

06594504

MODEL 700™ M24

Model **SMS**™

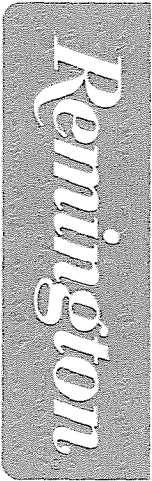
Action

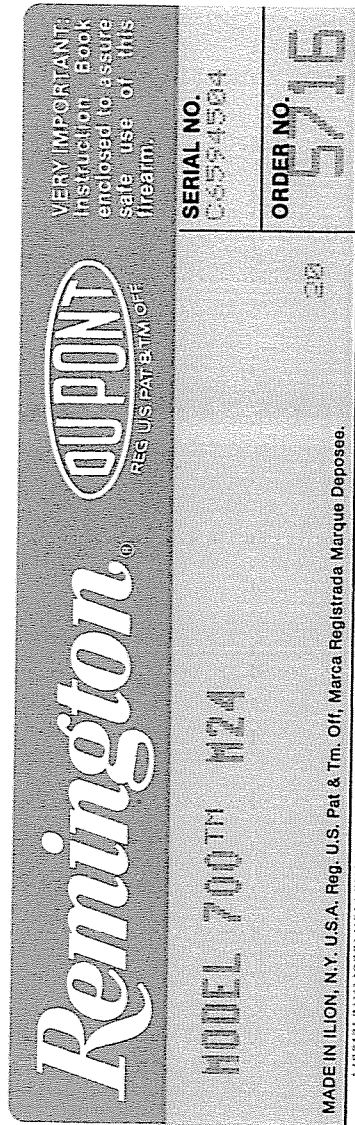
Barrel Length

Capacity

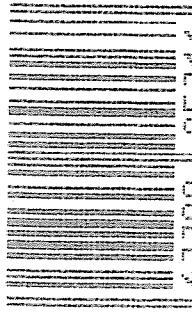
Order No. **5715**

*Includes 1 in chamber.





LPC



0 4720 25716 2



5716 C6594504

CONTRACT # DAAA21-87-C-0086

GUN SERIAL # C6594504

OP. #	OP. NAME	READINGS	DATE	INIT
575 & 580	Assemble Action and Stock	1228	90	RW
600	Proof	1228	90	RW
607	Check Headspace	1228	90	RW
610	Dis-assemble Gun	1228	90	RW
612	Magnaflux Barrel Action		1-7-91	KR
	Magnaflux Bolt		"	KR
615	Rollmark Caliber		"	LS
617	Drill and Tap Sight Holes	1 10	91	FB
618	Polish Barrel	1 10	91	WB
620	Apply Coatings (Barrel Action)		1-18-91	JA
	Apply Coating (Bolt)			
625	Final Assembly A) Clean inside of Bolt Assembly		1/28/91	RW
	B) Inspect Rear Firing Pin Hole for Chamfer in Bolt Head		1/28/91	RW
	C) Inspect Ejector Hole for Chamfer		1/28/91	RW
	D) Oil Firing Pin Ass'y		1/28/91	RW
	E) Adjust Trigger Pull to Min Setting and Stake		1-31-91	JA

op. #	BARBER - M24 0018267 OP. NAME	READINGS					DATE	INIT
625 cont.	F) Safety On Force	4 1/2	4 1/2	4 1/2			2/4/91	WB
	G) Safety Off Force	2 1/2	2 1/2	2 1/2			2/4/91	WB
	H) Trigger Pull Test & Retainability						1/31/91	JF
	I) Firing Pin Indent	.021	.0215	.0215			2/4/91	WB
	J) Assemble Stock						2/5/91	RW
	K) Assemble Swivel Studs						2-5-91	AC
	L) Attach Front and Rear Sight Assemblies						2/5/91	RW
	M) Iron Sight Alignment						2/5/91	RW
	N) Detach Front & Rear Sights & place in numbered container						2/5/91	RW
	O) Attach Scope to Rifle						2/5/91	RW
	P) Detach & Attach Scope 20 Times						2/5/91	RW
640	Gallery Target & Test						2-5-91	AC
	A) Time						2-5-91	AC
	B) Malfunctions						2-5-91	AC
	C) Pierced Primers						2-5-91	AC
	D) Optical Clarity of Scope						2-5-91	AC
645	Inspect for Live Ammo						2-5-91	AC
655	Final Inspection A) Headspace						2-19-91	AC
	B) Trigger Pull	2.53	2.49	2.50	2.30	2.53	2/18/91	WB
	C) Function						2-19-91	AC
660	Pack						2-19-91	DH

AVERAGE PULL FORCE BETWEEN
INITIAL & CYCLE TESTS

2.50# + .50#

3.00# + .75#

4.00# + 1.00#

SERIAL NO. 06594504

DATE 1-31-91

TESTER SM

	2.50# INITIAL	2.50# AFTER 50 CYCLES	FINAL TEST & TO RESET 2.50#		COMMENTS
PULL #1	2.43	2.19	2.30	2.53	MIN. SETTING, NO AVG. OF 5 READINGS ACCEPT- ABLE LESS THAN 2#
PULL #2	2.36	2.41	2.32	2.49	
PULL #3	2.31	2.38	2.26	2.50	
PULL #4	2.28	2.32	2.30	2.30	
PULL #5	2.22	2.36	2.30	2.53	
TOTAL					
AVG.					

	3.00# INITIAL	3.00# AFTER 20 CYCLES		COMMENTS
PULL #1	3.36	3.36		
PULL #2	3.47	3.13		
PULL #3	3.35	3.20		
PULL #4	3.40	3.39		
PULL #5	3.39	3.30		
TOTAL				
AVG.				

	4.00# INITIAL	4.00# AFTER 20 CYCLES	MAX SETTING GREATER THAN 4#	RESET TO 4# FOR TARGET & ACCURACY
PULL #1	4.35	4.26		4.39
PULL #2	4.12	4.47		4.37
PULL #3	4.37	4.26		4.35
PULL #4	4.19	4.15		4.34
PULL #5	4.33	4.32		4.32
TOTAL				
AVG.				

CENTROIDAL DISTANCE CALCULATIONS
FOR RIFLE # 06594504
6 Feb 1991

Govt

CENTROIDAL DISTANCES

0 TO	1	.10824
1 TO	2	.0562939
1 TO	3	.239282
1 TO	4	.339006
1 TO	5	.304795

4.5 <---POB

THE AVERAGE X-COORDINATE FOR THIS RIFLE IS: .1252
THE AVERAGE Y-COORDINATE FOR THIS RIFLE IS: -.0528
THE RESULTING AVERAGE POI RADIUS FOR THIS RIFLE IS: .135878
THE AMR FOR THIS RIFLE IS: .7798

Gov't

6 Feb 1991

FILE:/PATTERNING/CENTERFIRE_PATT/06594504

CENTERFIRE PATTERNS

1

POA

1 in circle

2 in circle

3 in circle

CENTROID *

OF SHOTS = 10

IN CIR

1 in = 3

2 in = 7

3 in = 10

HS = 2.034

VS = 2.054

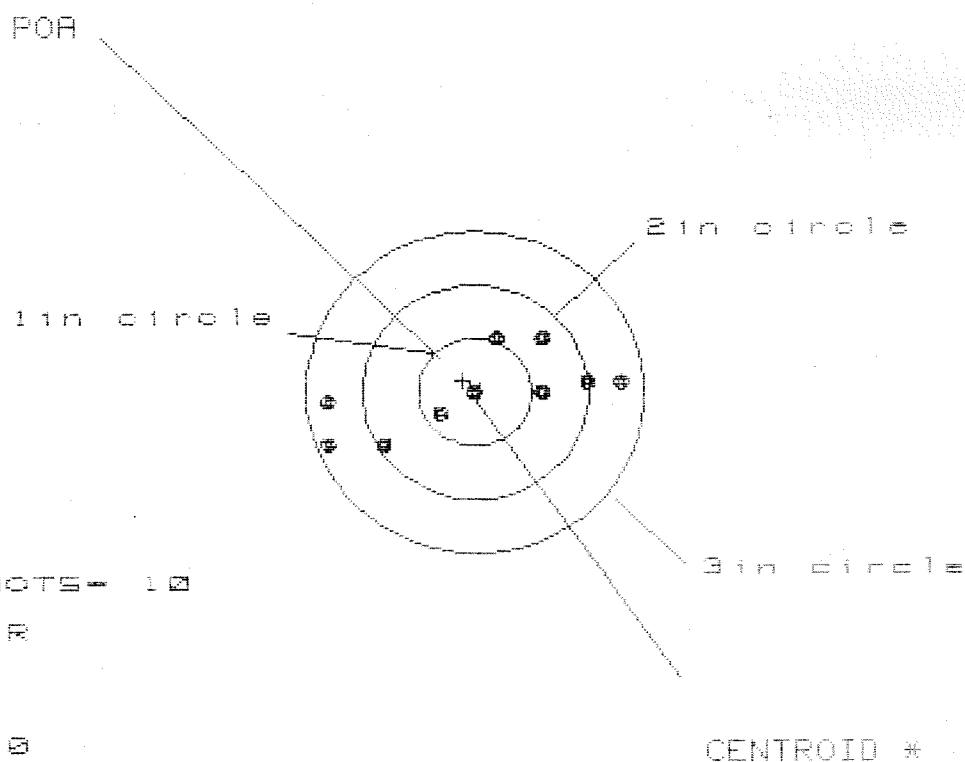
GS = 2.427

PATTERN #	1	2	3
SHOTS (BEST OF)	10	9	8
MAXIMUM X	-1.007	.930	.792
MINIMUM X	-1.028	-1.104	-.629
MAXIMUM Y	.771	.629	.516
MINIMUM Y	-1.282	-.905	-.606
CENTROID X	.096	.172	.310
CENTROID Y	-.050	.093	.206
POA TO CENTROID in.	.108	.196	.373
MIN RADIUS	.252	.357	.338
MEAN RADIUS	.786	.696	.592
MAX RADIUS	1.457	1.428	.815
HORIZONTAL SPREAD	2.034	2.034	1.421
VERTICAL SPREAD	2.054	1.534	1.122
EXTREME SPREAD	2.427	2.369	1.436
NUMBER IN ONE INCH CIRCLE =	3		
NUMBER IN TWO INCH CIRCLE =	7		
NUMBER IN THREE INCH CIRCLE =	10		

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CENTERFIRE PATTERNS # 2



OF SHOTS = 10

IN CIR

1in = 2

2in = 7

3in = 10

HS = 2.634

VS = .986

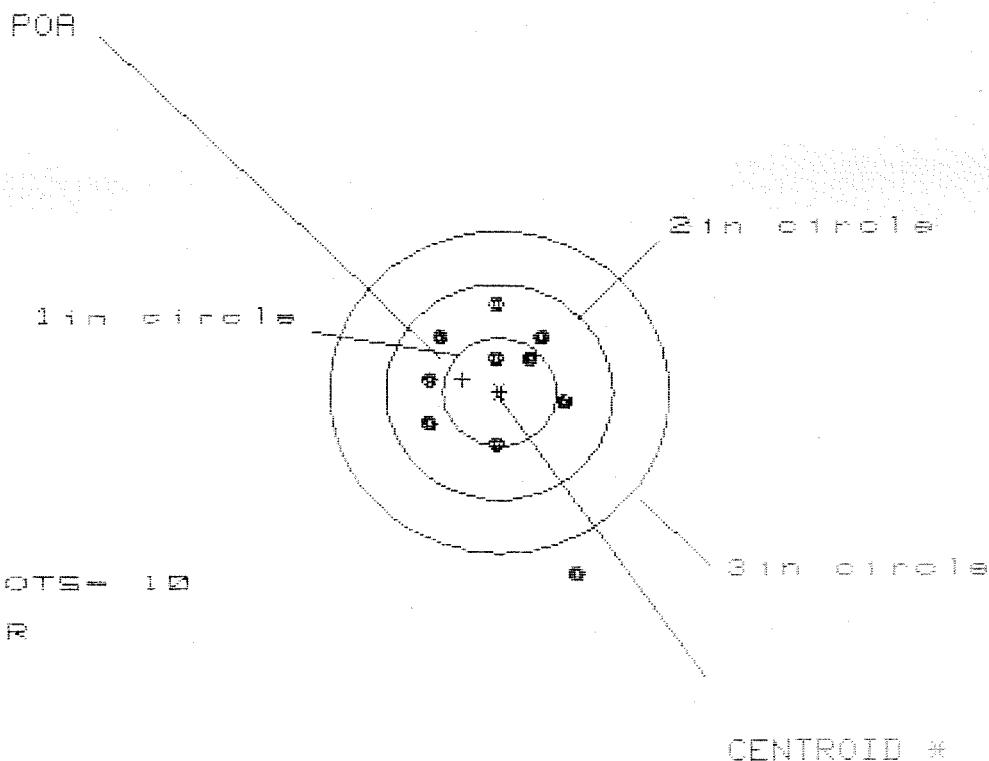
GS = 2.686

PATTERN #	:	2		
SHOTS (BEST OF)	:	10	9	8
MAXIMUM X	:	1.303	1.158	.973
MINIMUM X	:	-1.331	-1.476	-1.120
MAXIMUM Y	:	.494	.440	.426
MINIMUM Y	:	-.492	-.521	-.534
CENTROID X	:	.108	.253	.438
CENTROID Y	:	-.105	-.051	-.037
POA TO CENTROID in.	:	.151	.258	.440
MIN RADIUS	:	.031	.158	.291
MEAN RADIUS	:	.823	.748	.634
MAX RADIUS	:	1.395	1.480	1.241
HORIZONTAL SPREAD	:	2.634	2.634	2.093
VERTICAL SPREAD	:	.986	.961	.961
EXTREME SPREAD	:	2.686	2.642	2.182
NUMBER IN ONE INCH CIRCLE =			2	
NUMBER IN TWO INCH CIRCLE =			7	
NUMBER IN THREE INCH CIRCLE =			10	

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CENTERFIRE PATTERNS # 3



OF SHOTS- 10

IN CIR

1in = 2

2in = 9

3in = 9

HS= 1.364

VS= 2.578

GS= 2.688

CENTROID *

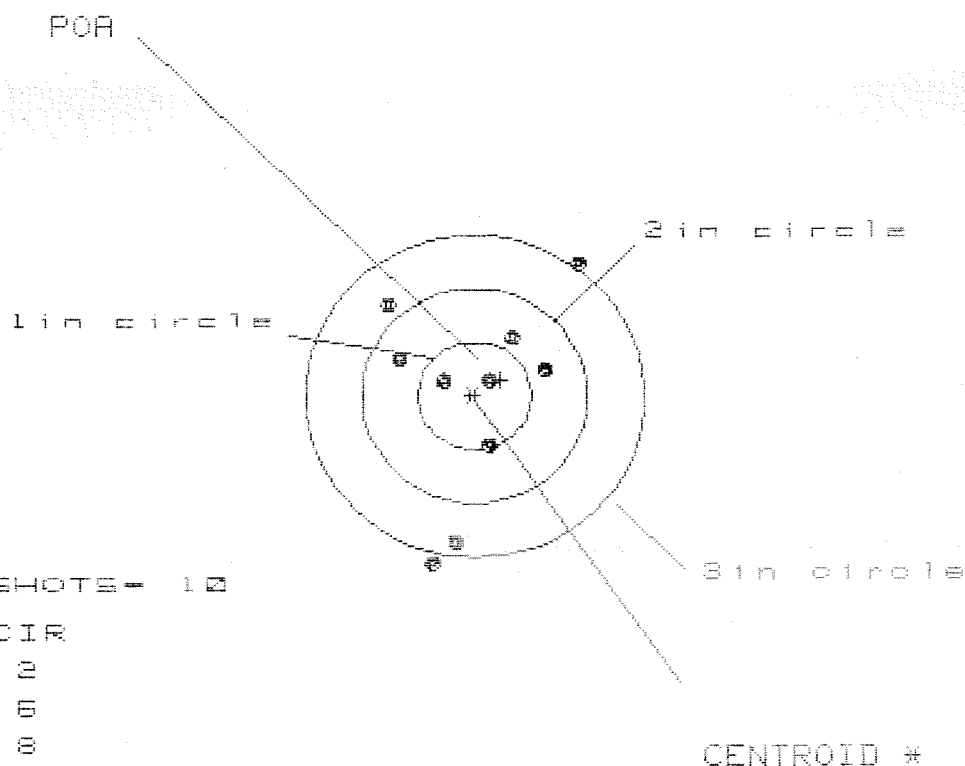
PATTERN #	:	3		
SHOTS (BEST OF)	:	10	9	8
MAXIMUM X	:	.711	.627	.634
MINIMUM X	:	-.653	-.574	-.567
MAXIMUM Y	:	.855	.664	.437
MINIMUM Y	:	-1.723	-.712	-.629
CENTROID X	:	.326	.247	.240
CENTROID Y	:	-.116	.075	-.008
POA TO CENTROID in.	:	.346	.258	.240
MIN RADIUS	:	.351	.156	.239
MEAN RADIUS	:	.717	.543	.535
MAX RADIUS	:	1.864	.746	.690
HORIZONTAL SPREAD	:	1.364	1.201	1.201
VERTICAL SPREAD	:	2.578	1.376	1.066
EXTREME SPREAD	:	2.688	1.376	1.303
NUMBER IN ONE INCH CIRCLE	=		2	
NUMBER IN TWO INCH CIRCLE	=		9	
NUMBER IN THREE INCH CIRCLE	=		9	

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CENTERFIRE PATTERNS

4



HS= 1.749

VS= 2.841

GS= 3.124

PATTERN #	:	4		
SHOTS (BEST OF)	:	10	9	8
MAXIMUM X	:	.930	.889	.736
MINIMUM X	:	-.819	-.860	-.749
MAXIMUM Y	:	1.251	1.074	.777
MINIMUM Y	:	-1.590	-1.512	-1.377
CENTROID X	:	-.230	-.189	-.300
CENTROID Y	:	-.143	.034	-.101
POA TO CENTROID in.	:	.271	.192	.317
MIN RADIUS	:	.218	.091	.223
MEAN RADIUS	:	.877	.762	.691
MAX RADIUS	:	1.632	1.521	1.379
HORIZONTAL SPREAD	:	1.749	1.749	1.485
VERTICAL SPREAD	:	2.841	2.586	2.154
EXTREME SPREAD	:	3.124	2.793	2.263
NUMBER IN ONE INCH CIRCLE	=		2	
NUMBER IN TWO INCH CIRCLE	=		6	
NUMBER IN THREE INCH CIRCLE	=		8	

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CENTERFIRE PATTERNS # 5

POA

1in circle

2in circle

3in circle

OF SHOTS= 10

IN CIR

1in = 3

2in = 8

3in = 9

HS= 1.540

VS= 2.583

GS= 2.611

CENTROID #

PATTERN #	5		
SHOTS (BEST OF)	10	9	8
MAXIMUM X	.735	.774	.557
MINIMUM X	-.805	-.766	-.669
MAXIMUM Y	1.494	.699	.584
MINIMUM Y	-1.089	-.924	-.677
CENTROID X	.326	.287	.190
CENTROID Y	.150	-.016	.099
POA TO CENTROID in.	.358	.287	.214
MIN RADIUS	.135	.153	.011
MEAN RADIUS	.696	.602	.499
MAX RADIUS	1.534	1.205	.877
HORIZONTAL SPREAD	1.540	1.540	1.226
VERTICAL SPREAD	2.583	1.623	1.261
EXTREME SPREAD	2.611	2.001	1.525
NUMBER IN ONE INCH CIRCLE =		3	
NUMBER IN TWO INCH CIRCLE =		8	
NUMBER IN THREE INCH CIRCLE =		9	