

Item A

Issued. 2/5/47STANDARD ENDURANCE TESTCENTER FIRE RIFLES

Conditions of Firing: One shot every 5 seconds. Time includes cooling and loading. Cool with compressed air every 40 rounds. Functioning - slow, medium and fast. Alternately load magazine. See Ammunition Schedule attached.

Conditions of Tests: Make the following Measurements, Cleaning and Inspection every 1,000 rounds and after 10,000 dry cycles.

Clean barrel with metal fouling solution.

Air gauge barrel and determine bore dimensions.

Trigger Pull Test #6.

Firing Pin Indentation and Protrusion Test #8.

Belt Opening Test #10 - 5 rounds.

Safety Mechanism Function Test #22.

Safety Sear Mechanism Test #25.

Measure free length of all springs at 0, 6000 rounds and 10,000 dry cycles.

Measure surfaces of locking mechanism, sear and manual safety at 0, 6000 rounds and 10,000 dry cycles.

Rounds

1. Take Down Inspection Test #11.
2. Head Space Test #3.
3. Proof Test #1. Eliminate if gun has been previously proofed. 0-1
4. Safety Operation Test #31.
5. Jar Off Test #21.
6. Cleaning and Oiling - Type III.
7. Head Space Test #3 (if gun has not been previously proofed).
8. Preliminary Live Fire Test #45 - 116 rounds. 2-120
9. Competitive Ammunition Test - 200 rounds. 121-320
10. Take Down Inspection Test #11. Weigh gun and major groups. Determine balance of gun (measure overall length of gun). List Heat Treat Specifications and parts. Determine if the gun meets the Products Committee specifications.

	<u>Rounds</u>
11. Predict Inspection Test.	
12. Accuracy Test #4 - 50 rounds.	321-370
13. Angular Position Test - 60 rounds (20 rds. in each position).	371-430
14. Interchangeability Test. (Do not use the Endurance Gun in this test).	
15. Determine position of ejected rounds with respect to the shooter - (60 rounds).	431-490
16. Live Fire Test #12 - 500 rounds.	491-990
17. Accuracy Test #4 - 60 rounds.	991 - 1050
18. Feeding rounds into "Loaded Chamber Test" - 20 rounds.	1051-1070
19. Fire 1 proof round.	1071-1072
20. Live Fire Test #12 - 848 rounds.	1073-1920
21. Breech Gas Escape Test - 80 rounds.	1921-2000
22. Accuracy Test #4 - 60 rounds.	2001-2060
23. Fire 1 proof round.	2061-2062
* 24. No Lubrication Test - 200 rounds.	2063-2262
25. Lubricate gun using Type III lubrication.	
* 26. Cold Test (20°F.)	
* 27. Ice Test (-20°F.)	
28. Live Fire Test #12 - 738 rounds.	2262-3000
29. Accuracy Test #4 - 60 rounds.	3001-3060
30. Fire 1 proof round.	3061-3062
* 31. Dust Test - 20 rounds	3063-3082
32. Clean gun and use Type III lubrication.	
33. Live Fire Test #12 - 897 rounds.	3083-3980
* 34. Rain Test - 20 rounds.	3981-4000
35. Accuracy Test #4 - 60 rounds.	4001-4060
36. Fire 1 proof round.	4061-4062
37. Head Space Test #3.	
* 38. Excess Lubrication Test -20 rounds. Use Proof Chamber	4063-4082
* 39. Defective Ammunition Test - 60 rounds. 3 types - 20 rounds per type. Use proof chamber.	4083-4112

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	<u>Rounds</u>
40. Live Fire Test #4 - 858 rounds.	4143-5000
41. Accuracy Test - 60 rounds.	5001-5060
42. Fire 5 Proof Rounds.	5061-5065
43. Head Space Test #3.	
* 44. "Cook Off Test" - for autoloading arms only. Determine if "Cook Off" can be obtained under 200 rounds of rapid firing. Use Proof Chamber. For other arms, fire at a normal rate.	5066-5960
45. Perform 10,000 Dry Cycle Operations.	
46. Accuracy Test - 60 rounds.	5901-5960
*Adverse Conditions Test.	

AMMUNITION SCHEDULEM/721 - Cal. 30-06 Endurance Gun

<u>Routing Ticket No.</u>	<u>Manufacture</u>	<u>Ammunition Type</u>	<u>Grain</u>	<u>Rounds</u>
3	Remington	Proof Ammunition		0-2
8	Remington	H1 Speed, Bronze Point	150 (40 rounds)	2-120
	"	H1 Speed, Soft Point	180	"
	"	Soft Point Express	220	"
9	Western	Open Point Expanding	150	121-320
	"	Soft Point	180	"
	"	Open Point Expanding, Boat Tail	180	"
	"	Silver Tip	220	"
	Winchester	Super Speed	180	"
12	Remington	Bronze Point	150	321-370
*13	"	Mushroom	180	371-430
15	"	Mushroom	220	431-450
	"	Bronze Point	180	451-470
	"	Bronze Point	150	471-490
16	"	Soft Point	180	491-990
17	Remington	Bronze Point	150	991-1050
18	"	Bronze Point	150	1051-1070
19	"	Proof		1071-1072
20	"	Mushroom	220	1073-1500
21	"	Mushroom	220	1501-1910
	"	Soft Point	220	1911-1960
	"	"	180	1961-1980
	"	Bronze Point	150	1981-2000

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<u>Routing Ticket No.</u>	<u>Manufacture</u>	<u>Ammunition Type</u>	<u>Grain</u>	<u>Rounds</u>
22	Remington	Bronze Point	150	2001-2040
23	"	Proof		2051-2092
*24	"	Soft Point	180	2053-2092
28	"	" "	"	2263-3000
29	"	Bronze Point	150	3001-3040
30	"	Proof		3061-3092
*31	"	Mushroom	180	3063-3092
33	"	"	"	3053-3092
*34	"	"	"	3981-4000
35	"	Bronze Point	150	4001-4040
36	"	Proof		4061-4092
*38	"	Soft Point	220	4063-4092
*39	"	" "	"	4083-4092
40	"	" "	"	4143-5000
41	"	Bronze Point	150	5001-5040
42	"	Proof		5061-5092
*44	"	Soft Point	180	5066-5092

*Adverse Conditions