

C6636040

MODEL 700™ M24

Model SMS™

Action

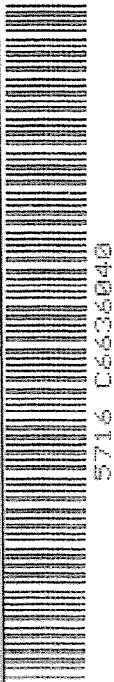
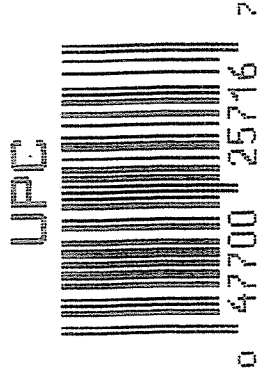
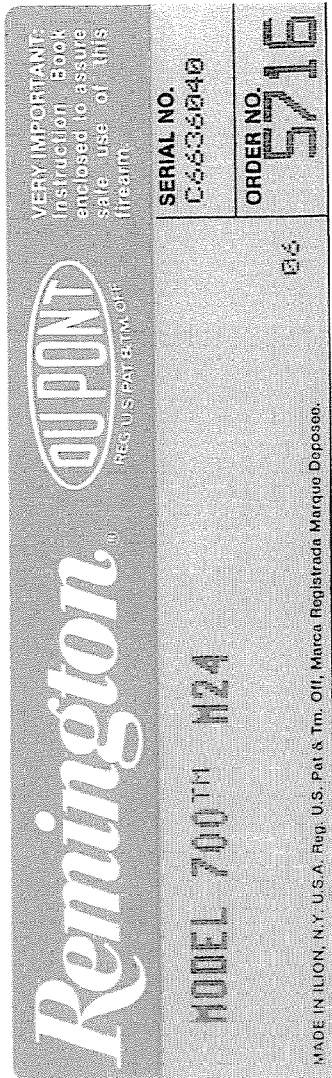
Barrel Length

Capacity

Order No. 5716

*Includes 1 in chamber.





MOD. _____		GA. CAL. _____	GUN # <u>6040</u>
# TEST	DATE	MALFUNCTION/DEFECT	ASSEM. #
NF	1st	B.H. Hits Stock	KS
	6/14	Ejects Very Hard Bolt + Release Sticks	
	2nd	100 RD test OF 6-15-91 DH	
	3rd		
	4th		
		FUNCTION	RD 6654 Rev 1

TEST INIT. ACTION TO CORRECT		ASSEM. #
PROOF		
TEST		
TGT		
PROOF		
TEST		
TGT		
PROOF	ENGINEER	
TEST		
TGT		
PROOF	ENGINEER	
TEST		
TGT		

CONTRACT # DAAA21-87-C-0086

GUN SERIAL #

C6636040

OP. #	OP. NAME	READINGS	DATE	INIT
575 & 580	Assemble Action and Stock		4/23/91	K.S.
600	Proof		4/23/91	K.S.
607	Check Headspace		4/23/91	K.S.
610	Dis-assemble Gun		4/23/91	K.S.
612	Magnaflux Barrel Action	5 8 9 1		KCR
	Magnaflux Bolt	5 8 9 1		KCR
615	Rollmark Caliber	5 8 9 1		GS
617	Drill and Tap Sight Holes	5 15 9 1		HB
618	Polish Barrel	5 15 9 1		WAB
620	Apply Coatings (Barrel Action)		5-31-91	TH
	Apply Coating (Bolt)			
625	Final Assembly A) Clean inside of Bolt Assembly		6/11/91	KS
	B) Inspect Rear Firing Pin Hole for Chamfer in Bolt Head		6/11/91	KS
	C) Inspect Ejector Hole for Chamfer		6/11/91	KS
	D) Oil Firing Pin Ass'y		6/11/91	KS
	E) Adjust Trigger Pull to Min Setting and Stake		6-13-91	TH

op. #	BARBER-M24 0036997	READINGS					DATE	INIT
625 cont.	F) Safety On Force	6	7	6			6-13-91	DH
	G) Safety Off Force	2 1/2	3	2 1/4			6-13-91	DH
	H) Trigger Pull Test & Retainability						6-13-91	DH
	I) Firing Pin Indent	.023	.020	.021			6-13-91	DH
	J) Assemble Stock						6-13-91	K-S
	K) Assemble Swivel Studs						6-15-91	DH
	L) Attach Front and Rear Sight Assemblies						6-13-91	K-S
	M) Iron Sight Alignment						6-13-91	K-S
	N) Detach Front & Rear Sights & place in numbered container						6-13-91	K-S
	O) Attach Scope to Rifle						6-13-91	K-S
	P) Detach & Attach Scope 20 Times						6-13-91	K-S
640	Gallery Target & Test						6-14-91	N
	A) Time						"	N
	B) Malfunctions						"	N
	C) Pierced Primers						"	N
	D) Optical Clarity of Scope						"	N
645	Inspect for Live Ammo						6-14-91	N
655	Final Inspection							
	A) Headspace						6-15-91	DH
	B) Trigger Pull	2.74	2.22	2.20	2.17	2.20	2-15-91	JM
	C) Function						6-15-91	DH
660	Pack						6-20-91	N

AVERAGE PULL FORCE BETWEEN
INITIAL & CYCLE TESTS
2.50# + .50#
3.00# + .75#
4.00# + 1.00#

SERIAL NO. C6636040DATE 6-13-91TESTER D/H

	2.50# INITIAL	2.50# AFTER 50 CYCLES	FINAL TEST & TO RESET 2.50#		COMMENTS
PULL #1	2.44	2.63	2.56	2.14	MIN. SETTING, NO AVG. OF 5 READINGS ACCEPT- ABLE LESS THAN 2#
PULL #2	2.54	2.60	2.57	2.22	
PULL #3	2.46	2.59	2.51	2.20	
PULL #4	2.52	2.57	2.57	2.17	
PULL #5	2.52	2.59	2.52	2.20	
TOTAL					
AVG.					

	3.00# INITIAL	3.00# AFTER 20 CYCLES		COMMENTS
PULL #1	3.01	3.48		
PULL #2	3.36	3.46		
PULL #3	3.36	3.39		
PULL #4	3.34	3.26		
PULL #5	3.31	3.40		
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	4.50		4.12
PULL #2	4.45	4.52		4.23
PULL #3	4.40	4.44		4.32
PULL #4	4.42	4.37		4.17
PULL #5	4.31	4.41		4.28
TOTAL				
AVG.				

CENTROIDAL DISTANCE CALCULATIONS
FOR RIFLE # C6636040
14 Jun 1991

CENTROIDAL DISTANCES

Ø TO	1	.201296
1 TO	2	.231398
1 TO	3	.276279
1 TO	4	.215539
1 TO	5	.326931

4 <----POA

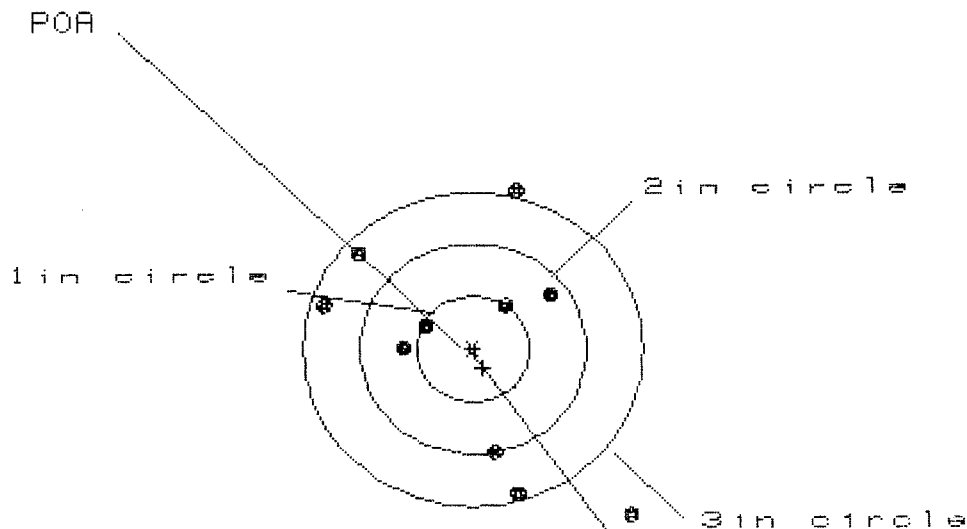
THE AVERAGE X-COORDINATE FOR THIS RIFLE IS: -.0514
THE AVERAGE Y-COORDINATE FOR THIS RIFLE IS: .0386
THE RESULTING AVERAGE POI RADIUS FOR THIS RIFLE IS: .06428

THE AMR FOR THIS RIFLE IS: 1.068

14 Jun 1991

FILE:/PATTERNING/CENTERFIRE_PATT/C6636040

CENTERFIRE PATTERNS # 1



OF SHOTS - 10

IN CIR

1 in = 2

2 in = 5

3 in = 8

HS = 2.724

VS = 3.154

GS = 3.480

CENTROID #

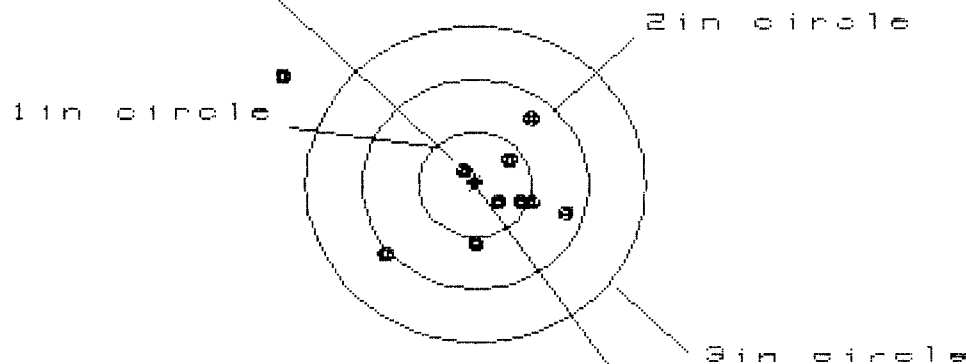
PATTERN #	:	1	9	8
SHOTS (BEST OF)	:	10	9	8
MAXIMUM X	:	1.410	.864	.930
MINIMUM X	:	-1.314	-1.157	-1.091
MAXIMUM Y	:	1.547	1.368	.895
MINIMUM Y	:	-1.607	-1.562	-1.391
CENTROID X	:	-.086	-.243	-.309
CENTROID Y	:	.182	.361	.189
POA TO CENTROID in.	:	.201	.435	.363
MIN RADIUS	:	.455	.262	.260
MEAN RADIUS	:	1.131	.977	.912
MAX RADIUS	:	2.138	1.649	1.513
HORIZONTAL SPREAD	:	2.724	2.021	2.021
VERTICAL SPREAD	:	3.154	2.930	2.286
EXTREME SPREAD	:	3.480	2.930	2.666
NUMBER IN ONE INCH CIRCLE	=	2		
NUMBER IN TWO INCH CIRCLE	=	5		
NUMBER IN THREE INCH CIRCLE	=	8		

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CENTERFIRE PATTERNS # 2

POA



OF SHOTS- 10

IN CIR

1in - 4

2in - 8

3in = 9

HS= 2.527

VS= 1.725

GS= 2.823

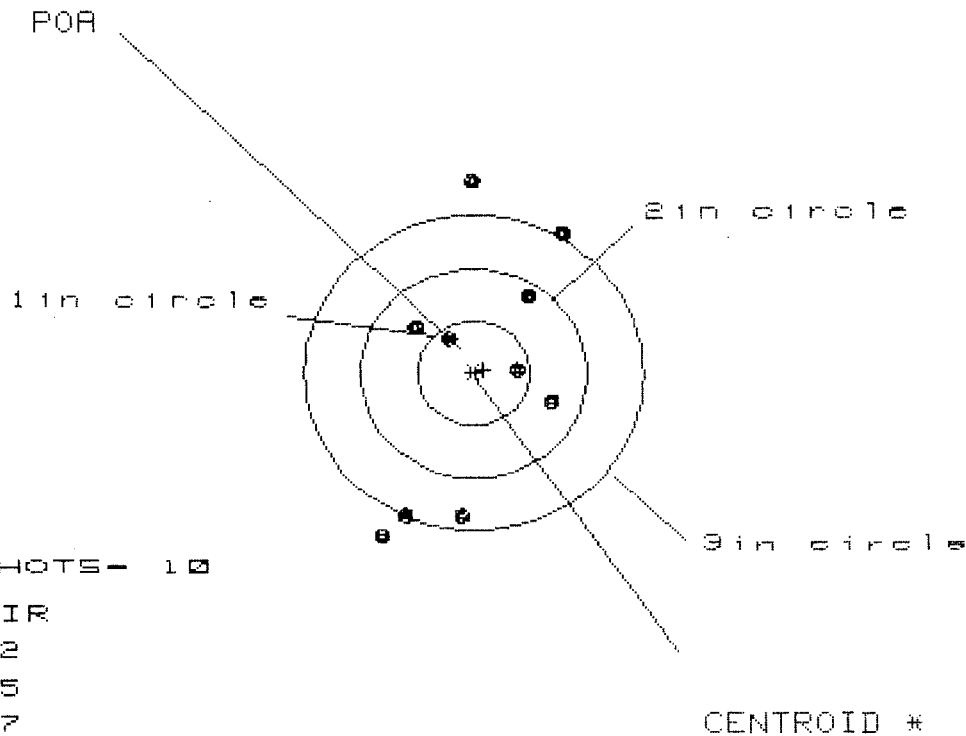
CENTROID #

PATTERN #	:	2		
SHOTS (BEST OF)	:	10	9	8
MAXIMUM X	:	.833	.644	.523
MINIMUM X	:	-1.694	-.974	-.433
MAXIMUM Y	:	1.030	.791	.719
MINIMUM Y	:	-.695	-.581	-.558
CENTROID X	:	.003	.192	.313
CENTROID Y	:	-.034	-.148	-.076
POA TO CENTROID in.	:	.034	.242	.322
MIN RADIUS	:	.155	.038	.155
MEAN RADIUS	:	.701	.492	.402
MAX RADIUS	:	1.983	1.134	.738
HORIZONTAL SPREAD	:	2.527	1.618	.956
VERTICAL SPREAD	:	1.725	1.372	1.277
EXTREME SPREAD	:	2.823	1.865	1.379
NUMBER IN ONE INCH CIRCLE	=		4	
NUMBER IN TWO INCH CIRCLE	=		8	
NUMBER IN THREE INCH CIRCLE	=		9	

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CENTERFIRE PATTERNS # 3



OF SHOTS - 10

IN CIR

1 in = 2

2 in = 5

3 in = 7

HS = 1.531

VS = 3.404

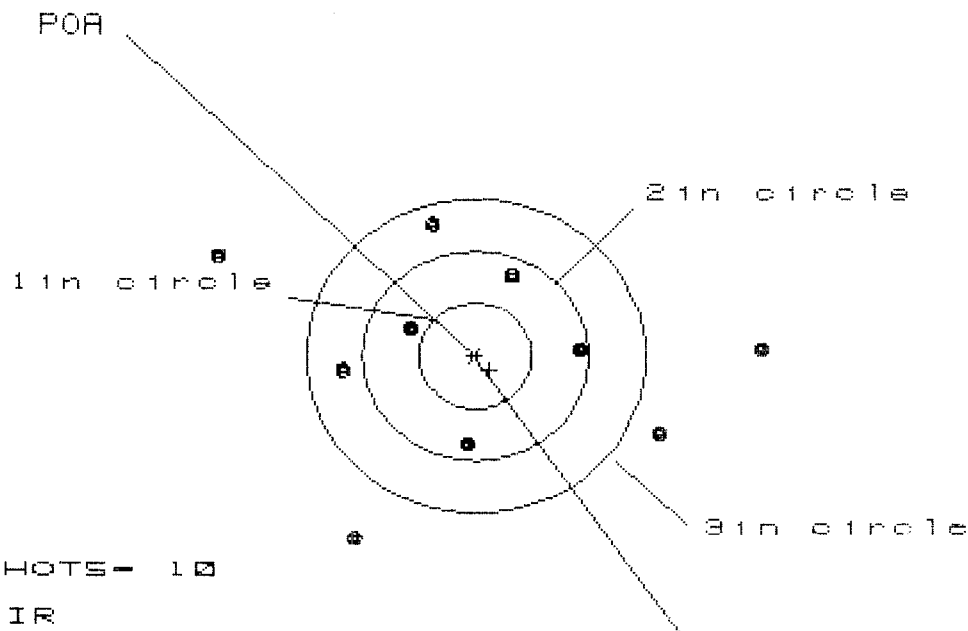
GS = 3.487

PATTERN #	:	3		
SHOTS (BEST OF)	:	10	9	8
MAXIMUM X	:	.749	.746	.648
MINIMUM X	:	-.782	-.785	-.740
MAXIMUM Y	:	1.804	1.486	1.311
MINIMUM Y	:	-1.600	-1.399	-1.366
CENTROID X	:	-.085	-.082	.017
CENTROID Y	:	-.035	-.236	-.061
POA TO CENTROID in.	:	.092	.249	.063
MIN RADIUS	:	.344	.411	.248
MEAN RADIUS	:	1.104	1.042	.924
MAX RADIUS	:	1.804	1.662	1.554
HORIZONTAL SPREAD	:	1.531	1.531	1.388
VERTICAL SPREAD	:	3.404	2.885	2.677
EXTREME SPREAD	:	3.487	3.266	3.015
NUMBER IN ONE INCH CIRCLE	=		2	
NUMBER IN TWO INCH CIRCLE	=		5	
NUMBER IN THREE INCH CIRCLE	=		7	

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CENTERFIRE PATTERNS # 4



OF SHOTS - 10

IN CIR

1in = 0

2in = 4

3in = 6

HS = 4.816

VS = 3.010

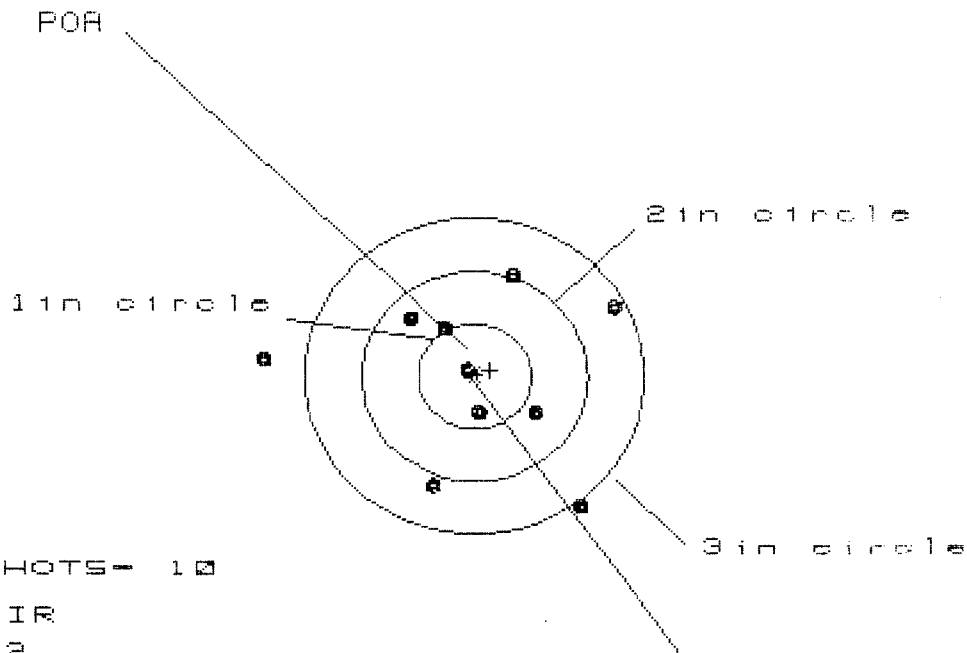
GS = 4.896

PATTERN #	:	4		
SHOTS (BEST OF)	:	10	9	8
MAXIMUM X	:	2.554	1.950	1.703
MINIMUM X	:	-2.262	-1.979	-1.175
MAXIMUM Y	:	1.237	1.246	1.367
MINIMUM Y	:	-1.773	-1.764	-1.643
CENTROID X	:	-.125	-.408	-.161
CENTROID Y	:	.138	.129	.008
POA TO CENTROID in.	:	.186	.428	.161
MIN RADIUS	:	.651	.427	.683
MEAN RADIUS	:	1.463	1.318	1.206
MAX RADIUS	:	2.555	2.203	1.933
HORIZONTAL SPREAD	:	4.816	3.929	2.878
VERTICAL SPREAD	:	3.010	3.010	3.010
EXTREME SPREAD	:	4.896	4.263	3.085
NUMBER IN ONE INCH CIRCLE	=		0	
NUMBER IN TWO INCH CIRCLE	=		4	
NUMBER IN THREE INCH CIRCLE	=		6	

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CENTERFIRE PATTERNS # 5



OF SHOTS- 10

IN CIR

1in = 2

2in = 6

3in = 8

HS= 3.196

VS= 2.127

GS= 3.227

CENTROID #

PATTERN #	:	5		
SHOTS (BEST OF)	:	10	9	8
MAXIMUM X	:	1.284	1.071	1.162
MINIMUM X	:	-1.912	-.737	-.646
MAXIMUM Y	:	.930	.950	.803
MINIMUM Y	:	-1.196	-1.177	-1.156
CENTROID X	:	-.136	.077	-.014
CENTROID Y	:	-.058	-.078	.069
POA TO CENTROID in.	:	.148	.109	.071
MIN RADIUS	:	.093	.267	.159
MEAN RADIUS	:	.941	.840	.749
MAX RADIUS	:	1.920	1.382	1.274
HORIZONTAL SPREAD	:	3.196	1.808	1.808
VERTICAL SPREAD	:	2.127	2.127	1.959
EXTREME SPREAD	:	3.227	2.364	2.364
NUMBER IN ONE INCH CIRCLE	=		2	
NUMBER IN TWO INCH CIRCLE	=		6	
NUMBER IN THREE INCH CIRCLE	=		8	