

710 Magnum T&P Conf. Call - 1/14/04 @ 9:00 am EST

## • 3 Issues

1. SAAMI Jar-Off Test
2. Obstructed Bore Test
3. Bolt Head Manufacturing Control (extractor)

## 1. SAAMI Jar-Off Test

- 1 of 6 guns failed in horizontal position, btm gun down
- gun set to process min. for engagement (.020") and trigger pull (4 lbs)
- determined sear/connector moved, not an over-ride
- inspected gun and re-measured settings - no appreciable change
- retorqued take down screws to factory spec. and redropped - dropped 3 times - fired on 3<sup>rd</sup> drop
- saw Diaz support bracket screw was partially stripped on head but was tight, installed new screw and dropped again, fired on 2<sup>nd</sup> drop
- disassembled fire control and visually inspected components - found connector could rock on the sear, high spot on trigger front face
- pressing on bottom front face of connector rotates and moves connector .012" at top
- took a trigger/sear from a DAT gun (connector to sear fit tight, no rock)
- reassembled and dropped 5 times without failure
- completed SAAMI Drop test OK, did break rear insert on last drop
- measured trigger and sear and compared to model drawing - in spec but on high side for flatness (*both trigger & connector*)
- looked at other guns from T&P sample and they exhibited similar fit between connector and trigger
- Measured trigger and connector on 6 drop guns - some dimensions out of spec. on both trigger and sear but not specific to failed gun

## 2. Obstructed Bore

- From DAT testing new hardness spec. determined Rc 42-47 (*7 at Rc (45, 46) DAT - 2 guns tested*)
- Testing T&P sample at Rc 42 and bolt lugs sheered and bolt exited gun rearward
- Tested 2 more samples at Rc 44 and bolts stayed in guns - bolt plugs came off and stock damage did occur
- New proposed spec will have Rc 44 min.

## 3. Bolt Head Manufacturing

- Failed a bolt shroud during 100 rd. proof test at 60+ rds. (never did this)
- Inspected bolt heads and measured dimensions - bolt heads not to print on extractor cuts and shroud cuts
- Mayfield has had problems controlling these cuts

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- Design proposed a change to make extractor cuts less sensitive
- Approx. 30 - 40 bolts processed, look much better
- Testing has started on these yesterday

**Remaining Testing**

- High Pressure
- All function and Endurance

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