Test Lab Work Request Form

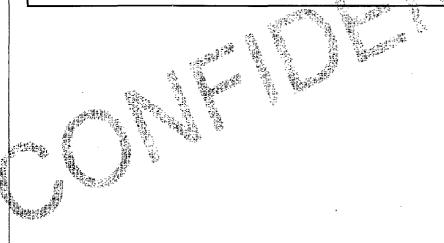
Rev.3 -20 April, 2000

Date Submitted: 10/27/00 Tracking # : TLW0344

Project # : 241095 Engineer: S. Franz for M. Keeney

Test Objective: A number of issues were identified in DAT Phase II that resulted in design changes. The purpose of this test is to determine if design changes made satisfactorily solve those deficiencies. Successful completion of this test will give a green light for T & P build and test activity to commence. Some of these issues have already been tested. For instance the magazine box weld strength was increased through weld parameter optimization and then subsequently tested via a tensile test run in the Metallurgical Lab. More specifically this test will focus on the following:

- Locking lug cam surface geometry changes and effect on bolt opening/closing
- Bolt stop location and detent(stock) support changes
- 2 bolt plug designs will be tested
 - ✓ Design #1: DAT design with material changed to nylon
 - ✓ Design #2: New design with material changed to nylon-
- Stock mold alterations to bring stock within model drawing (i.e. no shims)
- Permanent recoil lug attachment to the stock (shimmed and glided)



Test Description:

Test Plan:

- 10 guns
 - 1. System operation/bench check
 - 2. Measure trigger pull 9 (3 measurements/gun)
 - 3. Measure bolt opening and closing force (3 measurements/gun)
 - 4. Measure bolt stop opening and closing force (3 measurements/gun)
 - 5. Confirm proper fit between stock and receiver (no shims)
 - 6. Confirm permanent attachment of recoil lug to stock
 - 7. Headspace, Proof, Headspace
 - 8. 200 round jack function test (all 10 guns)
- 8 guns
- 1. ISS abuse test (See S. Franz)
- 1 gun
- 1. 500 round jack function test

Resource Usage:

Manpower Requirements -

Test Results Required:

Formal Report: X Data Only:

Requested Completion Date: 10/31/00

Facility Requirements -

Required Materials/Parts/Equipment (include quantities): Ten guns will be delivered. Five will have bolt plug design #1 and the remaining five bolt plug design #2.

Test Parts Availability Date: 10/27/00

Start Date: 300 ct 2000

Completion Date: 30 Oct 2000

Report Date:

Test Assigned To: Jesse Arnold, Bob Lee & Jody

Carson U. Casson L.

Assignment Date: 10/30/00

ET06650

Harold J. Carson

TLW0344

30 October 2000

Dummy Cocked 4.14 3.76 4.78 4.23 3.24 3.40 3.64 3.43 2.46 2.42 2.56 2.48	Un-Cocked 12.48 12.78 12.52 12.59 13.60 14.10 13.56 13.75 13.30 13.06 13.10	No Dummy Cocked 2.76 2.50 2.76 2.67 2.80 2.64 3.08 2.84 2.34	Un-Cocked 11.62 11.66 11.58 11.62 13.52 13.32 13.54 13.46	Dummy See Note See Note	No Dummy See Note	No Dummy 38.50 39.20 38.40 38.70 32.80
4.14 3.76 4.78 4.23 3.24 3.40 3.64 3.43 2.46 2.42 2.56 2.48	12.48 12.78 12.52 12.59 13.60 14.10 13.56 13.75 13.30	2.76 2.50 2.76 2.67 2.80 2.64 3.08 2.84	11.62 11.68 11.58 11.62 13.52 13.32 13.54	See Note	See Note	38.50 39.20 38.40 38.70 32.80
3.76 4.78 4.23 3.24 3.40 3.64 3.43 2.46 2.42 2.56 2.48	12.78 12.52 12.59 13.60 14.10 13.56 13.75 13.30 13.06	2.50 2.76 2.67 2.80 2.64 3.08 2.84	11.66 11.58 11.62 13.52 13.32 13.54			39.20 38.40 38.70 32.80
4.78 4.23 3.24 3.40 3.64 3.43 2.46 2.42 2.56 2.48	12.52 12.59 13.60 14.10 13.56 13.75 13.30 13.06	2.76 2.67 2.80 2.64 3.08 2.84	11.58 11.62 13.52 13.32 13.54	See Note	See Note	38.40 38.70 32.80
4.23 3.24 3.40 3.64 3.43 2.46 2.42 2.56 2.48	12.59 13.60 14.10 13.56 13.75 13.30 13.06	2.67 2.80 2.64 3.08 2.84	11.62 13.52 13.32 13.54	See Note	See Note	38.70 32.80
3.24 3.40 3.64 3.43 2.46 2.42 2.56 2.48	13.60 14.10 13.56 13.75 13.30 13.06	2.80 2.64 3.08 2.84	13.52 13.32 13.54	See Note	See Note	32.80
3.40 3.64 3.43 2.46 2.42 2.56 2.48	14.10 13.56 13.75 13.30 13.06	2.64 3.08 2.84	13.32 13.54	See Note	See Note	
3.64 3.43 2.46 2.42 2.56 2.48	13.56 13.75 13.30 13.06	3.08 2.84	13.54			
3.43 2.46 2.42 2.56 2.48	13.75 13.30 13.06	2.84				33.12
2.46 2.42 2.56 2.48	13.30 13.06		13.46			32.64
2.42 2.56 2.48	13.06	2.34				32.85
2.56 2.48			13.42	See Note	See Note	35.62
2.48	13,10	3.08	12.60		1917 PASE NAME OF THE P	35.94
		2.60	12.36			34.78
	13.15	2.67	12.79	() () () () () () () () () ()		35.45
4.06	11.54	3.58	10.66.,	See Note	See Note	34.72
4.14	11.78	3.10	10 64	THE PART OF THE		33.98
3.46	11.56	3.34	10.56	ta Asia. Valida		34.42
3.89	11.63	3.34	10.62	23		34.37
3.36	13.3 6 ∘,	2.40	12.62	See Note	See Note	34.68
3.04	_ g : #4.00 (i)	2.58	12.42		·	34.86
3.74	13.26	2.68	12.02			34.92
3,38	18.54	2.55	12.35			34.82
3.04	12.16	2.60	11.62	See Note	See Note	33.68
3.74	11.48	2.58	11.48	_		34.22
3.00	11.42	2.42	11.52			33.36
3.26	11.69	2.53	11.54			33.75
	14.96	2.50	15.08	See Note	See Note	33.00
						32.98
		2.68			-	32.84
2,97	14.88	2.59				32.94
				See Note	See Note	40.30
				000 11000	000 11010	40.84
3.30	14.02	2.92				37.90
3.28	14.61	3.09	14,97			39.68
3.02				See Note	See Note	29.92
				333,1020	000 11010	30.18
						31.66
						30.59
				See Note	Son Note	29.80
				266 MOTE	See Note	
						30.12
						30.58 30.17
	3.89 3.36 3.04 3.74 3.04 3.74 3.06 3.26 2.94 2.98 2.98 2.97 3.18 3.36 3.30	3.89 11.63 3.36 13.36 3.04 34.00 3.74 13.26 3.38 554 3.04 12.16 3.74 11.48 3.06 11.42 3.26 11.69 2.94 14.96 2.98 14.90 2.98 14.78 2.97 14.88 3.18 15.14 3.36 14.68 3.30 14.02 3.28 14.61 3.02 12.14 3.58 11.52 2.88 11.74 3.16 11.80 3.66 10.34 3.88 9.84 3.56 9.90	3.89 11.63 3.84 3.36 13.36 2.40 3.04 42.00 2.58 3.74 13.26 2.68 3.38 45.54 5.55 3.04 12.16 2.60 3.74 11.48 2.58 3.06 11.42 2.42 3.26 11.69 2.53 2.94 14.96 2.50 2.98 14.78 2.68 2.97 14.88 2.59 3.18 15.14 3.32 3.36 14.68 3.04 3.30 14.02 2.92 3.28 14.61 3.09 3.02 12.14 3.42 3.58 11.52 3.48 2.88 11.74 3.28 3.16 11.80 3.39 3.66 10.34 3.60 3.88 9.84 3.58 3.56 9.90 3.44	3.46 11.56 3.34 10.56 3.89 11.63 3.84 10.62 3.36 13.36 2.40 12.62 3.04 14.00 2.58 12.42 3.74 13.26 2.68 12.02 1.38 16.54 2.55 12.35 3.04 12.16 2.60 11.62 3.74 11.48 2.58 11.48 3.06 11.42 2.42 11.52 3.26 11.69 2.53 11.54 2.94 14.96 2.50 15.08 2.98 14.90 2.58 15.12 2.98 14.78 2.68 15.06 2.97 14.88 2.59 15.09 3.18 15.14 3.32 14.90 3.36 14.68 3.04 15.18 3.30 14.02 2.92 14.84 3.28 14.61 3.09 14.97 3.02 12.14 3.42	3.46 11.63 3.34 10.62 3.89 11.63 3.84 10.62 3.36 13.36 2.40 12.62 See Note 3.04 14.00 2.58 12.42 3.74 13.26 2.68 12.02 1.38 16.54 15.5 12.35 3.04 12.16 2.60 11.62 See Note 3.74 11.48 2.58 11.48 3.06 11.42 2.42 11.52 3.26 11.69 2.53 11.54 2.94 14.96 2.50 15.08 See Note 2.98 14.78 2.68 15.06 2.97 14.88 2.59 15.09 3.18 15.14 3.32 14.90 See Note 3.36 14.68 3.04 15.18 3.30 14.02 2.92 14.84 3.28 14.61 3.09 14.97 3.02 12.14 3.42 11.34 See Note 3.58 11.52 3.48 10.96 <	3.46 11.56 3.34 10.56

Note: Consistent closing forces could not be obtained.