
Air supply is required for gun actuation/lubrication.




## Relieving Pressure Procedure



Warning!

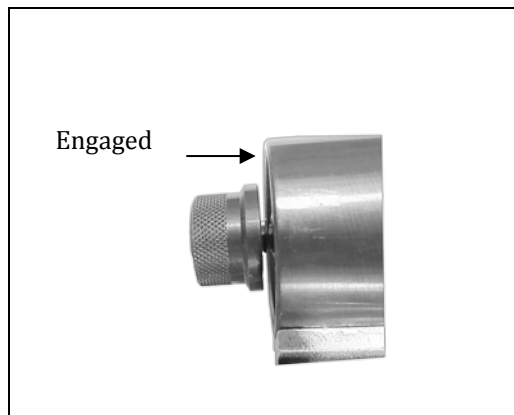


Elevated  
Temperatures

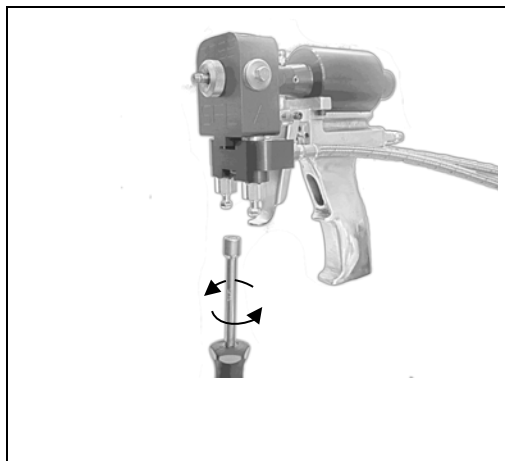


**Read all warnings on pgs. 3 and 4.  
Relieve all pressure before repairing or cleaning gun!**

1) Engage air piston safety lock. (see pgs. 7,8)





2) Close fluid shut off valves A and B.




3) Disengage air piston safety lock and trigger gun into a waste container to relieve excess pressure.

4) Engage air piston safety lock (See P 7.)

 **Warning!**

 **Elevated Temperatures**




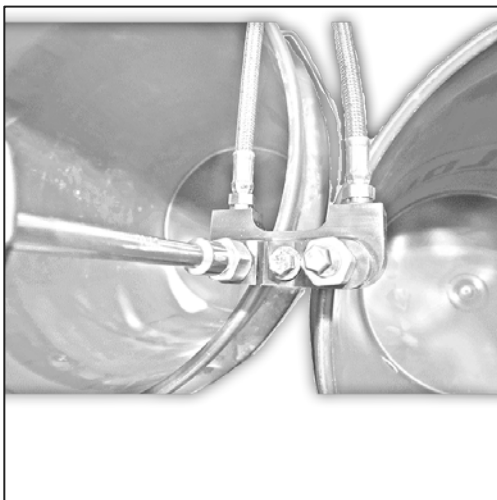
**Fluid in the proportioner is still under pressure.  
Relieve pressure from the proportioner before proceeding.  
Read all warnings on pgs. 3 and 4.  
Relieve all pressure before repairing or cleaning gun!**

5) Relieve pressure in the hose.

a.) Place the fluid manifold over a container with opening in the manifolds facing away from you in a safe direction.

b.) Slowly open the shut off valves.

-  If the fluid is under high pressure, it will spray sideways and down from fluid openings.



## **Gun Maintenance**

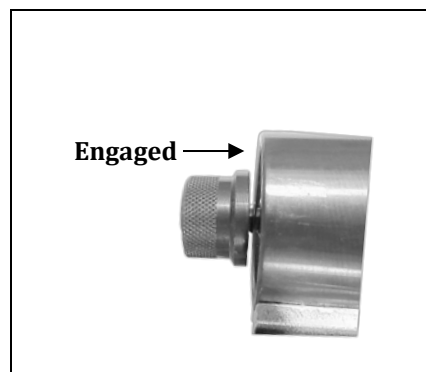
**Always lubricate all seals, threads and o-rings liberally!**

### **1) Preparing for shutdown at the end of each day**


- a) Close shut off valves on fluid manifold (see p. 8)**
- b) Actuate trigger with air connected and air valve in the “open” position to remove excess fluid**
- c) Pump grease into grease fitting until grease lightly sprays out of tip**
- d) Actuate trigger to remove contaminated grease**
- e) Disconnect air or turn air valve to the “closed” position.**
- f) Pump grease into grease fitting. Stop when grease is seen coming from tip**


### **1) Clean mixing Chamber nozzle tip**


- a.) Engage air piston safety lock(p. 7)**



**b.) Insert appropriate drill bit into tip and turn clockwise until clean**


 **Warning!**


 **Elevated Temperatures**



**Fluid in the proportioner is still under pressure.  
Relieve pressure from the proportioner before proceeding.  
Read all warnings on pgs. 3 and 4.  
Relieve all pressure before repairing or cleaning gun!**

## **2)Side seal assembly removal**

 **Warning!**



**\*Always make sure fluid shut off valves are completely closed before removing side seal assemblies! (see p. 11)  
\*Follow pressure relief procedure before doing maintenance on gun! (pgs. 11,12)**

**a) Always make sure fluid shut off valves are completely closed before removing side seal assemblies! (see p. 11)**


**b) Follow pressure relief procedure before doing maintenance on gun! (pgs. 11,12)**


**c) Remove fluid manifold with 5/16" nut driver**

- d) Disconnect air from gun
- e) Remove side seal assemblies with 5/16" nut driver or wrench
- f) Clean and inspect o-rings, side seals and springs(replace worn parts as needed)

\*\*\*You can access the side ports of the mixing chamber at this point(use the small drill bit to clean these ports).


### 3) Check valve assembly removal

 **Warning!**



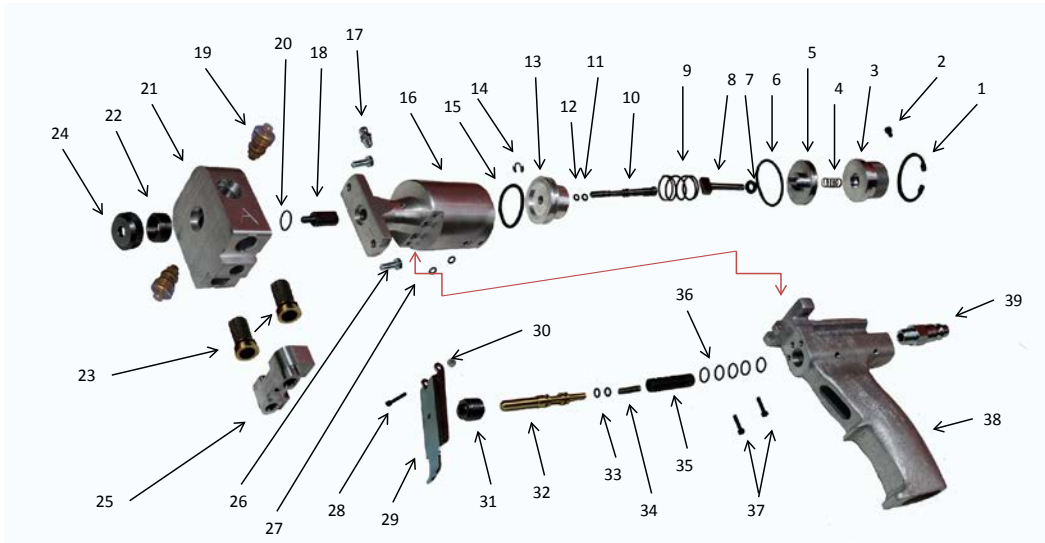
**\*Always make sure fluid shut off valves are completely closed before removing side seal assemblies! (see p. 11)**  
**\*Follow pressure relief procedure before doing maintenance on gun! (pgs. 11,12)**

- a) Always make sure fluid shut off valves are completely closed before removing side seal assemblies! (see p. 11)
- b) Follow pressure relief procedure before doing maintenance on gun! (pgs. 11,12)
- c) Remove fluid manifold with 5/16" nut driver
- d) Disconnect air from gun
- e) Pry out check valve assemblies with small screw driver
- f) Remove mesh screen, clean and inspect all parts. (replace worn or damaged parts)

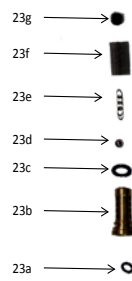
 **Warning!**

Worn or damaged o-rings may result in external leakage or spray.  
Always wear protective wear before servicing gun.

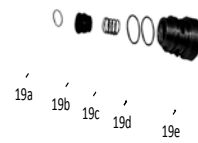
### Boss Gun Parts



### Check Valve Details (#23)



### Side Seal Cartridge Details (#19)



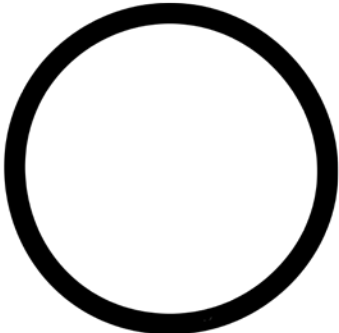
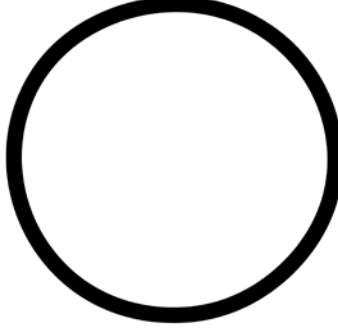











# **Boss Reference Parts Sheet**

Reference No.	Part No.	Description
1	BG-01	Retainer Clip, Large
2	BG-02	Screw, Small
3	BG-03	Safety Shut-off Knob
4	BG-04	Safety Shut-Off Spring
5	BG-05	Air Cylinder End Cap
6	BG-06	End Cap O-Ring
7	BG-07	Safety Pin U-Cup Seal
8	BG-08	Safety Pin
9	BG-09	Air Piston Spring
10	BG-10	Piston Shaft
11	BG-11	Piston Shaft O-Ring, Large
12	BG-12	Piston Shaft O-Ring, Small
13	BG-13	Air Cylinder Piston
14	BG-14	Retainer Clip, Small
15	BG-15	Air Cylinder Piston O-ring
16	BG-16	Air Cylinder Housing
17	BG-17	Grease Fitting
18	BG-18-01	01' Mixing Chamber
18	BG-18-02	02' Mixing Chamber
19	BG-19-A	A' Side Seal Housing Assembly
19	BG-19-B	B' Side Seal Housing Assembly
20	BG-20	Fluid Housing O-Ring
21	BG-21	Fluid Housing
22	BG-22	Air Cap All Thread
23	BG-23-A	A' Check Valve Assembly
23	BG-23-B	B' Check Valve Assembly
24	BG-24	Air Cap
25	BG-25	Fluid Shut-Off Manifold
26	BG-26	Fluid Housing Screw
27	BG-27	Handle to Air Cylinder O-rings
28	BG-28	Trigger Screw
29	BG-29	Trigger
30	BG-30	Trigger Nut
31	BG-31	Trigger Retainer Valve
32	BG-32	Trigger Pin
33	BG-33	Trigger Pin O-Rings
34	BG-34	Trigger Pin Spring
35	BG-35	Trigger Pin Housing
36	BG-36	Trigger Housing O-Rings
37	BG-37	Gun Handle Screws
38	BG-38	Gun Handle
39	BG-39	Air Inlet Fitting

# Boss Gun O-ring Reference Chart

(Close to actual size)

<p>#15 Air Piston Seal</p> 	<p>#6 Air back plate seal</p> 	<p>#20 Backfluid housing seal</p> 
<p>#36 Trigger housing seal</p> 	<p>#23c Check valve</p> 	<p>#19d SS Housing</p> 
<p>#12 Front of Air piston shaft</p> 	<p>#33 and 11 Trigger seal and Back Air piston shaft</p> 	<p>#19a Side seal o-ring</p> 
<p>#23a Check Valve base</p> 	<p>#7 U cup seal</p> 	

# Spray Foam Equipment Standard Warranty

Spray Foam Equipment warrants all equipment referenced in this document which is manufactured by Spray Foam Equipment and bearing its name to be free from defects in material and workmanship on the date of sale to the original purchaser for use. With the exception of any special, extended, or limited warranty published by Spray Foam Equipment, Spray Foam Equipment will, for a period of twelve months from the date of sale, repair or replace any part of the equipment determined by Spray Foam Equipment to be defective. This warranty applies only when the equipment is installed, operated and maintained in accordance with Spray Foam Equipment's written recommendations.

This warranty does not cover, and Spray Foam Equipment shall not be liable for general wear and tear, or any malfunction, damage or wear caused by faulty installation, misapplication, abrasion, corrosion, inadequate or improper maintenance, negligence, accident, tampering, or substitution of non-Spray Foam Equipment component parts. Nor shall Spray Foam Equipment be liable for malfunction, damage or wear caused by the incompatibility of Spray Foam Equipment with structures, accessories, equipment or materials not supplied by Spray Foam Equipment, or the improper design, manufacture, installation, operation or maintenance of structures, accessories, equipment or materials not supplied by Spray Foam Equipment.

This warranty is conditioned upon the prepaid return of the equipment claimed to be defective to Spray Foam Equipment for verification of the claimed defect. If the claimed defect is verified, Spray Foam Equipment will repair or replace free of charge any defective parts. The equipment will be returned to the original purchaser transportation prepaid. If the inspection of the equipment does not disclose any defect in material or workmanship, repairs will be made at a reasonable charge, which charges may include the costs of parts, labor, and transportation.

**THIS WARRANTY IS EXCLUSIVE, AND IS IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO WARRANTY OF MERCHANTABILITY OR WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE.**

Spray Foam Equipment's sole obligation and buyer's sole remedy for any breach of warranty shall be as set forth above. The buyer agrees that no other remedy (including, but not limited to, incidental or consequential damages for lost profits, lost sales, injury to person or property, or any other incidental or consequential loss) shall be available.

**SPRAY FOAM EQUIPMENT MAKES NO WARRANTY, AND DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, IN CONNECTION WITH ACCESSORIES, EQUIPMENT, MATERIALS OR COMPONENTS SOLD BUT NOT MANUFACTURED BY SPRAY FOAM EQUIPMENT.** These items sold, but not manufactured by Spray Foam Equipment (such as electric motors, switches, hose, etc.), are subject to the warranty, if any, of their manufacturer. Spray Foam Equipment will provide purchaser with reasonable assistance in making any claim for breach of these warranties.

In no event will Spray Foam Equipment be liable for indirect, incidental, special or consequential damages resulting from Spray Foam Equipment supplying equipment hereunder, or the furnishing, performance, or use of any products or other goods sold hereto, whether due to a breach of contract, breach of warranty, the negligence of Spray Foam Equipment, or otherwise.

## Spray Foam Equipment Information

**TO PLACE AN ORDER**, visit our website or call our Spray Foam Equipment Headquarters:

[www.sprayfoam.cm](http://www.sprayfoam.cm)  
(318) 644-5140

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