

C. Morse
Bill
Don't let the gun
Would like to discuss
2/3/21

CC: S. M. Alvis

May 18, 1956

H. E. Dyer

MODEL 40-1 TEST

For your information we withdrew from assembly one M/40-1 lightweight rifle for a test run on fire control head space stability in the dry cycle machine. We returned the rifle for correction on the following points.

1. Fired on closing
2. Full Height - 2 lbs. 7 oz.
3. Rear engagement on Connector

Approx. .001

The gun was not considered fit to test fire and was returned for correction.

C. H. Morse

G. E. Morse
 Research Department

Harvey

This gun was not taken from assembly but was gotten from Church Presser. It had been intentionally set by him to as near the engagement they Mike Walker has been asking for as he could make it (.007). We have a .015 min. on assembly. The gun did not fall down & had a 3rd trip pull when it hit Church.

CS 6/1/56

40 X
BOLT + FIRE CONTROL TEST.

	Pull. AVE. 50000 R.C. MIN	INDENT	Head L.T.
#1	3.5 (3.10) (2-140X)	023 - 018	OK
#2	3.8 (5.0) (3-60)	022 - 22	OK

HEAD SPACE - WEIR

#1	042 - 052	OLD FIRED (RECEIVED, UNAPPE)
#2	043 - 046	OLD FIRED (RECEIVED, UNAPPE)

WITH LUBRICATION

Two rifles were run 50000 cycles on the dry cycle machine. Checks were made on each gun on those items of customer acceptance: headspace, indent, trigger pull, and safety of rear engagement and ability of fire control to hold its rear engagement.

On #1 gun the indent changed from .23 down to .018 which in a target rifle would be unsatisfactory. Rear engagement remained OK and trigger pull weight stayed within satisfactory limits. Head space developed at an alarming rate and was .052 at 50000 cycles.

On #2 rifle the indent was .018 (as new in production) 100000 cycles. Head space was .018 at 50000 cycles but had run between 3-60 & 6-100, as it shot one round. The headspace on this gun was OK and perpend. the mounting of the gun was now in place of being weaker.

Calculated & head space