



1172 Fendt Drive, Howell, MI 48843
Phone: (517) 548-9096 Fax: (517) 548-9328

MAINTENANCE PROCEDURES

MODEL: #1200-DC

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 (#1221-SS) manifold by turning (#1228) quick release handle to the left.
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 (#1255) paint head body and (#1229) cylinder body.
8. Carefully remove (#1215) atomizing/fan O-rings and (#1213) body O-ring.
9. Remove fluid tube/tip combo from (#1255) paint head body with ¼" drive inch pound torque wrench with 5/16" deep well socket.
10. Remove (#311) packing nut from (#1255) 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 ¼" 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 (#1255) paint head body. Tighten (#311)



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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 (#1255) 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 (#1255) paint head body and (#1229) cylinder body and assemble with (#1205) body screws.
19. Apply non-silicone base lubricant to needle before inserting into (#1206) piston inside (#1229) 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 (#1221-SS) manifold by turning (#1228) quick release handle to the right.

- **NOTE:** Please do not use metal rigid instruments to clean gun parts – this may cause permanent damage.
- **NOTE:** A light grade lubricant that **DOES NOT** 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



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QTY	PART NUMBER	DESCRIPTION
1	321-L	AIR CAP LOCKING RING
1	1222	AIR CAP
4	1295	BODY SCREW
1	1255	PAINT HEAD BODY
4	1237	ALIGNMENT PIN
2	1227	QUICK RELEASE PIN
6	1215	VALVEZ O-RING
1	314	PACKING ASSEMBLY
1	311	PACKING NUT
1	1213	BODY O-RING
2	1229	CYLINDER BODY
1	1206	O-RING
1	1207	PISTON
1	1208	U-CUP SEAL
1	1221-SS	O-RING
2	1210	O-RING
2	1212	PISTON SPPOOL
1	1211	PISTON SPRING
1	312-G	NEEDLE SPRING
1	1201	BATCHET
1	1228	QUICK RELEASE HANDLE
1	1226	DUAL CAM LOCK
1	1236	MANIFOLD
1	1236	QUICK RELEASE SCREW
2	1223	SET SCREW
1	1254	TRIGGER FITTING
2	1293	ATOMIZING/FAN FITTING
2	306	FLUID TUBE INSERT
1	1247	RECIRC PLUG
1	1247	INCLUDED IN REBUILD KIT TSM-1250
1	1247	< INCLUDED IN PISTON O-RING KIT TSM-1251
1	1247	= USED FOR NON-RECIRC OPTION ONLY

TIP OPTIONS	
SET NO.	SIZE
1216	0.50MM
1217	0.75MM
1204	1.00MM
1203	1.25MM
1202	1.50MM
1248	1.75MM

GUN MODEL
CONFIGURATION
TSM-1200-DC-

AIR CAP
CONFIGURATION
1222
1257

TIP AND
NEEDLE SIZE
1216
1217
1204
1203
1202
1248

= CONTACT FOR ADDITIONAL OPTIONS AVAILABLE

TURBO SPRAY

1172 FENDT DRIVE
HOWELL, MI 48843
PHONE (517) 548-9096
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1200
DUAL CAM LOCK
AUTOMATIC ANALOG MANIFOLD SPRAY GUN

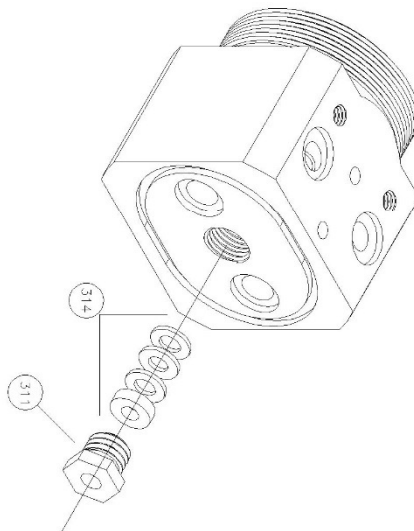
DATE: 02/06/19
SCALE: NONE

SHEET: 1 OF 1
DRAWN BY: JF

PART NO.: 1200-DC
DRAWING NO.: 1200-DC/AN/DWG



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- INSTALLATION INSTRUCTIONS
- SLIDE (#311) PACKING NUT AND (#314) PACKING ONTO NEEDLE
- REMOVE WAX COVER FROM PACKING
- INSERT INTO GUN BODY
- TIGHTEN PACKING NUT UNTIL NEEDLE IS SNUG TO REMOVE, THEN LOOSEN $\frac{1}{4}$ TURN
- REMOVE NEEDLE AND APPLY VASELINE
- RUN NEEDLE IN AND OUT OF PACKING 3-4 TIMES TO LUBRICATE PACKING

<p>1172 FENDT DRIVE HOWELL, MI 48843 PHONE (517) 548-9096 FAX (517) 548-9328</p>		TITLE 314 PACKING INSTALL	
DATE	SHEET	PART NO.	
09/27/19	1 OF 1	314	
SCALE	DRAWN BY	DRAWING NO.	
NONE	JF	314 PACKING INSTALL.DWG	



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TROUBLE SHOOTING MODEL #1200-DC

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.



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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.