

DATE REQUESTED

1-4-75

WORK ORDER

E0262

DESIGNER OR ENGINEER

A. HUGICK

MODEL

700

CAL. OR GAUGE

30/06

BARREL TYPE

RDC

TYPE OF TEST

NEW DESIGN

DESIGN CHANGE

DRY CYCLE

ACCURACY

HAND

LOADING

STRESS

PRESSURE

MUZZLE

VELOCITY

FUNCTION

PHOTOS

EVALUATION

BOLT

VELOCITIES

OTHER

DROP TEST

ESTIMATED COMPLETION DATE

6-16-75

REPORT REQUIRED

FORMAL

INFORMAL

X

TEST RESULTS ONLY

TEST OBJECTIVE

DROP TEST

M700

RIFLE

INVESTIGATION

GUNS REQUIRED

6631671 - M700 30/06 BDC

TEST COMPLETION DATE

SIGNED

CONDITIONS :

- SAFE - ON
- PEN ONLY DROP TEST
- CRUISER IN CHAMBER EACH TEST FOR NO.
- ONE PER HEIGHT
- ONE FIRE CONTROL & STRIKER PER PROB
- DROP HEIGHTS : 6, 12, 18, 24, 30, 36, inches
- M700 CONDOR GUN ASSEMBLY
- DROP SUCH THAT RIFLE HITS ON
EXPOSED PROJECTION OF STRIKER (EXTEN
STOP SURFACE VIA STEEL SURFACE.
- RECORD RIFLE WEIGHT
- NEW BOLT PLUG PER DROP.
- TRIGGER PULL AND SEAL ENGAGEMENT
SET TO MEAN.

WT: 7.50 lbs.

PICTURES

TO W.B. LEEK
CC: ED BARNETT

MODEL _____ CAL _____ SEV. "KO" _____ TRIGGER _____

CAL. S.N. _____ DROP HEIGHT _____ DEAR ENG. _____

MODEL	SEV. "KO"	6"	12"	18"	24"	30"	36"
IMPACT SPEED							
DEFENSE PIV. FALL?	IS						
	NO						
INDENT @ FALL 100'							
6000							
DAWNALSO							
IF SO, WHAT?							
$V_f = \sqrt{8AD}$							
$V_f = 13.4322 \sqrt{D}$							
$V_f = 16.0497 \sqrt{D}$							
$V_b = 11.3 \frac{CF}{\sqrt{E}}$							
12 16.0 5.2							
18 19.6 2.1							
24 22.7 2.7							
30 25.4							
36 27.8 2.4							

TRIGGER PIN INVESTIGATION

SAMPLE ORIGIN: FINAL ASSY TEST DATE: 6-23-75 TESTER: AWD-CJM

MODEL: 700 CALIBER: 30-06 BDL SER. NO.: 6631671 TRIGGER PIN SPEC.

DROP HEIGHT, IN.	6	12	18	24	30	36
KINETIC ENRG., FT.-LBS	3.8	7.5	11.2	15.0	18.8	22.5
IMPACT SPEED, FT./SEC.	11.3	16.0	19.6	22.7	25.4	27.8

GUN WEIGHT AS DROPPED: 7.50 POUNDS

SAFE POSITION AFTER	ON	ON	ON	ON	ON	ON
DID FIRING PIN FALL?	NO	NO	NO	NO	NO	NO
INDENT TO FALL, 0.001"	—	—	—	—	—	—
F. PIN FALL OK?	YES	YES	YES	YES	NO	NO
ANY PART DAMAGE?	NO	NO	NO	NO	NO	NO
WHAT?	(1)	(2)	(3)	(4)	(5)	(6)

PROCEDURE: NEW FIRING PIN ASSY FOR EACH DROP
 NEW TRIGGER HOUSING " " " "
 SEAR ENGAGEMENT FACTORY SET & SEALED
 TRIGGER PULL - ADJUSTED TO MEAN OF 4 LB

TRIGGER OVERTRAVEL: 3/4 TURN PAST
DISENGAGEMENT

① DROP

② CHECK POSITION OF SAFETY

EXAMPLE F-PIN HEAD TO SEE IF
COCKED OR NOT

1. IF COCKED & SAFE

PULL TRIGGER, ~~THAT~~ ^{THEN} RELEASE

SAFE TO FIRE POSITION

IF, OK, THEN FIRE TO VERIFY THAT INDENT IS 0

2. IF UNCOCKED, EXAMPLE

COPPER CRUSHER FOR INDENT

THEN COCK GUN FOR

PROPER OPERATION.

MODERATE
STUCK

FALL
TO OFF
SAFE

FIRING
PIN
HEAD

FIRING
PIN

SEAZ

SAFETY

NO

VERY MINOR VERY MINOR VERY MINOR VERY MINOR
FIRING PIN HEAD IN ORIGINAL POSITION

YES

MINOR VERT MINOR MINOR VERT MINOR
SOME UPSET SOME UPSET SOME UPSET

FIRING PIN HEAD IN ORIGINAL POSITION
TRIGGER BOUND TO REAR BY T. GUARD
F. PIN DID FALL FOR THIS REASON.

YES

MINOR
NO F.P.
UPSET

MINOR

MODERATE
F.P. HEAD
MINOR
SAFE

MODERATE
CRACKING
SUPPORTS

FIRING PIN PUSHED FORWARD
PLUS WITH BOLT PLUG.

YES

F.P.H. V 3/4 BOLT
MODERATE BENT SIDEWAYS.
UPSET CONC. C BOLT

SLIDING CONTACT DUTCH

BOLT PLUG. SOME
BINDING.. OIL IN BOLT

MINOR

MODERATE

F.P. HEAD

CRACK P

MODERATE

SUPPORTS

SAFE, SOME

~~1. WHEN SAFETY WAS MOVED
TO FIRE POSITION, TUGGER IS PULLED~~
REASON: TUGGER RUBS ON
RIGHT SIDE OF SLOT LIX
TR. GUARD ASS. OR BEFORE
PROP.

② First #18 was dis qualified because drop
height was unknown. The striker assembly did not
move freely

③ SAFETY COULD NOT BE MOVED
TO FIRE POSITION WITH ONLY
THUMB PRESSURE. LIGHTLY TAPPED
FORWARD & FIRED. THIS IS
A PROBLEM, BOLT STOP BINDS,

④ DITTO ABOVE. AFTER RECALL
& TUGGER PULL 1ST TIME F.D.
DID NOT FALL. CR. THEREAFTER
OIL INDENT AS SAFETY
MOVED TO CRF. GUN FUNCTIONED
OK AFTER INITIAL PROBLEMS.

⑤ F.D. ASSY FALL @ SAFETY RELEASE
OIL INDENT - LIGHT.
F.D. ASSY APPEARS TO BE BOUND &
BINDING IN BOLT PLW.
- F.D. ASSY DID NOT FALL
ON SUBSEQUENT CYCLING.
IN OPERATIVE

(C) FORMER PIN D.D. FOR FIVE
AS ~~WET~~ WETTED BLENDED
COULD NOT BE RELEASED THROUGH
SUSPECTED BEING R.D. BINDING
IN FOOT PLUG.

OFF GEAR

17/11/70

SEAL

SAFETY

5"

YES

SEVERE

BOUND

MODERATE

MODERATE

LIGHT IMPACT

BINDING

R.P.H.

CRACKS

.012 DUE TO R.P.H.

SIDE SIDE

VERY MINOR

SEAL CRACK

3/10/70

R SAFETY

SURFACE

GUN IS INOPERATIVE F. PLUG
BOUND ON BOLT PLUG.

6"

NO

SEVERE

BINDING

MOD E.F.P.H.

MOD CRACK

MOD. CRACK

R SEAL CRACK

GUN IS INOPERATIVE F-PLUG
BOUND ON BOLT PLUG.

DAMAGED PARTS

FLYING PIN HEAD

BOLT PLUG

SEAL

SAFETY

TRIGGER FALL INVESTIGATION. SAMPLE ORIGIN: _____

SAMPLE ORIGIN: _____ TEST DATE: _____ TESTER: _____

MODEL: _____ CALIBER: _____ SER. NO.: _____ TRIGGER ROLL
SPEC.

DROP HEIGHT, IN.	6	12	18	24	30	36
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KINETIC ENL. FT.-LBS						
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IMPACT SPEED FT./SEC.	11.3	16.0	19.6	22.7	25.4	27.8
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GUN WEIGHT AS DROPPED: _____

DID FIRING PIN FAIL?

INDENT @ FALL 0.001"

ANY PART DAMAGE?

WHAT?

PROCEDURE: NEW FIRING PIN ASSY FOR EACH DROP

NEW TRIGGER HOUSING " " " "

SEAR ENGAGEMENT FACTORY SET & SEALED

TRIGGER ROLL - ADJUSTED TO MEAN OF

VALLEY, IN