

## Test Lab Work Request Form

Date Submitted: 10 March, 2000

Tracking #: TLW 0010AB

Project #: 241095

Engineer: J.R.SNEDEKER

### Test Objective:

#### TLW0010AB - Basic Shoulder Function Test:

To get an early picture of the product's functional capability from the perspective of the customer, a 100 round per rifle shoulder function test will be conducted to evaluate the potential for feeding problems. These malfunctions may be different from those noted in the jack test due to shooter reactions to recoil potentially affecting round position in the magazine box. The test will be conducted in the long range shooting from a standing position. Twenty-five (25) rounds each of four (4) different bullet types will be shot in each sample rifle.

All malfunctions and any unusual behavior will be noted on the data forms. The overall average of all sample rifles should be at or below the 2% malfunction rate. All rifles must pass the 2% criteria due to the small number of rounds being fired. No major mechanical failures are allowed 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 will be carefully examined for signs of excessive wear, especially with respect to the plastic components.

### Test Description:

#### Method:

- Check each rifle for the presence of the proof stamp(s) – do not shoot unless the stamp(s) are present.
- Check each rifle for headspace
- Draw ammunition from stores – See test manager for ammo types to be used for this test.
- Perform all range preparations required for shooting in the long range. Make sure the range ventilation is turned on.
- Wear safety glasses with side shields and double hearing protection.
- When ready to fire, the tester should stand in the doorway of the long range and when firing should be careful to keep the bullets in the center of the range to prevent damage to shields, lights, etc.
- Load the five rounds into the rifle, one in the chamber and four in the magazine, do not shoot single shot by hand-feeding single rounds into the chamber.
- Push the safe to the "fire" position,
- Fire the first round in the chamber, listen for any off-sounds, and be alert for any other

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unusual behavior.

- Open the bolt; eject the spent round, note any extraction or ejection problems.
- Close the bolt to load the first round from the magazine into the chamber, note any feeding or stemming problems.
- Continue to fire the remaining rounds in the magazine until the last round is fired.
- Push the Safety to "On Safe" position, the safety will be pushed to the fire position at the start of every five round trial and will be pushed to the On Safe position at the end of every five round trial. The effect of the action of the safety lever on the trigger assembly side-plate needs to be determined.
- After firing ten rounds the rifle will be checked carefully for the presence of any live ammunition and if empty will be placed in the cooling rack. The safety will be in the "On Safe" position and the bolt will be unlocked and fully open at all times. Compressed air may be used, if necessary to cool the inside of the chamber area if the rifle is excessively hot from firing.
- All malfunctions will be recorded on the data sheets.

Data Required:

- Rifle serial number
- Tester's name
- Date of test firing
- The TLW#
- The ammunition used for the test with the ammo code number of the rounds actually used.
- Any malfunctions noted or other unusual items of note.

**Resource Usage:**

**Manpower Requirements -**

**Facility Requirements -**

**Test Results Required:**

**Formal Report:**      **Data Only: X**  
**REQUESTED Completion Date:**

**Required Materials/Parts/Equipment (include quantities):**

**Test Parts Availability Date:**

**Start Date:** 4-4-00

**Completion Date:** 4-5-00

**Report Date:** 7/29

**Test Assigned To:** JESSE ARNOLD

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DATE 4-4-00 thru 4-5-00

M710 BASIC SHOULDER  
FUNCTION TESTPROJECT# 241095  
TLW 0010AB

GUN	SERIAL#	AMMO	RDS.	M.F.	BOLT OVERRIDE	STEM LOW	FOLLOW DOWN
A-5	XC 1120	REM R30065 180GR	20				
		REM R30067 220GR	20				
		REM L30062 150GR	20				
		REM PRT3006B 165GR	20				
		REM R30063 150GR	20		1		
		<b>TOTAL</b>	<b>100</b>		<b>1</b>		
GUN	SERIAL#	AMMO	RDS.	M.F.	BOLT OVERRIDE	STEM LOW	FOLLOW DOWN
A-6	XC 1121	REM R30065 180GR	20				
		REM R30067 220GR	20				
		REM L30062 150GR	20				
		REM PRT3006B 165GR	20				
		REM R30063 150GR	20				
		<b>TOTAL</b>	<b>100</b>				
GUN	SERIAL#	AMMO	RDS.	M.F.	BOLT OVERRIDE	STEM LOW	FOLLOW DOWN
A-7	XC 1122	REM R30065 180GR	20				
		REM R30067 220GR	20				
		REM L30062 150GR	20				
		REM PRT3006B 165GR	20				
		REM R30063 150GR	20				
		<b>TOTAL</b>	<b>100</b>				
GUN	SERIAL#	AMMO	RDS.	M.F.	BOLT OVERRIDE	STEM LOW	FOLLOW DOWN
A-8	XC 1123	REM R30065 180GR	20				
		REM R30067 220GR	20				
		REM L30062 150GR	20		1		
		REM PRT3006B 165GR	20				
		REM R30063 150GR	20				
		<b>TOTAL</b>	<b>100</b>		<b>1</b>		

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DATE 4-4-00 thru 4-5-00

M/710 BASIC SHOULDER  
FUNCTION TESTPROJECT# 241095  
TLW 0010AB

GUN	SERIAL#	AMMO	RDS.	M.F.	BOLT OVERRIDE	STEM LOW	FOLLOW DOWN
A-9	XC 1124	REM R30065 180GR	20				
		REM R30067 220GR	20				
		REM L30062 150GR	20				
		REM PRT3006B 165GR	20				
		REM R30063 150GR	20				
		TOTAL	100				
GUN	SERIAL#	AMMO	RDS.	M.F.	BOLT OVERRIDE	STEM LOW	FOLLOW DOWN
A-10	XC 1125	REM R30065 180GR	20				
		REM R30067 220GR	20				
		REM L30062 150GR	20		2		
		REM PRT3006B 165GR	20				
		REM R30063 150GR	20				
		TOTAL	100		2		
GUN	SERIAL#	AMMO	RDS.	M.F.	BOLT OVERRIDE	STEM LOW	FOLLOW DOWN
A-11	XC 1126	REM R30065 180GR	20				
		REM R30067 220GR	20				
		REM L30062 150GR	20				
		REM PRT3006B 165GR	20				
		REM R30063 150GR	20				
		TOTAL	100				
GUN	SERIAL#	AMMO	RDS.	M.F.	BOLT OVERRIDE	STEM LOW	FOLLOW DOWN
A-12	XC 1127	REM R30065 180GR	20				
		REM R30067 220GR	20				
		REM L30062 150GR	20				
		REM PRT3006B 165GR	20				
		REM R30063 150GR	20				
		TOTAL	100				

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DATE 4-4-00 thru 4-5-00

M/710 BASIC SHOULDER  
FUNCTION TESTPROJECT# 241095;  
TLW 0010AB

GUN	SERIAL#	AMMO	RDS.	M.F.	BOLT OVERRIDE	STEM LOW	FOLLOW DOWN
A-13	XC 1128	REM R30065 180GR	20				
		REM R30067 220GR	20				
		REM L30062 150GR	20				
		REM PRT3006B 165GR	20				
		REM R30063 150GR	20				
		TOTAL	100				
GUN	SERIAL#	AMMO	RDS.	M.F.	BOLT OVERRIDE	STEM LOW	FOLLOW DOWN
A-14	XC 1129	REM R30065 180GR	20				
		REM R30067 220GR	20				
		REM L30062 150GR	20				
		REM PRT3006B 165GR	20				
		REM R30063 150GR	20				
		TOTAL	100				
GUN	SERIAL#	AMMO	RDS.	M.F.	BOLT OVERRIDE	STEM LOW	FOLLOW DOWN
A-15	XC 1130	REM R30065 180GR	20				
		REM R30067 220GR	20				
		REM L30062 150GR	20				
		REM PRT3006B 165GR	20				
		REM R30063 150GR	20				
		TOTAL	100				
MALFUNCTIONS ALL GUNS ALL AMMO TYPES							
		AMMO	RDS.	M.F.	BOLT OVERRIDE	STEM LOW	FOLLOW DOWN
		REM R30065 180GR	300				
		REM R30067 220GR	300				
		REM L30062 150GR	300		6		
		REM PRT3006B 165GR	300		1		
		REM R30063 150GR	300		2		
		TOTAL	1500		9		

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