

DAILY PROGRESS REPORT

4/23/47

SUBJECT: M/721 Pilot Line Testing

A Product Inspection Test was conducted on the first three of eight M/721 Pilot Line Guns. Results are as follows:

<u>Gun #</u>	<u>Firing Pin Protrusion</u>	<u>Firing Pin Indent</u>	<u>Position on Gun.</u>	<u>Safety Can</u>	<u>Position on Gun.</u>	<u>Sear</u>	<u>Firing Pin Head</u>	<u>Head- Space</u>	<u>Trigger Pull</u>
20532	Within Limits	Within Limits	1	Under Min. Max.	1	Under Min. Over Max. to Under Min.	.006" above Max.	Min.	Within Lim
			2		2				
			3	Max.	3				
			4	Min.	4				
20517	"	"	1	Under Min.	1	Under Min.	Within Limits	"	"
			2	Within Limits	2	Under Min. to Max.			
			3	" "	3	Lower Edge Max.			
			4	Min.	4	Under Min. on Front Edge. Under Min.			
2054	"	"	1	Under Min.	1	Under Min.	.002" below Min.	"	"
			2	Within Limits	2	Min.			
			3	" "	3	"			
			4	Max.	4	"			

*Limits used at Position #1 on both Safety Can and Sear were the absolute Min. limits allowed by the designer to facilitate the use of available parts. All measurements were made on the comparator ratio of 10/1.

From the measurements made of the Firing Pin Heads, the condition of the firing pin moving forward when the Bolt is closed might present itself in Gun #20544 after a few rounds of firing.

There is evidence of the fire control adjusting screws moving out of position after manual functioning of the Bolt. This condition could develop into a dangerous situation and it is recommended that immediate steps be taken to stake or lock the screws into position after the fire control has been correctly adjusted.

Accuracy and functional firing of the above three guns is in progress and results of these tests will be forwarded as soon as practicable.

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SEL:mc