## CONFIDENTIAL

## TLW0010

## Remington Arms Company Inc. RESEARCH & DEVELOPMENT TECHNICAL CENTER 315 WEST RING ROAD ELIZABETHTOWN, KY 42701

REM R30063 150 GR.	400	<sub>888</sub> 11	2.8%
TOTAL	2000	27	1.35%

## MALFUNCTIONS BY MALFUNCTION TYPE

MALFUNCTION	TOTAL RDS FOTAL		AVERAGE MALF		
	SHOT	MALFUNCTIONS	RATE		
STEM LOW	2000	24	1.2%		
BOLT OVERRIDE	2000	<u>y</u>	0.1%		
FAIL TO EJECT	2000	1	0.1%		
TOTAL	2000	27	1.35%		

To get an early picture of the product's functional gapability, a 200 round per rifle jack function test was conducted. Five bullet types were used, 40 rounds of each in each rifle to evaluate the potential for feeding problems. The test was conducted in the test jacks with the "belly-protectors" in place and fully closed for each shot. All malfunctions and any unusual behavior were noted on the data forms. To be acceptable the overall average of all sample rifles should be at or below 2.% malfunction rate. Up to one rifle from the sample of ten may be removed from the averaging process if it has an excessive malfunction rate relative to the remaining group of nine samples. If this had occurred the rifle would have been investigated by engineering to determine the probable source of the problem and engineering would have provided written documentation for possible inclusion in the DAT report. Test criteria allowed for no major mechanical failures in the test sample. Major mechanical failures are defined as those failures that cannot easily be repaired with simple tools and/or readily available replacement parts. At the conclusion of this test the firearms were carefully examined for signs of excessive wear, with special attention paid to the plastic components.

The major problem experienced during this test was related to the magazine box. Two problems, possibly related, were noted. First, the boxes failed at the assembly welds (see picture below) and second, the boxes were continually deformed by being bowed out at the front of the box by rounds impacting the box. This required that the boxes be pounded back into shape to continue the function testing. There were also dents in the front of the magazine boxes from the buffer periods. (See picture below.)

Testing was done in the boxes to determine weld strength. (See reports in the Appendices on weld strength testing.) Corrections were made to the production welding process to address this problem and welding strength retesting was performed to confirm improved status.

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