

MAINTENANCE PROCEDURES MODEL: #1200

DAILY CLEANING

The automatic gun should be flushed with solvent (or water) at the end of each shift. The flushing should be under low pressure (maximum 25 lbs). The Air Cap should be removed, soaked and brushed. Check for dirt particles in orifice. Blowing tips and air caps dry with air is recommended.

REBUILDING GUN (REFER TO SCHEMATIC ON PAGE 3)

- 1. Flush gun thoroughly.
- 2. Remove gun from (**#1218**) manifold by unscrewing (**#1224**) manifold screws.
- 3. Carefully remove (#1215) atomizing/fan/fluid O-rings and (#1209) trigger O-ring.
- 4. Remove air cap.
- 5. Remove (**#1201**) ratchet, (**#312-G**) needle spring and (**#1211**) piston spring from cylinder side of spray gun.
- 6. Remove the needle and (**#1206**) piston from housing by covering end of housing with cloth in palm and activate piston by applying compressed air to trigger opening where you removed the (**#1209**) trigger O-ring.
- 7. Remove (**#1205**) body screws from front of gun to separate (**#1214**) paint head body and (**#1219**) cylinder body.
- 8. Carefully remove (#1215) atomizing/fan O-rings and (#1213) body O-ring.
- 9. Remove fluid tube/tip combo from (**#1214**) paint head body with ¹/₄" drive inch pound torque wrench with 5/16" deep well socket.
- 10. Remove (**#311**) packing nut from (**#1214**) paint head body. Using a curved dental pick, remove all (4) pieces, (1) brown leather packing and (3) white Teflon packings, of (**#314**) packing assembly.
- 11. Clean fluid passages on body making sure they are free of debris.
- 12. Clean inside of fluid tube/tip combo with ¹/₄" bottle brush. Make sure bristles are soft and not metal to prevent damage.
- 13. Remove and replace (**#1210**, **#1209**, **#1208**) O-rings and (**#1207**) U-cup from (**#1206**) piston.
- 14. Apply non-silicone based lubricant to all O-rings and inner walls of cylinder body.
- 15. Re-install (**#1206**) piston assembly, making sure (**#1212**) plungers line up with holes and assembly slides in straight.
- 16. Slide (#311) packing nut and (#314) packing assembly onto needle. Remove wax cover from (#314) packing assembly and insert into (#1214) paint head body. Tighten (#311) packing nut until needle is snug to remove then loosen ¼ turn. Remove needle, apply



non-silicone base lubricant and run needle back and forth into (**#311**) packing nut 3-4 times to lubricate (**#314**) packing. See page 4 for more detail.

- 17. Install fluid tube/tip combo into (**#1214**) paint head body and torque to **140-inch pounds** using a 5/16" deep well socket.
- 18. Replace (#1215) atomizing/fan O-rings and (#1213) body O-ring between (#1214) paint head body and (#1219) cylinder body and assemble with (#1205) body screws.
- 19. Apply non-silicone base lubricant to needle before inserting into (**#1206**) piston inside (**#1219**) cylinder body.
- 20. Install (**#1211**) piston spring, (**#312-G**) needle spring and (**#1201**) ratchet.
- 21. Install (**#1215**) atomizing/fan/fluid O-rings and (**#1209**) trigger O-ring onto gun body and reattach to (**#1218**) manifold with (**#1224**) manifold screws.
- **NOTE:** Please do not use metal rigid instruments to clean gun parts this may cause permanent damage.
 - **NOTE:** A light grade lubricant that <u>**DOES NOT**</u> contain silicone should be used when replacing and reinstalling O-rings, packings, needles, and threaded parts. Petroleum jelly is preferred.

WEEKLY

- Flush gun once per week if using black or clear.
- Flush each day if using metallics or Zinc rich.
- Remove tip and air cap and clean same as above.
- Check and adjust packing use non-silicone based lubricant if necessary.
- **NOTE:** Be sure to flush entire system from pot through gun if settling occurs.

MONTHLY (Same check list as weekly)

- Check sizing on tips and wear on needle by feeling seating area of needle. Replace if necessary.
- **NOTE:** If guns are cycled intensely (2-3 shifts per day), tips and needles should be replaced every month. They should be replaced every three months during regular use. This will help control the process. Be sure to replace as a set.

QUARTERLY

• Rebuild guns – see automatic spray gun maintenance procedure









TROUBLE SHOOTING MODEL #1200

PROBLEM	SOLUTION
Tip Leakage	Check fluid pressure. Should be in 4-8 Lb. range and constant Use fluid regulators where possible. Check packings which may be dry or contaminated with paint. This will stop needle from seating in tip. Check tip for dirt. Check for bent needle. Check for excessive tip and needle wear
Spray Skip	 Check tip for dirt. Remove tip and check needle travel - replace or lubricate packings if necessary. Check fluid pressure. Must be constant usually in the 4-8 lb. range Use fluid regulators where possible. Check paint fluid source - make sure all paint line fittings are tight. Make sure pump seal or siphon tube seals are not damaged and sealed tight. Special attention should be given to seal at the top of siphon tube. If paint is agitated, make sure agitator is turning slowly as not to aerate paint or force it above fluid tube.
Fan Distortion	Check side holes in air cap for obstructions. Check fluid flow, must be low and constant. Use fluid regulators where possible, especially in low ranges. Check paint viscosity. High viscosity causes smaller fans. Check ratio of air to fluid.
Lack of Paint Break Up	Lower fluid supply. Increase atomizing air. Increase heat. Decrease viscosity. Check air cap, tips and needles.

PROBLEM

SOLUTION

Insufficient Air to Cylinder	75 Lbs. minimum
O Ring New on Piston	Lube (petroleum jelly)
O Ring on Piston Worn	Fire several times to break in
Bent Needle	Replace needle
Packing "stick"	Lube needle in gun "cut" area as it enters packings
Needle "Stick"	(P-M) each day
	Tighten packing after one week break in (1/2 turn)
	Replace if worn
	Move small I.D. packing ring to front to wipe needle better

** Please note that fluid control in the low ranges (4-8 lb) is critical. A lack of control will cause gun fluctuation. To check, cut atomizing air, set fluid control, and check consistency of stream at the desired low PSI setting. Additional low pressure, sensitive fluid regulators (1-15 PSI) may have to be located close to the Turbo Spray guns. Use regulator #918 for robot.