

XC File

TO: JWB

FAM

FHS

From RS MURPHY

Subject Competitive Review - Magazine Systems

A meeting was held on March 18 to review competitive magazine box systems and compare them to our NBAR proposed offering. The magazine function, latch system, material, construction and aesthetics were evaluated. I have listed below summary of the comments with a short description of each system.

Weatherby Vanguard has a one piece black anodized aluminum trigger guard with an aluminum hinged floorplate. The trigger guard screws are exposed and the latch is located on the front of the trigger guard bow. The latch is rotated to open the floorplate and recoil would tend to move the latch similarly. Storage of rounds in the magazine is staggered and pressure to present a feeding round is supplied by a flat w-spring. The follower is a stamped assembly.

Comments - when unlocked, the floorplate hits finger, poor placement of latch
- spring supplies good pressure to front of follower.

Smith & Wesson 1500 system is identical to the Weatherby Vanguard with the following exceptions.

- floorplate is a stamped metal assembly
- scotch follower design modifications
- micro-bonded stamped floorplate and cast aluminium guard (probably for color match)

Comments - cheap stamped follower

- cast aluminium 1 piece guard and magazine
- poorly designed floorplate, stamping difficult to assemble

Ruger M77 is comprised of two major assemblies. The trigger guard is investment cast in aluminium and the latch, spring and pivot is assembled to it. The latch is rotated to unlock the floorplate and is operated from inside of the trigger bow. It appears to be balanced to negate the effects of recoil. The guard is held in place by two screws, the front of which is covered by the floorplate. The floorplate assembly is comprised of the hinge, hinge pin, floorplate, w. spring and follower. The hinge supplies a bearing surface for and is held in place by a take down screw and is part of Ruger's patented recoil lug. The hinge, floorplate and follower are investment cast. The hinge, floorplate and trigger guard are made of aluminium and black oxidized however the follower is steel and has been plated. The magazine stores shells in a →

Comments - latch won't hit finger
- w. spring tips down easily

Winchester 70 floorplate and trigger guard is a two piece cast ~~aluminum~~^{steel} design. The floorplate latch which is housed in the trigger guard must be translated to operate and is very similar to the Remington Model Seven. Two screws fasten the guard in place and the front screw is covered by the floorplate. The floorplate is pinned to the hinge and the hinge is fastened by a single screw. The magazine is a steel stamping held in place by the hinge and trigger guard and a w-spring supports the cast steel follower. All components except the follower and spring are either ~~black anodized~~ or black oxidized.

Comments: - difficult to operate with gloves

- w-spring has holes in it

- floorplate pivot is very loose

- doesn't release well.

Browning BBR magazine system is ~~best~~ for the most costly among those evaluated. It is a two piece design with a cast aluminum trigger guard and floorplate. The floorplate latch operates similar to ~~the~~ Model Seven. The floorplate is pinned to a steel hinge and is spring biased to the open position. The stamped steel magazine is spring clipped to the floorplate and is detachable. The staggered feed magazine has a cast steel insert, an aluminum follower and a unique torsion magazine spring.

Comments: - very nice well done system

- cheap follower

- insert into magazine changes for different calibers
- seam on magazine hard to find good workmanship
- poorly done latch, hits finger, difficult to operate
- scissor spring yields uniform pressure
- magazine assembles from bottom

Colt Sauer features a one piece cast steel trigger guard and a single feed ~~detachable~~ magazine. Their latch is similar to the Model 7400 and is between the magazine and guard. The magazine is stamped, it has a stamped follower and employs a w-spring. It is also spring biased such that when released, it falls from the gun.

Comments: single feed box, reliable release points

Sako / 61R uses a one piece cast and machined steel guard and floorplate. The latch is similar to our Model Sauer. The follower supports a w-spring and a cast steel follower. A stamped ^{steel} magazine is placed above the trigger guard.

All parts except the follower and spring are black oxide.
Comments: bomb-bay floorplate, poor latch placement

staggered arrangement, is a stamping, and is held front and rear by the hinge and guard respectively.