



M/721 RIFLE

(30-06, 500 MAG. & .270 WIN.)

SUBJECT: Gallery (Proof, Test and Target)

Proof: 100% of production, all guns passing first inspection.

1. Loading Procedure

- A. Check bore for obstruction
- B. Check for "P" on Barrel (500 Mag. only)
- C. Place in holding jack.
- D. Close action.
- E. Attach lanyard to trigger.
- F. Close cover.
- G. Step outside booth and close door.
- H. Pull lanyard.

2. Watch for:

- A. Fractured parts - Action open and action closed.
- B. Lack of smoothness of operation.
- C. Swelling or cracks in empty case.
- D. Blown primers.

3. Inspect each gun after proof

- A. Visually check chamber for live ammunition.

4. Stamp proof mark.

- A. (R E F) Right side of barrel ahead of receiver.
- B. Prick punch bolt underneath bolt handle.

5. Inspect complete truck load

- A. Visually check chamber.

Test: 100% of guns passing proof (Check each gun for proof work before test).

1. Ammunition

- A. For 30-06 cal.
 - a. Load 4 - 220 grain express soft point cartridges in magazine and 1 in chamber and fire.
- B. For .500 Mag. Cal.
 - a. Load 3 - 220 grain express mushroom cartridges in magazine and 1 in chamber and fire.
- C. For .270 Winchester
 - a. Load 4 - 150 grain H.S. mushroom cartridges in magazine and 1 in chamber and fire.

M/TEL Rifle (Cont)

Authorisation

Test (Cont)2. Proper Load

- A. Should not slam chamber.
- B. Action should not close hard.
- C. Shell should not catch on face of block.
- D. Should not override (Press down rear of loaded Magazine before testing).
- E. Shell must not be hard under extractor.
- F. Shell should not be hard under rail.

3. Proper Extraction

- A. Action open easily.
- B. Withdraw fired case from chamber.

4. Proper Ejection

- A. With action in full rearward position shell to be thrown clear.

5. Proper firing pin blow

- A. Visually inspect one fired case from each gun.
- B. Must be equal to sample.

6. Rejection

- A. One failure in above test rejects gun.
- B. Exception may be defective ammunition in which case repeat test and pass if no additional failures occur.

7. Inspect for live ammunition (each gun)

- A. Visually check magazine and chamber.

B. Stamp

- A. Individual inspectors stamp for test.
- B. Right side of barrel, ahead of Rec., ahead of proof work.

8. Inspect for live ammunition (complete truck load).

- A. Visually check chamber.
- B. Visually check magazine.

Target: 100% of guns passing test (Check for test and proof mark).

1. Ammunition

- A. For .50-08 cal. - use 220 grain express mushroom cartridges.
- B. For .500 Mag. - use 220 grain express mushroom cartridges.
- C. For .270 Winchester - use 150 grain H.S. mushroom cartridges.

M/721 Rifle (Cont)

Authorization

Target (Cont)Alignment

- A. Load 4 cartridges in magazine (8 on 300 Mag.)
 - a. Fire necessary shots to align sights for 100 yds.
 - b. See data sheet #1 on "Sighting Picture," fig. #4.
 - B. Limits permissible from point of aim (6 o'clock).
 - a. See data sheet on "Sight Align. Limits," fig. #4, area "B".
 - b. 4 in. high.
 - c. 2 inches low.
 - d. 3 inches right.
 - e. 3 inches left.
 - C. Adjust Front Sight (Horizontal Align.)
 - a. Tap on base of sight with copper hammer.
 - b. To correct guns shooting to the left, tap on right side.
 - c. To correct guns shooting to the right, tap on left side.
 - d. Front Sight bead maybe no more than .030 ($1/32''$) to right or left of center line of barrel C.D.
 - D. Adjust Rear Sight (Vertical Alignment)
 - a. If gun shoots low - change to higher step.
 - b. If gun shoots high - change to lower step.
 - E. Adjust Rear Sight (Horizontal Alignment)
 - a. Rear Sight left should be parallel to barrel, and shoulders of base should not protrude beyond dovetail more than $1/16''$.
5. Maximum Spread (Distance between inside edges of two shots farthest apart).
- A. Refill Magazine
 - a. Fire 1-5 shot group from each gun using ammunition under target 1-A, B, or C.
 - b. 100% of shots fired to be within 3.5 inches.
 - (1) If not in this spec. and more than 4 in. reject gun.
 - B. If more than $3\frac{1}{2}$ inches and less than 4 inches, refill magazine.
 - a. Fire another 5 shot group for a total of 10 shots.
 - (1) 100% of 10 shots must be within 4 inches.
 - (2) 80% of 10 shots must be within 3 inches.

M/721 Rifle (Cont)

Authorisation

Target (Cont)Center of Impact (Average position of all shots fired):

- A. From point of aim, not to be more than:
 - a. 4 in. high.
 - b. 3 in. right.
 - c. 3 in. left.
 - d. 2 in. low.
 - e. See data sheet on "Alignment Limits," Fig. #4, area "B".
5. If any trend is noted on majority of guns, that is, if guns consistently shoot outside allowable limits, or if more than 10% of guns targeted do not meet specification, notify foreman.
6. Check each gun for live ammunition.
 - A. Visually check follower and chamber empty.
7. Stamp
 - A. Use individual inspectors stamp for target.
 - B. Right side of barrel ahead of testers stamp.
8. Inspect for live ammunition
 - A. Complete truck load.
 - B. Visually check chamber and magazine empty.

To live Ammunition Inspection