TEST AND MEASUREMENT LAB - TEST REPORT

REQUESTER:M.KEENEY WRITTEN BY:C. STEPHENS DATE:7 JUNE 93

WORK ORDER:481153 REPORT NO.:931241 TEST TYPE:DRY CYCLE

FIREARM STAT'S: MODEL:700 CAL OR GAGE: N/A

BARREL TYPE:STD. PROOFED:YES

REASON FOR TEST: TO DETERMNE THE EFFECT OF REDUCING THE WEIGHT OF THE M/700 FIRING ON THE ENDURANCE LIFE OF THE ASSEMBLY.

EQUIPMENT REQUIRED: DRY CYCLE MACHINE, M/700 RIFLE, FIRING PINS.

TEST PROCEDURE: A M/700 RIFLE WAS PLACED IN THE DRY CYCLE MACHINE AND SIX EXPERIMENTAL FIRING WERE PLACED INTO THE BOLT ASSEMBLY AND DRY CYCLED FOR 30,000 CYCLES OR FAILURE.

TEST RESULTS: THE TEST RESULTS ARE LISTED BELOW.

| BOLT NUMBER | CYCLES |
|---|---|
| 4 | 5245 |
| 5 | 16390 |
| 6 | 2635 |
| 7 | 26554 |
| 8 | 8050 |
| 9 | 29320 |

30K each

Test Request No. 931241

## RESEARCH TEST & MEASUREMENT LAB WORK REQUEST

**Purpose for Testing:**

| | | |
|---|---|---|
| __ Developmental | ✓ Design Change Eval. | __ Ammunition Evaluation |
| __ Design Acceptance | __ Plant Assistance | __ Cost Reduction |
| __ Trial & Pilot | __ Marketing Request | __ Litigation Support |
| __ Safety Issue | __ Quality Evaluation | __ Other |

**Types of Testing Requested:**

| | | |
|---|---|---|
| __ Intentional Abuse | __ Endurance Testing | __ Photography/Video |
| __ Function Test | ✓ Dry Cycle Testing | __ High Speed Photography |
| __ Accuracy Test | __ Ammunition Testing | __ Other (specify) |
| ✓ Measurements | __ Environmental Testing | _____ |

**Type Report Desired:**
__ Formal Written
✓ Informal Written
__ Results only

**Date Requested:** 3 / 5 / 93 (dd / mm / yy)
**Date Needed:** 28 / 5 / 93 (dd / mm / yy)

**Work Order No. to be Charged for This Testing:** 481153

**Name of Requester:** Mike Keeney
**Extension where you can reached:** 3267
**Pager Number:** _____

**Firearm Descriptions:**

| | | |
|---|---|---|
| Model(s): _____ | Model(s): _____ | Model(s): _____ |
| Gage/Cal: _____ | Gage/Cal: _____ | Gage/Cal: _____ |
| Barrel Type: _____ | Barrel Type: _____ | Barrel Type: _____ |
| RAMAC #: _____ | RAMAC #: _____ | RAMAC #: _____ |
| No.of samples: _____ | No.of samples: _____ | No.of samples: _____ |

Explain in DETAIL the reason(s) for conducting this test.
- what are we trying to learn?
- what will be the criteria used to judge the results?
- use back of sheet if more room is needed .

DETERMINE THE EFFECT OF A REDUCTION IN WEIGHT OF THE M/700 FIRING PIN ON LOCK TIME AND ENDURANCE LIFE OF THE M24.

TEST PIECES CONSIST OF 3 SAMPLES PER EACH GROUP, GROUPS ARE AS FOLLOWS: ① STD M/700 FIRING PIN. 1-3
② STD M/700 FIRING PIN TIP W/ ALUMINUM SHANK 4-6.
③ TITANIUM FIRING PIN TIP W/ ALUMINUM SHANK. 7-9.

B6889854 Dry Cycle 30,000 cycles each

TL-FORM # -001

Note: No firearms or parts will be tested in the Lab unless accompanied by a Work Request that is completely filled out along with the guns or parts that are to be tested. NO EXCEPTIONS

Date completed: __/__/__
Completed By: _____
Report Completed: __/__/__