

Nozzle and Needle Selection Chart

Type of Fluid to be Sprayed	Fluid x Air Nozzles	Nozzle Type	CFM at				Max. Pattern at 8"	Fluid Needle Numbers for Spray Gun Models				
			30 PSI	50 PSI	70 PSI	95 SL		95	95A & 95 AR	2100	21	
VERY THIN 14-16 secs. Zahn 2 Cup Wash primers, dyes, stains, solvents, water, inks	63ss x 63P	PE	4.5	7.5	10	5	863	663	763	563	263	
	63Bss x 63PB	PE	9	14.3	20	14	863A	663A	763A	563A	263A	
	66ss x 66SD	SE	7.9	12.1	—	10.5	865	665	765	565	265	
	66ss x 66SK	SE	11	15.2	19.5	13	865	665	765	565	265	
	63Bss x 200	PI	3.1	5.2	6.4	12	863A	663A	763A	563A	263A	
THIN 16-20 secs. Zahn 2 Cup Sealer, lacquers, primers, inks, lubricants zinc chromates, acrylics	63Ass x 63P	PE	5.1	8.37	12.2	11	863A	663A	763A	563A	263A	
	66ss x 66SK	SE	11	15.2	19.5	13	865	665	765	565	265	
	63Bss x 200	PI	3.1	5.2	6.4	12	863A	663A	763A	563A	263A	
MEDIUM 19-30 secs. Zahn 2 Cup Synthetic enamels, varnishes, shellacs, fillers, primers, epoxies, urethanes, lubricants, wax emulsions, enamels	63Bss x 63PB	PE	9	14.3	20	14	863A	663A	763A	563A	263A	
	63Css x 63PE	PE	9.5	15	20	13	863A	663A	763A	563A	263A	
	66ss x 66SD	SE	7.9	12.1	—	11	865	665	765	565	265	
	66ss x 66SK	SE	11	15.2	19.5	13	865	665	765	565	265	
	63Css x 200	PI	3.1	5.2	6.4	12	863A	663A	763A	563A	263A	
HEAVY (Cream-like) Over 28 secs. No. 4 Ford Cup	67ss x 67PB	PE	9.5	14.9	19.5	12	867	667	767	567	267	
	68ss x 68PB	PE	9.5	14.1	19.1	12	868	668	768	568	268	
	67ss x 206	PI	6	9.5	13	15	867	667	767	567	267	
VERY HEAVY Texture coatings, Road marking paint	68ss x 68PB	PE	9.5	14.1	19.1	12	868	668	768	568	268	
	68ss x 206	PI	6.2	9.8	13.2	15	868	668	768	568	268	
	59Ass x 244	PI	7.8	11.5	15.2	12	859	659	759	559	259	
	59Bss x 252	PI	7.8	11.5	15.2	6	859	659	759	559	259	
	59Css x 262	PI	7.3	11	14.7	6	859	659	759	559	259	
68ss x 206	PI	6.2	9.8	13.2	15	868	668	768	568	268		
ADHESIVES Waterbase white vinyl glues Solvent base, neoprenes (contact cement)	63Bss x 66SD-3	PE	7.9	12.1	16.2	4	863	663	763	563	263	
	67ss x 67PB	PE	9.5	14.1	19.1	12	867	667	767	567	267	
	66ss x 66SD-3	PE	7.9	12.1	16.2	10	865	--	--	--	--	
CERAMICS Similar abrasive materials, glazes, engobes, porcelain enamel	67VT x 67PD	PE	10	15	20	15	867VT	667VT	767VT	567VT	267VT	
	68VT x 68PB	PE	9.5	14.1	19.1	12	868VT	668VT	768VT	568VT	268VT	
BUFFING COMPOUNDS	64VT x 64PA	PE	12.1	15	21	13	864VT	664VT	764VT	--	264VT	
	67VT x 67PD	PE	10	15	20	15	867VT	667VT	767VT	--	267VT	
CONCRETE CURING COMPOUNDS	66ss x 200	PI	3.1	5.2	6.4	15	865	665	765	565	265	
	67ss x 206	PI	6	9.5	13	18	867	667	767	567	267	
	68ss x 206	PI	6.2	9.8	13.2	20	868	668	768	568	268	
MULTICOLOR PAINTS	66ss x 200	PI	3.1	5.2	—	12	865	665	765	565	265	
	67ss x 206	PI	6	9.5	—	15	867	667	767	567	267	
NON-STICK COATINGS	63Ass x 63PB	PE	9	14.3	20.1	10	863A	663A	763A	563A	263A	
	66ss x 66SD	PE	7.9	12.1	—	7	865	665	765	565	265	
HAMMERS	63ss x 63PB	PE	9	14.3	—	14	863A	663A	763A	563A	263A	
	66ss x 63PB	PE	9	14.3	—	14	865	665	765	565	265	
	66ss x 66SD	PE	7.9	12.1	—	7	865	665	765	565	265	
WRINKLE ENAMELS	63Css x 63PB	PE	9	14.3	20	10	863A	663A	763A	563A	263A	
	66ss x 63PB	PE	9	14.3	20	10	865	665	765	565	265	
ZINC RICH COATINGS	66ss x 66PD	PE	12	18	24	15	865	665N	765	565N	--	
	67VT x 67PB	PE	9.5	14.1	19.1	12	867VT	667VT	767VT	567VT	267VT	
SPATTER VEILING DISTRESS	66ss x 66PD	PE	3 @15psi	—	—	—	865	665	765	565	265	
EXTRUSION	66xss extrusion tip	—	—	—	—	—	--	--	--	565	--	

Note: PE - Pressure External SE - Siphon External PI - Pressure Internal

Nozzle and Needle Selection Charts

Model 460 Gun Nozzle Selection Chart

TYPE OF FLUID TO BE SPRAYED	FLUID X AIR NOZZLES	TYPE	CFM AT			MAX. PAT. (INCHES) AT 8 IN.	FLUID NEEDLE
			30 PSI	50 PSI	70 PSI		
THIN Lacquers, Enamels, Oils, Inks, Sealers	J930 x J92P J940 x J92R	PE	3.0	4.1	5.4	9	940
		PE	1.5	2.3	3.0	RD.	940
MEDIUM Lacquers, Sealers, Shellacs, Primers, Varnishes Enamels, Oils	J940 x J92R K960 x K92P	PE	1.5	2.3	3.0	RD.	940
		PE	2.7	4.0	5.3	9	960

Model 115 Gun Nozzle Selection Chart

TYPE OF FLUID TO BE SPRAYED	FLUID X AIR NOZZLES	TYPE	CFM AT			MAX. PAT. (INCHES) AT 8 IN.	FLUID NEEDLE
			30 PSI	50 PSI	70 PSI		
VERY THIN Wash Primers, Dyes, Stains, Cleaning Fluids, Water, Inks	78 x 78S 78 x 78SD	SE	4.2	6.9	--	8	78ss
		SE	2.8	4.0	--	7	78ss
THIN Sealers Primers Lacquers	78 x 78S 78 x 78SD	SE	4.2	6.9	--	8	78ss
		SE	2.8	4.0	--	7	78ss
MEDIUM Lacquers, Primers, Varnishes, Enamels, House Paints	78 x 78S	SE	4.2	6.8	--	8	78ss

Note: PE - Pressure External SE - Siphon External PI - Pressure Internal

Nozzle Selection Chart for Extensions EAX, EBX, ENX and ERX

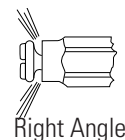
(Use with Model 95, 95A Guns)

TYPE OF FLUID TO BE SPRAYED	FLUID X AIR NOZZLES	TYPE	CFM AT			MAX. WIDTH PATTERN AT 8 INCHES
			30 PSI	50 PSI	70 PSI	
LIGHT TO MEDIUM Lacquers Enamels Primers	J-2SS x R-6SS	PI	2.9	4.5	6.0	RD.

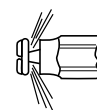
Fluid Nozzle Orifice Size - J-2SS - .043" (1.1mm)

Nozzle Tips for Extensions

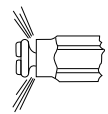
C HC	CVT HCVT	DIRECTION OF SPRAY
52-363	52-2372	Rt. Angle
52-364	--	Reverse
52-365	52-3041	Forward



Right Angle



Reverse



Forward

■ Nozzle Selection Chart - (7D)

Fluid x Air Nozzle Combination	Air Flow Required at 50 PSI (CFM)	Maximum Pattern (Width at 8")	Shape of Spray	Needle
+68ss x 101 ●	6.75	13"	Fan	54-1209
*57ss x R-27ss ●	9	8"	Fan	54-1209
59Ass x 244	11.5	11"	Fan	47-345
59Bss x 250	11	--	Round	47-345
59Bss x 252	11.5	7"	Fan	47-345
59Css x 262 ●	11	7"	Fan	47-345

- * Requires 54-1224 retainer ring. 200 Series air nozzles requires 54-2065 retainer ring.
- + Requires 54-1583 base and 54-1584 ring.
- Standard Setups

Fluid Nozzle Orifice Sizes

68ss	57ss	58ss	59Ass	59Bss	59Css
.110	.218	.281	.171	.218	.281

■ Nozzle Selection Chart - (7E2)

Nozzle Combination Fluid x Air	Fluid Nozzle Orifice Size (Inches)		Air Nozzle Reference			Body Base No.	Spray		Air Required at 50 PSI (CFM)
	No.	Size	No.	Figure	Material		Shape	Mix*	
44ss x 1/4 ●	44ss	.250	1/4	1	Steel	--	Round	I	13.2
45ss x 1/4 ●	45ss	.250	1/4	1	Steel	--	Round	I	13.2
45ss x 3/8 ●	45ss	.250	3/8	1	Steel	--	Round	I	20.3
47ss x 3/8	47ss	.375	3/8	1	Steel	--	Round	I	20.3
45ss x 3/8F ●	45ss	.250	3/8F	2	Steel	--	Fan	I	20.0
45ss x 1/4E	45ss	.250	1/4E	6	Brass	--	Fan	E	15.3
46ss x 190	46ss	.312	190	5	T. Carbide	54-1924	Fan	I	11.5
46ss x 191	46ss	.312	191	5	T. Carbide	54-1924	Fan	I	9.0
46ss x 390ss	46ss	.312	390	5	Stnls. Steel	54-1924	Fan	I	11.5
46ss x 391ss ●	46ss	.312	391	5	Stnls. Steel	54-1924	Fan	I	9.0

*I = Internal Mix. E = External Mix. ● Standard Setups



Figure 1



Figure 2

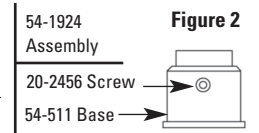


Figure 5

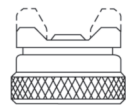


Figure 6

■ Airless Twist-Tip Chart

SURFACE	COATING	FAN WIDTH (in inches)	ORIFICE SIZES									
			.009	.011	.013	.015	.017	.019	.021	.023	.035	.051
Wood Interior Cabinets, Paneling	Stain, Sanding Sealer	6"	309	311	313	-	-	-	-	-	-	-
	Lacquer, Varnish, Shellac, Enamels	10"	-	-	513	-	-	-	-	-	-	-
Interior Walls Ceilings, Drywall, Plaster	Latex, Vinyl	6"	-	-	-	315	-	-	-	-	-	-
	Acrylic	8"	-	-	-	-	417	419	-	-	-	-
		10"	-	-	513	515	517	519	-	-	-	-
Overhang	Primers, Enamels, Vinyl	6"	-	-	-	315	-	-	-	-	-	-
		8"	-	-	-	-	417	-	-	-	-	-
		10"	-	-	-	515	517	-	-	-	-	-
Masonry Block, Stucco, Concrete	Acrylic, Latex, Oil Base, Aklyds	8"	-	-	-	-	417	-	-	-	-	-
		10"	-	-	-	-	517	519	521	-	-	-
Wood Exterior Shingle Siding, Shiplap	Exterior, Stains, Latex, Vinyl, Acrylic	10"	-	-	-	-	517	519	521	-	-	-
Open Joist Ceiling Areas	MIL White HI Build	10"	-	-	-	-	-	519	521	523	-	551

Note: Order using 454-, then the three digit number with proper fan width and orifice opening, Example 454-517.

■ Twist-Tip Base Retainers - (Part Sheet 77-2613)

Assembly	454-3	454-5
Number	3/4"-20	7/8"-14
	Binks	Graco, Titan, Wagner

Note: Tip size is coded into listed part no. below
 Example: 454-5 17 "17" = .017 orifice
 "5" x 2 = 10" fan