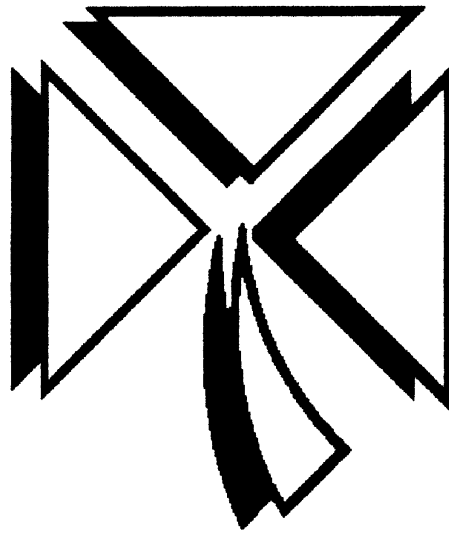


HAND SPRAY BLOW-OFF GUN INSTRUCTION MANUAL



SHAMROCK AUTOMATION, INC.

**320 Industrial Park Road
Harrison, Arkansas 72601**

Phone: (800)458-5702

Fax: (870)741-9656

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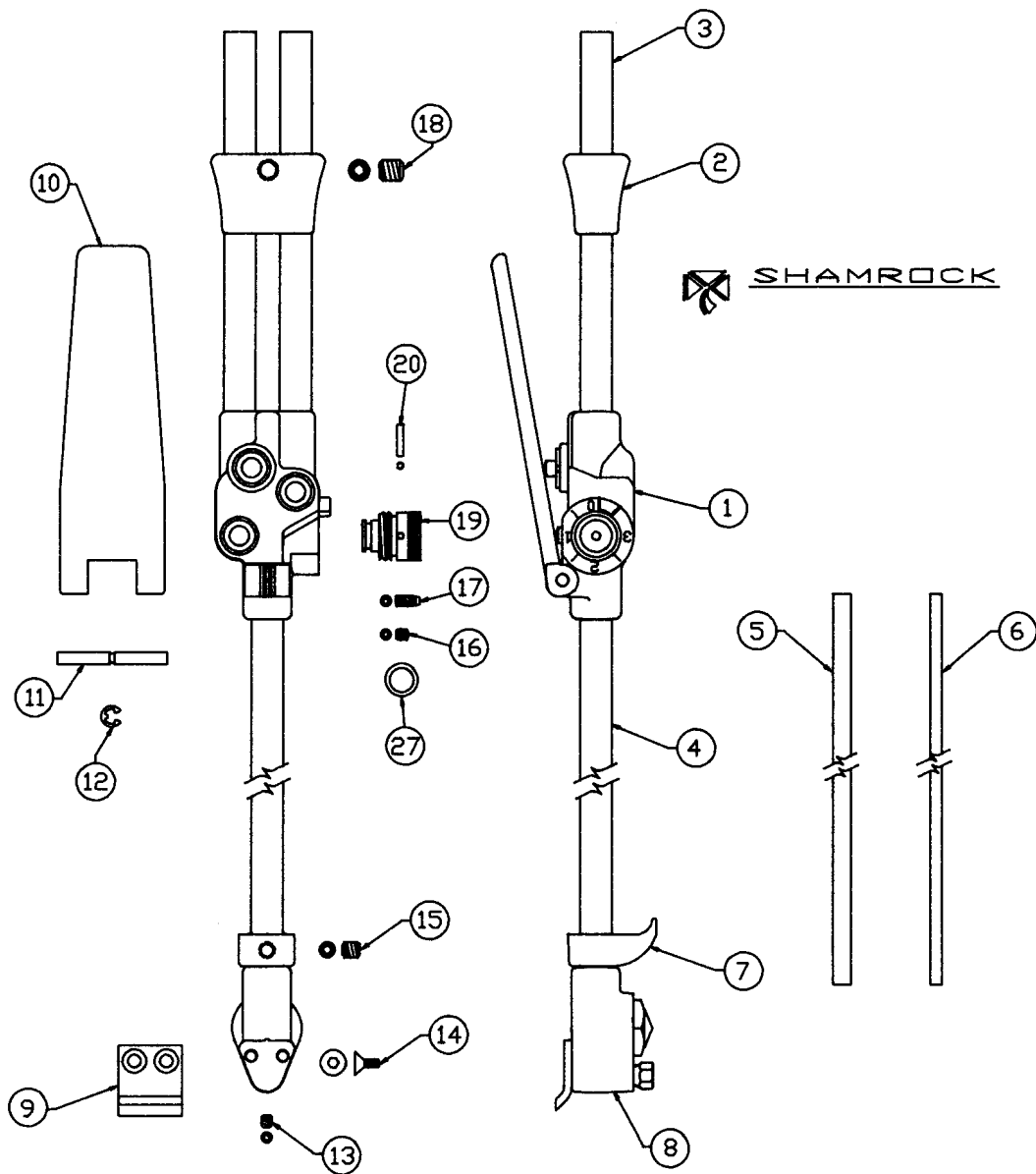
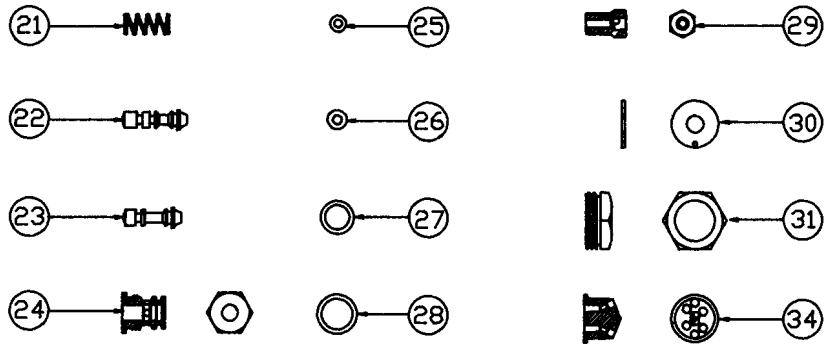
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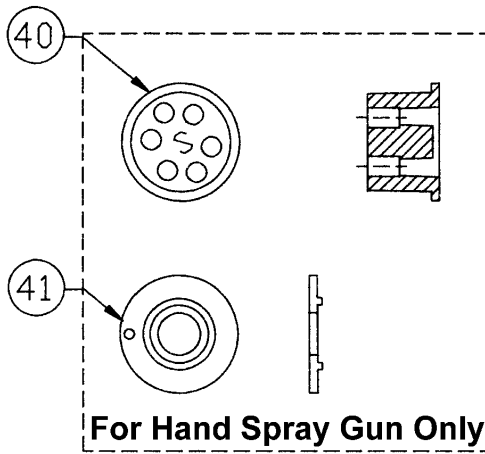
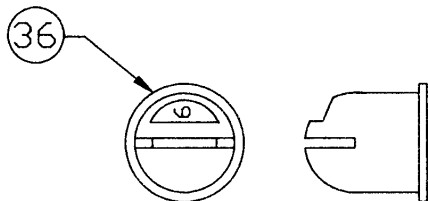
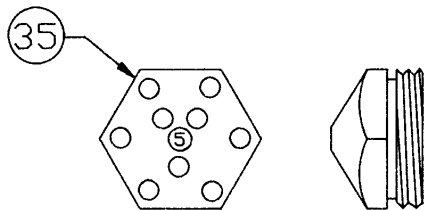
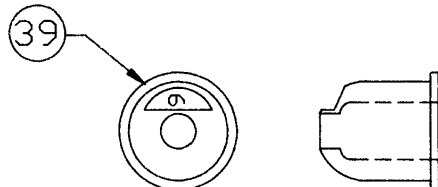
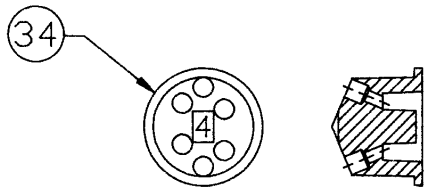
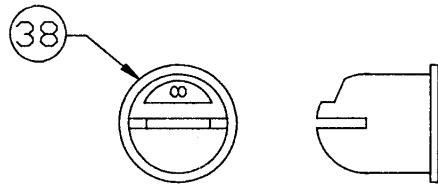
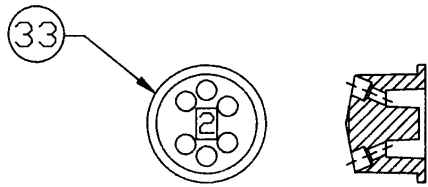
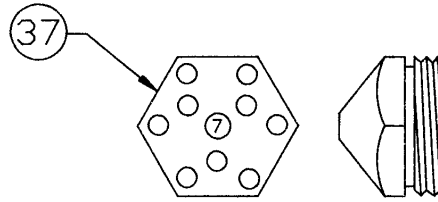
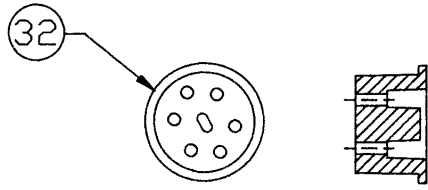
**HAND SPRAY BLOW-OFF GUN
MODEL "A" Parts List**

Pat. No. 3,907,207

NR	PNUM	PNAME	RQTY
	30160019	HAND SPRAY GUN SEAL KIT	1
1	30160350	HAND SPRAY GUN HOUSING	1
2	30160490	HAND GRIP	1
3	30160480	INLET TUBE	2
4	30160080	10" OUTER DELIVERY TUBE	1
	30160090	12"	
	30160100	14"	
	30160110	16"	
	30160120	18"	
	30160130	20"	
	30160140	22"	
	30160150	24"	
5	30160160	10" INTERMEDIATE DELIV TUBE	1
	30160170	12"	
	30160180	14"	
	30160190	16"	
	30160200	18"	
	30160210	20"	
	30160220	22"	
	30160230	24"	
6	30160240	10" CENTER DELIVERY TUBE	1
	30160250	12"	
	30160260	14"	
	30160270	16"	
	30160280	18"	
	30160290	20"	
	30160300	22"	
	30160310	24"	
7	30160070	HANGER	1
8	30160040	SPRAY HEAD	1

NR	PNUM	PNAME	QTY
9	30160020	SCRAPER	1
10	30160340	LEVER	1
11	30160330	LEVER PIVOT	1
12	30160320	SNAP RING	1
13	34800990	SET SCREW 10-32X3/16"	2
14	34801160	FLAT HEAD SCREW 10-32X3/8"	1
15	34801050	SET SCREW 1/4-20X3/16"	1
16	30160380	SOCKET SET SCREW 8-32X1/4"	1
17	30160360	METERING SCREW, PRESSURE	1
18	34801080	SET SCREW 5/16-18X3/8"	1
19	30160400	FLUID ADJUSTMENT KNOB	1
20	30160390	PLATED ROLL PIN 3/32"X1/2"	1
21	30160430	RETURN SPRING	3
22	30160440	LONG VALVE SPOOL (3 GROOVE)	1
23	30160410	SHORT VALVE SPOOL (2 GROOVE)	2
24	30160460	VALVE CAGE	3
25	33090040	O-RING SEAL 01-006	4
26	33090050	O-RING SEAL 01-007	3
27	33090100	O-RING SEAL 01-012	4
28	33090110	O-RING SEAL 01-013	3
29	30160030	AIR BLAST NOZZLE	1
30	30270020	AIR JET WASHER	1
31	30270100	NOZZLE RETAINING NUT	1
32	30270030	"0" SPRAY NOZZLE	1
33	30270040	#2 SPRAY NOZZLE	1
34	30270050	#4 SPRAY NOZZLE	1
35	30270060	#5 SPRAY NOZZLE	1
36	30270070	#6 SPRAY NOZZLE	1
37	30270080	#7 SPRAY NOZZLE	1
38	30270090	#8 SPRAY NOZZLE	1
39	30270095	#9 SPRAY NOZZLE	1
40	30160060	SIPHON NOZZLE	1
41	30160050	AIR JET WASHER (SIPHON)	1





NOZZLE DESIGN

Number:

- "0" Straight spray, measuring 3/4" diameter at 10" distance. Used where deep narrow recesses in the die require a narrow beam spray pattern.
- "2" Small fan-shaped spray, measuring 4" x 2" at 10" distance. This is a general purpose nozzle and adequately handles most applications.
- "4" Medium fan-shaped spray, measuring 8" x 2" at 10" distance. Used for shallow multiple-cavity dies. Can cover wide areas with few strokes of the sprayer.
- "S" Especially designed for siphoning when mated with a siphoning air jet washer. Produces a 4" diameter circular pattern at 10" distance.

Note: Fan-shaped nozzles should be rotated so that the fan spreads across the narrower dimension of the area to be sprayed. This allows the area to be covered in one or two passes of the sprayer, moving in the direction of the larger dimension. A compromise can be made by orienting the fan at 45°, allowing a wide area to be covered by moving the sprayer in either a horizontal or vertical direction.

MAINTENANCE POINTERS

- The long valve spool (with three O-rings) goes in the rear of the housing. The two short valve spools (with two o'rings) are interchangeable between the center and front position in the housing. Valve cages and springs interchange between all three locations.
- When installing a new scraper, the edge of the mounting screws should be dimpled with a center punch to help prevent loosening.
- When re-assembling the head to the housing, assemble the three tubes in the head first. The tapered holes which mate with the two center tubes have been made deep enough in the housing to allow these tubes to be started into their holes before the outer tube contracts the housing. Difficulty may be encountered if this sequence is reversed. A very light coating of non-drying sealing should be applied over 1/4" length on each end of the 3/16 diameter center tube.
- The fluid adjustment knob travel stop is a 3/32 diameter roll pin. It projects about 1/8" when driven in all the way. It may be backed out by means of pin punch.
- To adjust the metering needle for complete shut-off, back out of the travel stop roll pin as explained above, to expose the center hole. Remove the locking set screw in this hole. Using the same allen wrench, screw the metering needle in until it bottoms out, with the fluid adjustment knob turned to the closed position. Back the fluid adjustment knob and the metering needle open about 1/8 turn to eliminate the blind in the metering needle. Apply sealing compound (No. 2, permatex, etc.)to the locking set screw, and tighten it against the metering needle. Press the roll pin back in place.
- To convert Siphon model to pressure model, remove the Siphoning spray nozzle (40) and Siphoning air jet washer underneath (41) and replace them with the corresponding pressure fluid components (30) and (32). For identification the Siphon air jet washer has a projecting ring which mates with the nozzle, and the Siphon nozzle is marked "S".
- O-rings may be removed and installed without damaging components by using a hard round wooden toothpick as a tool.

TROUBLESHOOTING

Inlet pipes rotate when hoses are being screwed in and out: This can be stopped by tightening the set screw in the adjustable hand grip.

Maximum fluid flow is less than normal: The fluid line may be restricted. To blow out the fluid line:

1. Disconnect the fluid supply line
2. Open the fluid adjustment knob all the way
3. Cover the spray nozzle with your thumb
4. Completely depress the lever

This forces air under line pressure back through the fluid line, carrying with it accumulated sediment.

Spray is intermittent when fluid adjustment knob is at low volume setting: Assuming there is an adequate fluid supply, this condition is caused by air leaking into the fluid system around the ends of the center delivery tube (the center 3/16 OD tube). To correct this problem, apply a light coating of non-hardening sealing compound around the outside surface of this tube at each end prior to assembly.

Air or fluid will not shut off: Check to be sure operating lever clears all valve spools, and has a little free movement when it is released. The lever travel stop may have an obstruction in it, preventing the lever from moving free of the valve spools. If this is not the problem, the valve is stuck open, or the valve seat has dirt in it, and it must be removed and cleaned. Adequate filtering for both air and fluid should be provided to eliminate this problem.

Air volume from spray is lower than normal after reassembly of spray gun: This condition is probably due to over-tightening the delivery tube assembly. Inspect the ends of the intermediate deliver tube to see if they are turned over. File off the turned-over portion of the tube and reassemble. The center delivery tube may also need filing, although this does not normally restrict the fluid flow.

TROUBLESHOOTING - SIPHON MODEL

Unit will not spray, and nozzle retaining nut will not screw all the way: This is caused by the air jet washer under the nozzle being installed upside down. The nozzle must be positioned exactly over the center of the air jet washer for proper Siphoning. For this reason, the Siphoning air jet washer has a locating ring which mates with the siphoning nozzle. A flat projection has been cast into the head to prevent the siphoning washer from seating if it is installed upside down. This, in turn, prevents the retainer nut screwing in all the way.

WARRANTY

Seller fully warrants that equipment, service, repair or parts supplied shall conform to the description in the quotation and agrees to repair or replace F.O.B. shipping point, any parts (excepting expendable items such as ladle cups, ladle attachment brackets, ladle attachment arms, hydraulic seals, fuses, etc), services, or repairs that fail due to defects in material or workmanship within (1) one year of start-up of equipment or eighteen (18) months after shipment, whichever occurs first, or in the case of service, repairs, or part within one (1) year of supplying such service, repair, or part. If the equipment, service, repair, part includes software, Seller warrants, for a period of one (1) year of start-up or eighteen (18) months after shipment, whichever occurs first, that the software supplied or serviced will meet its published functional specifications. Should software fail to meet the specifications, or be otherwise defective, Seller shall promptly correct errors or non-conformities. If correction is not possible, Seller shall replace defective software, or, at Seller's option, refund the purchase price paid for such software. Other than those expressly state herein, THERE ARE NO OTHER WARRANTIES OF ANY KIND, EXPRESSED OR IMPLIED, AND SPECIFICALLY EXCLUDED, BUT NOT BY WAY OF LIMITATION, ARE THE IMPLIED WARRANTIES OF FITNESS FOR PARTICULAR PURPOSE AND MERCHANTABILITY.

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