

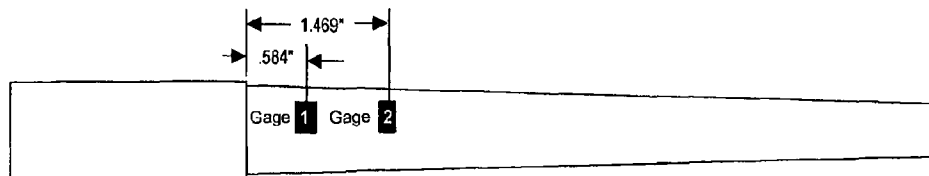
CONFIDENTIAL

## Remington Arms Company Inc.

Research & Development Technical Center  
315 West Ring Road  
Elizabethtown, KY 42701

Test Summary (22 May 2003):

- Two guns received on May 9<sup>th</sup>, 2003. (.300 Win. Mag. caliber)
- Both guns had tangentially mounted strain gages installed on the exterior of the barrel in the chamber area. (2 gages applied/gun)
- 20 Proof rounds were fired per gun with headspace and chamber strain monitored on every shot.
- Headspace:
  - 1<sup>st</sup> gun increased .002" over the 20 rd. test (min.+.006 to min.+.008)
  - 2<sup>nd</sup> gun increased .001" over the 20 rd. test (min.+.007 to min.+.008)
- A strain level shift of 162 micro-in/in was observed on gun #1 while gun #2 increased by 260 micro-in/in from the beginning to end of the 20 rd. proof test. These levels are in line with what was seen with the M/710 .30-06 caliber and M/700 .30-06 caliber products. The strain leveled off at these levels, indicating that the slight shift may be instrumentation or thermal related.
- No increase in barrel diameter was observed during the test.
- Fired cases were consistent and showed no abnormal deformation.
- Bolts had to be tapped slightly with a hammer to extract/free the fired case from the chamber on every shot of proof ammo. Consistent marks on the cases indicate that small radial gouges in the chamber on both guns may be the reason for the hard bolt opening.



Chamber Strain Test with Heat Treated Barrels- M/710 Magnum Bolt Action Rifle  
R & D Technical Center Project No. 241314; TLW1172

22 May 2003

Page 1  
CONFIDENTIAL

file: tlw1172--Chamber-Strain-22May03.doc

ET28273