Item #	Description	Part #	Item #	Description	Part #
1.	Nozzel nut		22.	O-ring	
2.	Teflon seal		23.	Cylinder cover	
3.	Retaining nut		24.	O-ring	
4.	Valve seat		25.	Retaining nut	
5.	O-Ring		26.	Knurled knob	
6.	Valve piston		27.	Flat head screw	
7.	Piston guide, compl·		28.	Gun body with opening for control sensor	
8.	Cartridge body		29.	Usit sealing ring	
9.	Cup seal		30.	Inspection plug	
10.	Sealing cap		31.	Bush	
11.	Adapter		32.	Cylinder flange	
12.	Threaded bush incl. nut		33.	Retaining ring	
13.	Stop cock		34.	Fastening screw	
14.	Sealing ring 1/4“		35.	Cylinder	
15.	Hose connection		36.	Plunger	
16.	Connection piece		37.	Compression spring	
17.	Compl. check valve		38.	Piston assembly	
18.	Grooved pin		39.	Sealing ring 1/8“	
19.	O-ring		40.	Quick connection	
20.	Flat seal		41.	Complete catridge	
21.	Spindle		42.	Nozzle	

USER MANUAL

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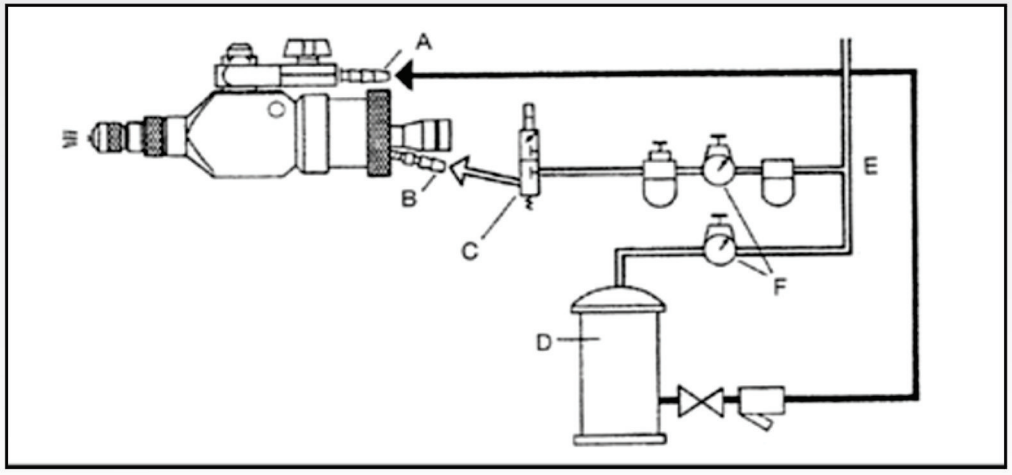
Installation

1. *Mount gun on a support. Use 12 mm (15/32“) _hole in gun body*
2. *Connect compressed air to quick connection ‘B’ using a 10 mm (3/8”) pipe. Please use clean lubricated air.*
3. *3-way control valve (minimum flow _, 1/4“) as close as possible to the gun. When using a 3-way solenoid valve, valve is „normally closed“ when de-energized. Actuation of valve can be made through an automatic timer or manually.*
   - *Dead closed by electromagnetic manipulation*
   - *Opening time at least 0.5 seconds*
   - *Delay time at least 1.5 second*
4. *The valve should be located as near to the spray gun as possible.*
5. *Connect material feed (compound hose) to hose connection no. ‘A’ using a hose pipe with 12 mm (1/2”) ID.*



Technical Data

1. ***Air pressure/spray 75–90 p.s.i.***
2. ***Material (compound) pressure 50–90 p.s.i.***
3. ***Hose ID; Air 3/8“***
4. ***Hose ID; Material (compound) 1/2“***
5. ***3-way valve normally closed***
6. ***port size 3/8“ NPT***
7. ***Minimum flow 1/4“***
8. ***Spray amount per shot (adjustable) 0.2–6 cm3***
9. ***Air consumption/spray gun approx. 0.75 m3/h***

TIP NOZZLE SIZING

Part #	*Tip Nozzle Size*	*Distance from Buff Wheel*	*Buff Width*
Degree0	0 Degree Spray Nozzle Air connector	2.5 "	1 or less "
Degree05	5 Degree Spray Nozzle Attachment	2.5 "	2 or less "
Degree15	15 Degree Spray Nozzle	9.0 max "	3 or less "
Degree25	25 Degree Spray Nozzle	9.0 max "	5 or less "
Degree40	40 Degree Spray Nozzle	8.750 max"	6 or less "
Degree50	50 Degree Spray Nozzle	9.0 max "	8 or less "
Degree65	65 Degree Spray Nozzle	9.25 max "	12 or less "
Degree65L	65 Degree Spray Nozzle-Large Orifice	9.25 max "	12 or less "
Degree95	95 Degree Spray Nozzle	12.0 max "	24 or less "
Degree95L	95 Degree Spray Nozzle-Large Orifice	12.0 max "	24 or less "
Degree110	110 Degree Nozzle	12.0 "	24-26" "
Degree110L	110 Degree Nozzle-Large Orifice	12.0 "	24-26" "

- *Crown Spray Pistol is a high/low pressure airless liquid compound applying machine created for applying abrasive polishing compound onto buffing wheels, during polishing and finishing operations.*
- *Crown Spray Pistol dispenses 0.2 to 6 cc of polishing compound, precisely in every shot.*
- *This Spray Pistol operates with the aid of compressed air, pressure of which may vary from 75 to 120 psi, depending upon the application.*
- *The Spray Pistol is designed such that it magnifies the shop air pressure manifold (up to 1200 psi) for a small period; consequently, no external high pressure lines are required.*
- *The spraying nozzle that can be easily fitted and removed from the spraying head, without using any tool, can be selected to achieve different spray angles (from 0 to 120 degrees), for use with buffing wheels of up to 2 feet width.*
- *Installation is simply done by feeding the material to the Spray Pistol with any rubber or fibre hose from a pressure feed tank or a pump. Compressed air supply is through a 3/2 solenoid valve, controlled with a timer or similar device.*
- *Compressed air consumption is minimal (approx. 0.75 cubic meter/hr.)*
- *The compound is fired at a high velocity from the pistol which overcomes the turbulence created by the rotating buff wheel and is impregnated deeper inside the buff wheel.*
- *This eliminates wastage, keeps the working area cleaner and improves the buffing quality.*

Start-up

1. *Open stop cock no. 13.*
2. *Deaerate the gun. There are 2 possibilities:*
   a) *Fundamental aeration of the whole system:*

      Please unlock retaining nut no.30, 2–3 times until no air will come out or till compound will emerge. Then lock again.

   b) *Quick aeration of the gun:*

      Put the blade of a screwdriver to the groove of the nozzle nut no. 1 and press down the nozzle until no air will come out. After the screwdriver has been removed, the system is closed automatically. Please check that the position of the nozzle has not become changed.
3. *Actuate control valve automatically or manually.*
4. *Adjust quantity of spray volume by means of knurled knob no.26.*

SECURITY ADVISE

1. *Never point guns at yourself or at other persons.*
2. *Before any repair work may be carried out, the guns must be disconnected from the compressed air network and pressure must be released. Further on, the stop cock no. 13 for the spraying compound has to be closed.*
3. *Defective components have to be repaired or replaced, use original Crown spare parts only.*
4. *Before starting to use the gun, particularly after repairs, ensure that screws and nuts are correctly tightened and check that tubes or hoses are not leaking and properly fixed to the gun.*

Care and maintenance

1. *To avoid damaging seals, never immerse spray gun in hot water or aggressive cleaning fluids. Keep movable parts clean and lubricate them when maintaining.*
2. *Exchange of cartridge*

   The most important spare parts are put together as a cartridge. If you will have on stock a compl. cartridge the exchange of worn spare parts is very quick. You only need a spanner (size 30) to replace the compl. cartridge. Afterwards you have time to check the different parts. Please assure that the cup seal no. 9 must be installed with the sealing lip towards the nozzle.
3. *Exchange of valve piston no. 6*

   Remove retaining nut no. 3. Extract valve piston no. 6 with a pincersand press in the new valve piston by hand.
4. *Replacement of plunger*

   Please unlock retaining nut no. 25. Then remove cylinder cover no. 23 and take out the compl. cartridge, the plunger and the piston assembly. If the plunger is defective, the plunger has to be pressed out of the piston assembly no. 38. The best way is to heat up the piston with 150 to 200°C, then it is easy to remove the old one and to fit the new plunger. Before fitting again to the gun the flat seal no. 20 hasto be replaced. Also the inner wall of the cylinder and the plunger has to be lubricated with graphitic oil.

Tips for trouble shooting

No compound emerges from nozzle:

1. *Insufficient air pressure: increase to 75–90 p.s.i.: Guide bush of piston guide no.7 is worn out. Exchange cartridge and replace piston guide.*
2. *Gun or whole system not properly deaerated : See "Start-up, pos. 2".*
3. *Nozzle blocked: Remove nozzle and clean.*
4. *Check valve no. 17 binds or leaks: Clean or replace*
5. *Material hardened in feed line: Clean line and stop cock no.13.*
6. *Plunger no.36 binds, does not retract: Exchange compression spring no.37 and/or piston assembly no.38 or flat seal no.20.*
7. *Gun dribbles: Valve piston no. 6, valve seat no. 4 or compl. Piston guide no. 7 could get worn out. Replace these parts.*
8. *Filter cartridge of the strainer behind pomp or pressure vessel is foul: Please take out and clean.*

When using buffing compound:

To obtain trouble free operation and minimum rate of wear, use airless compositions suitable for high pressure applications. We reserve the right to make changes for the purposes of improvements and technical progress.