

REMINGTON MODEL 710
Trial and Pilot SERIES C
PRELIMINARY MEASUREMENTS

710 TRAIL & PILOT SERIES-C PRELIMINARY MEASUREMENTS & CHECKS
12/11/2000 PROOF TEST & MAGNAFLUX COMPLETED AT MAYFIELD
TEST LAB TRACKING NUMBER- TLW0300

BLUE INDICATES BELOW SPEC
RED INDICATES ABOVE SPEC

GUN ID #	SERIAL NUMBER	HEADSPACE, REM. SPEC GAUGES	TRIGGER PULL WITH SPRING SCALE				TRIGGER PULL WITH SPRING SCALE				SEAR TO TRIGGER ENGAGEMENT				SEAR LIFT			
			TLW0300J IN STOCK				TLW0300J OUT OF STOCK				TLW0300I out of stock @ 20X				TLW0300I out of stock @ 20X			
			1	2	3	AVERAGE	1	2	3	AVERAGE	1	2	3	AVERAGE	1	2	3	AVERAGE
C-1	71002561	MIN.+003	4.25	4.75	4.5	4.50	4.75	4	4.75	4.50	0.0233	0.0233	0.0244	0.0237	0.0181	0.0176	0.0189	0.0182
C-2	71002558	MIN.+001	4	3.75	3.75	3.83	4.5	4.25	3.75	4.17	0.0268	0.0255	0.0277	0.0267	0.0197	0.0193	0.0194	0.0195
C-3	71002552	MIN.+002	3.75	3.5	3.5	3.58	3.5	3.25	3.5	3.42	0.0272	0.0254	0.0275	0.0267	0.018	0.0186	0.0187	0.0184
C-4	71002505	MIN.+003	4	4.25	4	4.08	4.5	4.25	4	4.25	0.0275	0.0251	0.0271	0.0266	0.0188	0.0177	0.018	0.0182
C-5	71001848	MIN.+002	3.5	3.5	3.5	3.50	3.75	3.75	3.75	3.75	0.028	0.0289	0.0289	0.0286	0.0171	0.017	0.0183	0.0175
C-6	71001683	MIN.+001	4	4.25	4	4.08	4.25	4.25	4.25	4.25	0.0265	0.0274	0.0276	0.0272	0.0196	0.0208	0.0212	0.0205
C-7	71001834	MIN.+002	4.5	4.75	4.5	4.58	4.75	4.75	4.75	4.75	0.0277	0.0279	0.0281	0.0279	0.0151	0.014	0.0152	0.0148
C-8	71002501	MIN.+001	4	4	4	4.00	4.5	4.25	4.25	4.33	0.0319	0.0318	0.0326	0.0321	0.0134	0.0123	0.0144	0.0134
C-9	71001429	MIN.+002	4.25	4	4.25	4.17	4.5	4.25	4	4.25	0.0264	0.0283	0.0267	0.0271	0.0183	0.0165	0.0166	0.0171
C-10	71002554	MIN.+001	3.75	3.75	3.75	3.75	3.75	3.5	3.75	3.67	0.0297	0.0279	0.0279	0.0285	0.0159	0.0186	0.0174	0.0173
C-11	71002555	MIN.+002	4	3.25	4	3.75	4.25	4.25	3.75	4.08	0.0284	0.0252	0.0254	0.0263	0.0192	0.0189	0.019	0.0190
C-12	71001680	MIN.+001	4.25	4.25	4.25	4.25	4.5	4.5	4.5	4.50	0.0278	0.0258	0.0271	0.0269	0.0193	0.0191	0.0193	0.0192
C-13	71001686	MIN.+001	5.5	5	4.75	5.08	4.75	5	5.25	5.00	0.0279	0.0273	0.027	0.0274	0.0171	0.0189	0.0186	0.0182
C-14	71001787	MIN.+001	4.25	4.25	4.25	4.25	4.5	4.5	4.75	4.58	0.0322	0.0334	0.0338	0.0331	0.0156	0.0159	0.0163	0.0159
C-15	71001948	MIN.+001	3.75	3.75	3.75	3.75	4.25	4	4.25	4.17	0.0245	0.0275	0.0275	0.0265	0.018	0.0175	0.0179	0.0178
C-16	71001858	MIN.+002	4.25	4.5	4	4.25	4.5	4.25	4.25	4.33	0.0271	0.027	0.0275	0.0272	0.0182	0.0172	0.0178	0.0177
C-17	71001844	MIN.+001	4	4.25	4.25	4.17	4.5	4.5	4.5	4.50	0.0301	0.0309	0.0309	0.0306	0.0173	0.0179	0.0181	0.0178
C-18	71001950	MIN.+002	3.5	3.25	3.75	3.50	4	4.25	4.5	4.25	0.0275	0.0274	0.0278	0.0276	0.0196	0.0186	0.0197	0.0193
C-19	71001911	MIN.+002	4	3.75	4	3.92	4	3.75	3.75	3.83	0.029	0.0276	0.0268	0.0278	0.0191	0.0188	0.019	0.0190
C-20	71001157	MIN.+002	3.5	3.25	3.5	3.42	4	4	3.75	3.92	0.0256	0.0292	0.0278	0.0275	0.0183	0.0185	0.0186	0.0185
C-21	71001761	MIN.+002	3.5	4	3.5	3.67	3.75	4	4	3.92	0.0298	0.029	0.0283	0.0290	0.0149	0.015	0.0144	0.0148
C-22	71001745	MIN.+003	3.5	3.25	3.5	3.42	4.5	3.75	3.75	4.00	0.029	0.03	0.0307	0.0299	0.0177	0.0191	0.019	0.0186
C-23	71001174	MIN.+002	3.5	4	4	3.83	4.25	4	4	4.08	0.03	0.0304	0.0282	0.0295	0.0129	0.0178	0.0169	0.0159
C-24	71001709	MIN.+002	4	3.75	4	3.92	4.25	4.25	4.25	4.25	0.0276	0.0349	0.0355	0.0360	0.0197	0.0202	0.02	0.0200
C-25	71002563	MIN.+002	4.25	4.25	4.25	4.25	4.25	4.5	4.75	4.50	0.0221	0.0254	0.0261	0.0245	0.02	0.019	0.0197	0.0196
C-26	71002580	MIN.+001	4.25	4.25	4	4.17	3.75	4	4	3.92	0.0338	0.0351	0.0338	0.0342	0.0181	0.0197	0.0197	0.0192
C-27	71002557	MIN.+001	3.75	3.75	4	3.83	3.5	4	3.75	3.75	0.0307	0.0261	0.0283	0.0284	0.0175	0.017	0.0172	0.0172
C-28	71002565	MIN.+002	3.5	4	3.75	3.75	4	4	3.75	3.92	0.024	0.0236	0.0244	0.0240	0.0177	0.0199	0.0188	0.0188
C-29	71002569	MIN.+002	3.75	4.25	3.75	3.92	4.25	4.25	4	4.17	0.0258	0.0251	0.023	0.0246	0.0171	0.0168	0.0171	0.0170
C-30	71001744	MIN.+002	4.5	4.25	4.5	4.42	4.25	4	4.25	4.17	0.0296	0.0297	0.0305	0.0299	0.0135	0.0149	0.0162	0.0149
TEST AVERAGE			3.99				4.17				0.02821				TEST AVERAGE			
SPEC.= 4.0 TO 5.5 LBS.							SPEC.= 4.0 TO 5.5				SPEC.= .020 TO .025				SPEC.= .006 TO .018			

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Williams v. Remington

REMINGTON MODEL 710
Trial and Pilot SERIES C
PRELIMINARY MEASUREMENTS

FIRECONTROL INSPECTION TLW0300AU			FIRING PIN ASSEMBLY INSPECTION		FIRING PIN HEAD TO SEAR ENGAGEMENT, TLW0300N	BOLT STOP & RELEASE FUNCTION TEST TLW0300O, GUNS C-11 TO C-20		ISS: FUNCTION TEST, TLW0300P
TRIGGER RETURN	GAP	SEAR MOVEMENT	CHECK FOR TIGHTNESS		measurement method produces a dimension range	STOP FUNCTION	RELEASE DETENT	GUNS C-11 TO C-20
out of stock @ 20x		in stock by feel	TIP	HEAD				
OK	NONE	FREE	OK	OK	.058-.069			
OK	NONE	FREE	OK	OK	.061-.072			
OK	NONE	FREE	OK	LOOSE	.062-.073			
OK	NONE	FREE	OK	OK	.070-.081			
OK	NONE	FREE	OK	LOOSE	.066-.077			
OK	NONE	FREE	OK	OK	.064-.075			
OK	NONE	FREE	OK	OK	.064-.075			
OK	NONE	FREE	OK	OK	.064-.075			
OK	NONE	FREE	OK	LOOSE	.068-.079			
OK	NONE	FREE	OK	OK	.066-.077			
OK	NONE	FREE	OK	LOOSE	.067-.078	OK	GOOD	PASS
OK	NONE	FREE	OK	OK	.070-.081	OK	GOOD	PASS
OK	NONE	FREE	OK	OK	.065-.076	OK	GOOD	PASS
OK	NONE	FREE	OK	OK	.064-.075	OK	GOOD	PASS
OK	NONE	FREE	OK	OK	.066-.077	OK	GOOD	PASS
OK	NONE	FREE	OK	LOOSE	.064-.073	OK	POOR, LOOSE	PASS
OK	NONE	FREE	OK	OK	.069-.080	OK	GOOD	PASS
OK	NONE	FREE	OK	LOOSE	.065-.076	OK	POOR, LOOSE	PASS
OK	NONE	FREE	OK	OK	.066-.077	OK	GOOD	PASS
OK	NONE	FREE	OK	OK	.066-.077	OK	GOOD	PASS
OK	NONE	FREE	OK	LOOSE	.065-.076			
OK	NONE	FREE	OK	OK	.062-.073			
OK	NONE	FREE	OK	OK	.068-.079			
OK	NONE	FREE	OK	LOOSE	.070-.081			
OK	NONE	FREE	OK	OK	.062-.073			
OK	NONE	FREE	OK	LOOSE	.064-.075			
OK	NONE	FREE	OK	LOOSE	.062-.073			
OK	NONE	FREE	OK	LOOSE	.069-.080			
OK	NONE	FREE	OK	OK	.064-.075			
OK	NONE	FREE	OK	LOOSE	.067-.078			

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Confidential - Subject to Protective Order
Williams v. Remington

710 TRAIL & PILOT SERIES- B
 FINAL INSPECTION AFTER LIVE FIRE TESTING
 12/13/2000

BLUE INDICATES BEL
 RED INDICATES ABO

TEST LAB TRACKING NUMBER- TLW0300AB

GUN ID #	SERIAL NUMBER	ROUND LEVEL	HEADSPACE, REM. SPEC GAUGES	FIRINGPIN INDENT W/ COPPER CRUSHERS				SEAR ENGAGEMENT @ 20x		
				IN STOCK		LBS.		OUT OF STOCK		
				1.000	2.000	3.000	AVERAGE	1	2	3
B-1	71001124	510	MIN+.003	0.019	0.019	0.019	0.019	0.0312	0.0313	0.0297
B-2	71001184	510	MIN+.003	0.017	0.019	0.017	0.018	0.0269	0.0267	0.0280
B-3	71001244	510	MIN+.003	0.018	0.019	0.018	0.018	0.0268	0.0284	0.0280
B-4	71001288	510	MIN+.002	0.017	0.017	0.018	0.017	0.0307	0.0305	0.0312
B-5	71001421									
B-6	71001462									
B-7	71001504									
B-8	71001511									
B-9	71001524									
B-10	71001529									
B-11	71001534	113	MIN+.002	0.018	0.018	0.019	0.018	0.0301	0.0284	0.0296
B-12	71001535	110	MIN+.002	0.018	0.017	0.018	0.018	0.0234	0.0263	0.0271
B-13	71001539	110	MIN+.002	0.019	0.019	0.019	0.019	0.0284	0.0280	0.0282
B-14	71001559	110	MIN+.002	0.020	0.020	0.020	0.020	0.0243	0.0297	0.0297
B-15	71001578	110	MIN+.001	0.020	0.018	0.019	0.019	0.0244	0.0243	0.0250
B-16	71001580	110	MIN+.002	0.018	0.020	0.019	0.019	0.0308	0.0307	0.0314
B-17	71001583	110	MIN+.002	0.021	0.020	0.020	0.020	0.0315	0.0360	0.0371
B-18	71001584	110	MIN+.002	0.017	0.016	0.016	0.016	0.0245	0.0258	0.0276
B-19	71001595	110	MIN+.002	0.018	0.018	0.019	0.018	0.0265	0.0295	0.0292
B-20	71001605	110	MIN+.002	0.018	0.019	0.019	0.019	0.0283	0.0289	0.0293
B-21	71001613	215	MIN+.002	0.018	0.018	0.019	0.018	0.0294	0.0303	0.0302
B-22	71001623	228	MIN+.002	0.018	0.019	0.017	0.018	0.0307	0.0297	0.0295
B-23	71001632	228	MIN+.002	0.017	0.019	0.019	0.018	0.0288	0.0264	0.0275
B-24	71001634	228	MIN+.002	0.018	0.018	0.019	0.018	0.0323	0.0330	0.0314
B-25	71001643	190	MIN+.002	0.019	0.018	0.017	0.018	0.0306	0.0305	0.0326
B-26	71001647	228	MIN+.002	0.020	0.018	0.019	0.019	0.0332	0.0315	0.0304
B-27	71001724	228	MIN+.004	0.021	0.019	0.019	0.020	0.0292	0.0293	0.0301
B-28	71001760	228	MIN+.003	0.017	0.017	0.018	0.017	0.0362	0.0351	0.0350
B-29	71001782	228	MIN+.002	0.021	0.021	0.020	0.021	0.0278	0.0290	0.0286
B-30	71001789	228	MIN+.003	0.020	0.020	0.019	0.020	0.0282	0.0253	0.0267
TEST AVERAGE				0.019				TEST AVERAGE		
SPEC. = SAAMI MIN = .017								SPEC. = .020 TO .025		

ET08355

LOW SPEC
VE SPEC

LBS. AVERAGE	TRIGGER PULL WITH SPRING SCALE				SAFETY LEVER ON TO OFF FORCE				SAFETY LEVER OFF TO ON		
	OUT OF STOCK		LBS.		IN STOCK		LBS.		IN STOCK		
	1	2	3	AVERAGE	1	2	3	AVERAGE	1	2	3
0.0307	5	5.25	5.25	5.17	2.43	2.57	2.41	2.47	6.3	6.2	6.51
0.0272	4.75	5.25	5	5.00	2.015	1.93	1.9	1.95	5.37	5.39	5.26
0.0277	4	4.5	4.25	4.25	2.56	2.62	2.53	2.57	5.27	5.26	5.45
0.0308	5.5	5	5.25	5.25	2.27	2.39	2.3	2.32	7.44	7.25	7.56
0.0295	4	4.25	4.25	4.17	2.36	2.38	2.38	2.37	6.39	6.35	6.94
0.0256	5.25	5	5.25	5.17	2.47	2.56	2.52	2.52	6.055	6.055	6.15
0.0282	5.75	5.25	5.5	5.50	2.3	2.48	2.36	2.38	6.93	7.31	7.06
0.0279	6.75	6.5	6.25	6.50	2.41	2.4	2.32	2.38	6.92	7.05	7.04
0.0246	4.75	5	5	4.92	2.55	2.41	2.42	2.46	5.99	6.1	6.08
0.0310	5	5	5.25	5.08	2.39	2.4	2.4	2.40	6.11	6.44	6.4
0.0349	4.75	5	4.75	4.83	2.65	2.5	2.61	2.59	5.7	5.72	5.7
0.0260	5.75	6	6.25	6.00	2.5	2.51	2.49	2.50	5.6	5.74	5.65
0.0284	5	5	5	5.00	2.06	2.11	1.95	2.04	5.9	6.17	5.91
0.0288	4.5	5	4.5	4.67	2.47	2.55	2.56	2.53	6.59	6.5	6.67
0.0300	5.5	5.5	5.25	5.42	2.65	2.42	2.51	2.49	6.3	6.34	6.3
0.0300	4.5	5	5	4.83	2.29	2.37	2.27	2.31	5.9	5.99	6.14
0.0276	3.5	3.75	4.75	4.00	2.61	2.39	2.56	2.49	6.83	6.87	6.9
0.0322	4	4.5	4.5	4.33	2.43	2.32	2.51	2.42	7.03	7.07	7.21
0.0312	4.25	4.25	4.4	4.17	2.76	2.57	2.62	2.65	6.13	6.24	6.06
0.0317	5.5	5	4.5	5.00	2.18	2.24	2.28	2.23	6.22	6.37	6.25
0.0295	4.5	5.25	5	4.92	2.4	2.44	2.41	2.42	5.73	5.64	5.81
0.0354	5	4.5	4.5	4.67	2.32	2.37	2.33	2.34	6.04	5.96	5.75
0.0285	4.25	4.75	4.75	4.58	2.62	2.92	2.84	2.79	6.39	6.38	6.63
0.0267	6	5	5.75	5.58	2.12	2.23	2.31	2.22	6.53	5.95	5.99
0.0293	TEST AVERAGE			4.96	TEST AVERAGE			2.41	TEST AVERAGE		
	SPEC. = 4 LBS. TO 5.5 LBS.				SPEC. = SAAMI MIN = 1 LB.				SPEC. = SAAMI MIN		

ET08356

IN FORCE	FRONT MAGAZINE FEED LIPS	REAR MAGAZINE FEED LIPS	RECEIVER INSERT	REAR SURFACE OF BOLT LUGS	GALLING OF BOLT LUGS	CONDITION OF BOLT PLUG	BOLT PLUG RETAINING TABS (EARS)
LBS.							
AVERAGE							
6.34	0.414	0.419	SOME WEAR	OK	OK	OK	OK
5.34	0.418	0.421	SOME WEAR	OK	OK	OK	OK
5.33	0.418	0.421	WEAR	SLIGHT WEAR	OK	OK	OK
7.42	0.417	0.419	WEAR	SLIGHT WEAR	OK	OK	OK
6.56	0.419	0.420	SLIGHT WEAR	OK	OK	OK	OK
6.09	0.416	0.418	SLIGHT WEAR	OK	OK	OK	OK
7.10	0.416	0.419	SLIGHT WEAR	OK	OK	OK	OK
7.00	0.418	0.420	OK	OK	OK	OK	OK
6.06	0.419	0.422	OK	SLIGHT WEAR	OK	OK	OK
6.32	0.416	0.419	SLIGHT WEAR	SLIGHT WEAR	OK	OK	OK
5.71	0.418	0.420	SLIGHT WEAR	SLIGHT WEAR	OK	OK	OK
5.66	0.418	0.421	SLIGHT WEAR	SLIGHT WEAR	OK	OK	OK
5.99	0.420	0.420	SLIGHT WEAR	SLIGHT WEAR	OK	OK	OK
6.59	0.416	0.419	SLIGHT WEAR	OK	OK	OK	OK
6.31			SLIGHT WEAR	OK	OK	OK	OK
6.01	0.418	0.421	SLIGHT WEAR	OK	OK	OK	OK
6.87	0.419	0.422	WEAR	SLIGHT WEAR	OK	OK	OK
7.10	0.419	0.422	OK	SOME WEAR	OK	OK	OK
6.14	0.420	0.422	SOME WEAR	SLIGHT WEAR	OK	OK	OK
6.28	0.422	0.424	SOME WEAR	SLIGHT WEAR	OK	OK	OK
5.73	0.421	0.422	SOME WEAR	SOME WEAR	OK	OK	OK
5.92	0.421	0.421	WEAR	SOME WEAR	OK	OK	OK
6.47	0.421	0.424	SOME WEAR	SOME WEAR	OK	OK	OK
6.16	0.419	0.423	SOME WEAR	SOME WEAR	OK	OK	OK
6.27							

N = 1 LB.

ET08357

Headspace and Proof

Note: For each of the submitted samples in the test series of sample rifles, the proof test and Magnaflux™ inspections were performed at Mayfield prior to shipment to R&D. R&D Technicians, as part of the incoming inspection procedure, determined for each rifle that the Proof stamp and Magnaflux™ inspection stamps were present. Actual measurements of the headspace were not made.

However, for series "B" & series "C" rifles, measurements of the headspace were recorded. These readings are summarized in the table below.

The Headspace readings are well within the Min. to Min+ 0.007" range.

3.1.1.3 TLW0407E – Measure Headspace
(Please see Note above)

3.1.1.4 TLW0407F – Proof Test
(Please see Note above)

3.1.1.5 TLW0407G – Re-Measure Headspace after Proof *

(T&P, Series "B" & "C") – Specification: $\leq$ Min. + 0.007" after Proof.

Variable	N	Mean	Std. Dev.	95% Confidence Interval
Headspace: Series B (all readings are in the min. + range)	30	0.00113 in.	0.00051 in.	0.00095, 0.00132
Headspace: Series C (all readings are in the min. + range)	30	0.00100 in.	0.00045 in.	0.00084, 0.00116

*Note that the raw data for Series "B" Headspace is found in Part B listed under tab "Series B FIRING PIN INDENT."

Raw data for Series "C" Headspace is found in Part B listed under tab "Series C PRELIMINARY MEASUREMENTS."

ET08359