

C6648974

MODEL 700TM M24

Model **SMS** TM

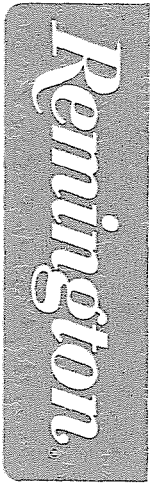
Action

Barrel Length

Capacity

Order No. **5716**

*Includes 1 in chamber.



0 " 47700 " 25716 " 7

CONTRACT # DAAA21-87-C-0086

GFM

GUN SERIAL #

C6648974

OP. #	OP. NAME	READINGS	DATE	INIT
575 & 580	Assemble Action and Stock		7/24/91	KL
600	Proof		7/24/91	KL
607	Check Headspace		7/24/91	KL
610	Dis-assemble Gun		7/24/91	KL
612	Magnaflux Barrel Action		AUG 7 1991	KR
	Magnaflux Bolt		AUG 7 1991	KR
615	Rollmark Caliber		AUG 7 1991	YB
617	Drill and Tap Sight Holes		AUG 7 1991	LB
618	Polish Barrel		AUG 13 1991	WB
620	Apply Coatings (Barrel Action)		8-27-91	PA
	Apply Coating (Bolt)			
625	Final Assembly A) Clean inside of Bolt Assembly		9/4/91	KL
	B) Inspect Rear Firing Pin Hole for Chamfer in Bolt Head		9/4/91	KL
	C) Inspect Ejector Hole for Chamfer		9/4/91	KL
	D) Oil Firing Pin Ass'y		9/4/91	KL
	E) Adjust Trigger Pull to Min Setting and Stake		9/10/91	PA

op. #	BARBER M24 0030172	READINGS					DATE	INIT
625 cont.	F) Safety On Force	5	5	5			9/10/91	SH
	G) Safety Off Force	3	3	3			9/10/91	SH
	H) Trigger Pull Test & Retainability						9/10/91	SH
	I) Firing Pin Indent	.020	.022	.021			9/10/91	SH
	J) Assemble Stock						9/12/91	SH
	K) Assemble Swivel Studs						9-14-91	D/H
	L) Attach Front and Rear Sight Assemblies						9/12/91	SH
	M) Iron Sight Alignment						9/12/91	SH
	N) Detach Front & Rear Sights & place in numbered container						9/12/91	SH
	O) Attach Scope to Rifle						9/12/91	SH
	P) Detach & Attach Scope 20 Times						9/12/91	SH
640	Gallery Target & Test						9-13-91	NF
	A) Time						"	NF
	B) Malfunctions						"	NF
	C) Pierced Primers						"	NF
	D) Optical Clarity of Scope						"	NF
645	Inspect for Live Ammo						9-13-91	NF
655	Final Inspection							
	A) Headspace						9-14-91	D/H
	B) Trigger Pull	2.67	2.72	2.72	2.78	2.71	9-14-91	D/H
	C) Function						9-14-91	D/H
660	Pack						9-18-91	NF

AVERAGE PULL FORCE BETWEEN
INITIAL & CYCLE TESTS

2.50# ± .50#
3.00# ± .75#
4.00# ± 1.00#

SERIAL NO. C6648974

DATE 9-10-91

TESTER JU

	2.50# INITIAL	2.50# AFTER 50 CYCLES	FINAL TEST & TO RESET 2.50#		COMMENTS
PULL #1	2.48	2.47	2.59	267	MIN. SETTING, NO AVG. OF 5 READINGS ACCEPT- ABLE LESS THAN 2#
PULL #2	2.54	2.56	2.61	272	
PULL #3	2.55	2.55	2.63	272	
PULL #4	2.54	2.57	2.50	278	
PULL #5	2.57	2.61	2.51	271	
TOTAL					
AVG.					

	3.00# INITIAL	3.00# AFTER 20 CYCLES		COMMENTS
PULL #1	3.27	3.47		
PULL #2	3.28	3.51		
PULL #3	3.54	3.55		
PULL #4	3.46	3.55		
PULL #5	3.53	3.52		
TOTAL				
AVG.				

	4.00# INITIAL	4.00# AFTER 20 CYCLES	MAX SETTING GREATER THAN 4#	RESET TO 4# FOR TARGET & ACCURACY
PULL #1	4.52	4.51		4.26
PULL #2	4.35	4.35		4.38
PULL #3	4.46	4.47		4.25
PULL #4	4.42	4.41		4.49
PULL #5	4.31	4.42		4.31
TOTAL				
AVG.				

CENTROIDAL DISTANCE CALCULATIONS
FOR RIFLE # 06648974
13 Sep 1991

CENTROIDAL DISTANCES

0 TO	1	.252842
1 TO	2	.350708
1 TO	3	.225222
1 TO	4	.314059
1 TO	5	.396565

1/2 <----POA

THE AVERAGE X-COORDINATE FOR THIS RIFLE IS: .258
THE AVERAGE Y-COORDINATE FOR THIS RIFLE IS: -.0082
THE RESULTING AVERAGE POI RADIUS FOR THIS RIFLE IS: .25813
THE AMP FOR THIS RIFLE IS: 1.127

13 Sep 1991

FILE:/PATTERNING/CENTERFIRE_PATT/C8648974

CENTERFIRE PATTERNS # 5

POR

1 in circle

2 in circle

3 in circle

CENTROID *

OF SHOTS= 10

IN CIR

1 in = 0

2 in = 3

3 in = 9

HS= 2.574

VS= 2.797

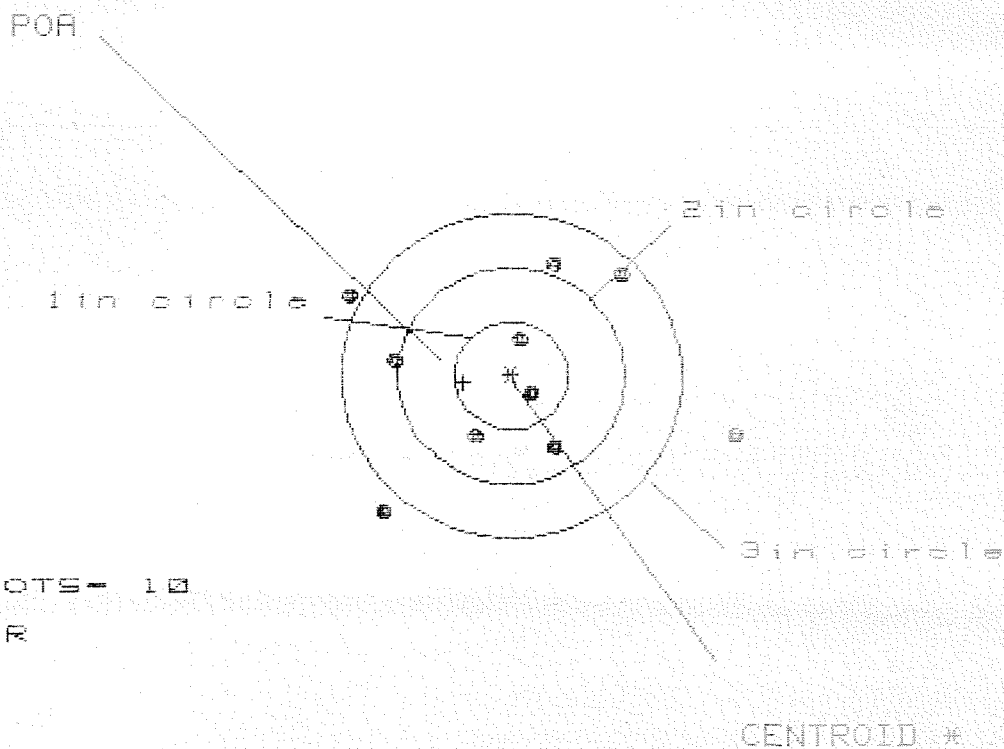
GS= 2.812

PATTERN #	5	5	5
SHOTS (BEST OF)	10	9	8
MAXIMUM X	1.621	1.267	1.261
MINIMUM X	-.953	-.773	-.779
MAXIMUM Y	1.475	1.507	1.010
MINIMUM Y	-1.322	-1.290	-1.102
CENTROID X	.200	.028	.034
CENTROID Y	-.187	-.219	-.407
POR TO CENTROID in.	.280	.221	.409
MIN RADIUS	.544	.415	.524
MEAN RADIUS	1.128	1.041	.987
MAX RADIUS	1.646	1.508	1.358
HORIZONTAL SPREAD	2.574	2.040	2.040
VERTICAL SPREAD	2.797	2.797	2.112
EXTREME SPREAD	2.812	2.812	2.464
NUMBER IN ONE INCH CIRCLE =	0		
NUMBER IN TWO INCH CIRCLE =	3		
NUMBER IN THREE INCH CIRCLE =	9		

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FILE:/PATTERNING/CENTERFIRE_PATT/C6B4B974

CENTERFIRE PATTERNS # 4



OF SHOTS = 10

IN CIR

1 in = 2

2 in = 4

3 in = 7

HS = 3.404

VS = 2.271

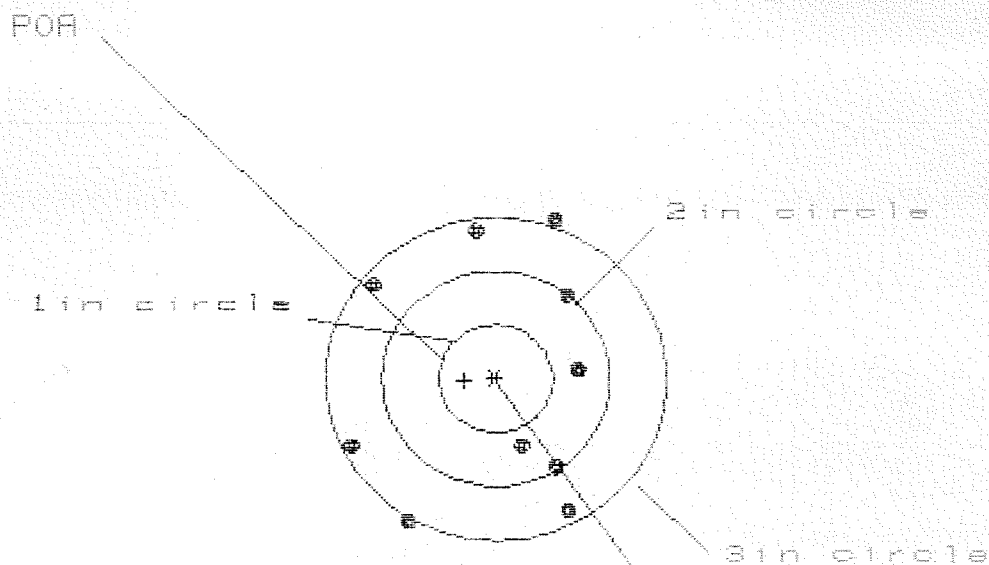
GS = 3.652

CENTROID *

PATTERN #	4	5	6
SHOTS (BEST OF)	10	9	8
MAXIMUM X	1.945	1.214	1.104
MINIMUM X	-1.460	-1.243	-1.353
MAXIMUM Y	1.036	.970	.807
MINIMUM Y	-1.235	-1.301	-.862
CENTROID X	.425	.208	.318
CENTROID Y	.057	.123	.286
POR TO CENTROID in.	.428	.242	.428
MIN RADIUS	.217	.381	.192
MEAN RADIUS	1.080	.979	.889
MAX RADIUS	2.034	1.568	1.442
HORIZONTAL SPREAD	3.404	2.457	2.457
VERTICAL SPREAD	2.271	2.271	1.669
EXTREME SPREAD	3.652	3.049	2.471
NUMBER IN ONE INCH CIRCLE =	2		
NUMBER IN TWO INCH CIRCLE =	4		
NUMBER IN THREE INCH CIRCLE =	7		

FILE:/PATTERNING/CENTERFIRE PATT/C6B4B974

CENTERFIRE PATTERNS # 3



OF SHOTS = 10

IN CIR

117 = 2

210 - 3

$$a_1 b_1 = a$$

HS- 2.067

VS= 2.735

GS- 3, 643

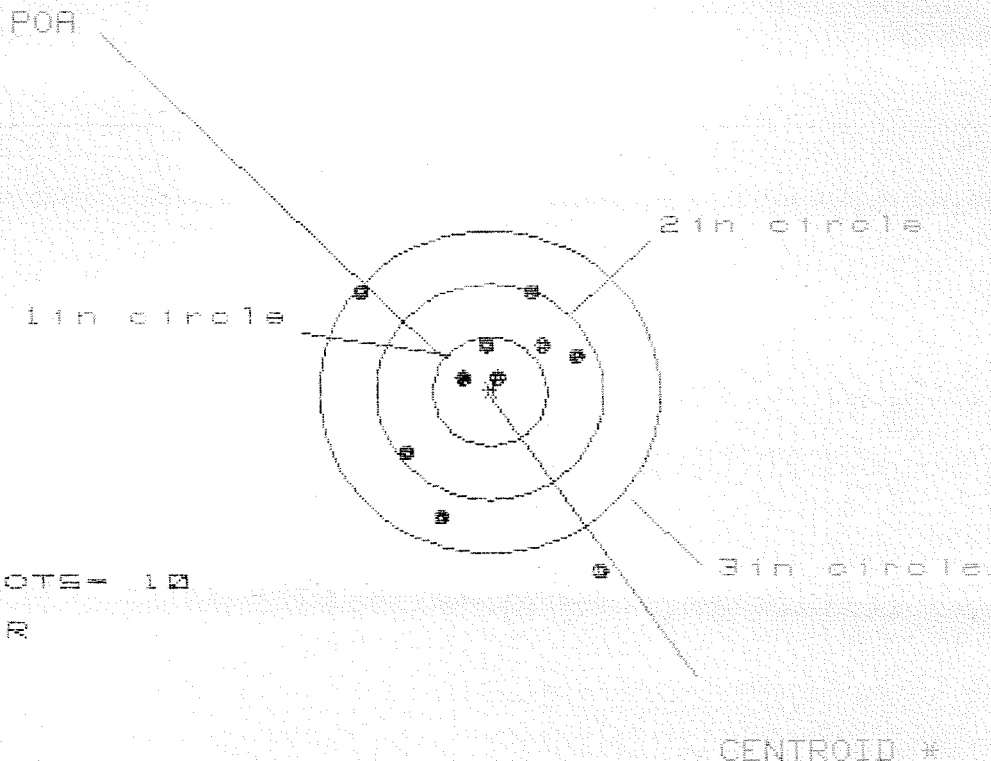
CENTRO

PATTERN #	:	3	:	
SHOTS (BEST OF)	:	10	:	9
MAXIMUM X	:	.770	:	.832
MINIMUM X	:	-1.297	:	-1.235
MAXIMUM Y	:	1.466	:	1.493
MINIMUM Y	:	-1.269	:	-1.107
CENTROID X	:	.275	:	.213
CENTROID Y	:	.019	:	-.143
POA TO CENTROID in.	:	.276	:	.257
MIN RADIUS	:	.661	:	.543
MEAN RADIUS	:	1.199	:	1.143
MAX RADIUS	:	1.568	:	1.501
HORIZONTAL SPREAD	:	2.067	:	2.067
VERTICAL SPREAD	:	2.735	:	2.600
EXTREME SPREAD	:	3.040	:	2.670
NUMBER IN ONE INCH CIRCLE	=		:	0
NUMBER IN TWO INCH CIRCLE	=		:	3
NUMBER IN THREE INCH CIRCLE	=		:	9

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FILE:/PATTERNING/CENTERFIRE_PATT/08846974

CENTERFIRE PATTERNS # 2



OF SHOTS = 10

IN CIR

1in = 3

2in = 6

3in = 9

HS = 2.129

VS = 2.623

GS = 3.378

CENTROID *

PATTERN #	1	2	3
SHOTS (BEST OF)	10	9	8
MAXIMUM X	.999	.856	.729
MINIMUM X	-1.130	-1.019	-.798
MAXIMUM Y	.976	.793	.881
MINIMUM Y	-1.647	-1.379	-1.288
CENTROID X	.234	.123	.250
CENTROID Y	-.135	.048	-.051
POA TO CENTROID in.	.270	.132	.255
MIN RADIUS	.211	.132	.132
MEAN RADIUS	.898	.739	.668
MAX RADIUS	1.927	1.412	1.350
HORIZONTAL SPREAD	2.129	1.875	1.527
VERTICAL SPREAD	2.623	2.172	2.161
EXTREME SPREAD	3.378	2.296	2.296
NUMBER IN ONE INCH CIRCLE =	3		
NUMBER IN TWO INCH CIRCLE =	6		
NUMBER IN THREE INCH CIRCLE =	9		

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FILE:/PATTERNING/CENTERFIRE_PATT/08648974

CENTERFIRE PATTERNS # 1

POB

1in circle

2in circle

3in circle

OF SHOTS= 10

IN CIR

1in = 0

2in = 5

3in = 7

HS= 2.853

VS= 4.690

GS= 4.702

CENTROID #

PATTERN #	1	9	8
SHOTS (BEST OF)	10	9	8
MAXIMUM X	1.365	1.485	1.593
MINIMUM X	-1.488	-1.368	-1.260
MAXIMUM Y	2.332	1.309	1.047
MINIMUM Y	-2.358	-2.099	-1.195
CENTROID X	.148	.028	-.000
CENTROID Y	.205	-.054	.208
POB TO CENTROID in.	.253	.061	.223
MIN RADIUS	.525	.272	.360
MEAN RADIUS	1.331	1.162	1.001
MAX RADIUS	2.571	2.270	1.736
HORIZONTAL SPREAD	2.853	2.853	2.853
VERTICAL SPREAD	4.690	3.408	2.242
EXTREME SPREAD	4.702	3.793	3.246
NUMBER IN ONE INCH CIRCLE =	0		
NUMBER IN TWO INCH CIRCLE =	5		
NUMBER IN THREE INCH CIRCLE =	7		