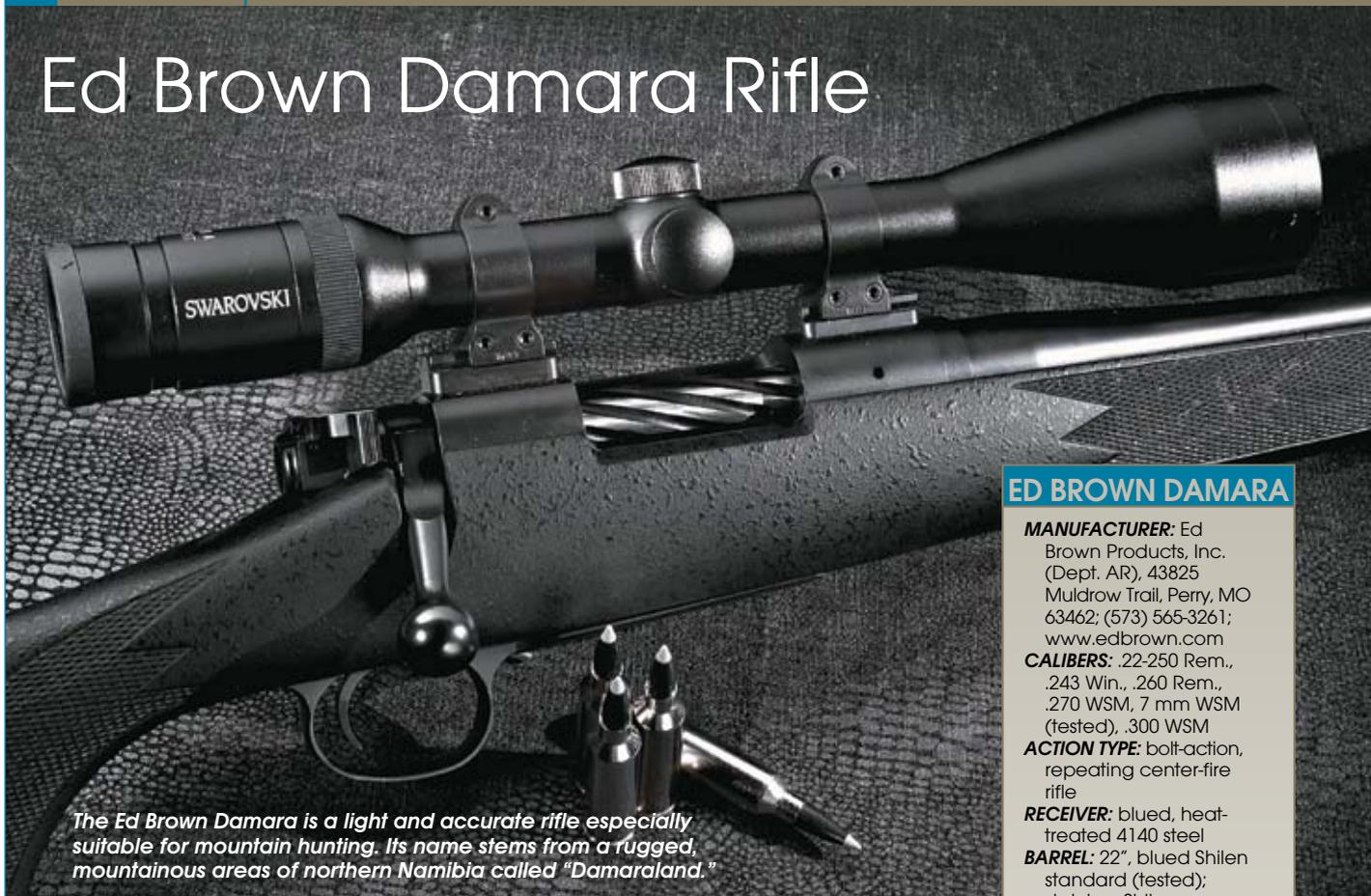


Ed Brown Damara Rifle



The Ed Brown Damara is a light and accurate rifle especially suitable for mountain hunting. Its name stems from a rugged, mountainous areas of northern Namibia called "Damaraland."

ED BROWN DAMARA

MANUFACTURER: Ed Brown Products, Inc. (Dept. AR), 43825 Muldrow Trail, Perry, MO 63462; (573) 565-3261; www.edbrown.com

CALIBERS: .22-250 Rem., .243 Win., .260 Rem., .270 WSM, 7 mm WSM (tested), .300 WSM

ACTION TYPE: bolt-action, repeating center-fire rifle

RECEIVER: blued, heat-treated 4140 steel

BARREL: 22", blued Shilen standard (tested); stainless Shilen or Krieger cut-rifled barrel optional

RIFLING: six-groove, 1:10" RH twist

MAGAZINE: four-round, non-detachable

SIGHTS: none supplied; receiver drilled and tapped for Talley scope mounts supplied with rifle

TRIGGER: single-stage, adjustable; Shilen standard (tested), Jewell optional; 1½-lb. pull

STOCK: black McMillan Graphite synthetic; length of pull, 13½"; drop at heel, 1½"; drop at comb, 1½"

OVERALL LENGTH: 41½"

WEIGHT: 6 lbs., 2 ozs.

ACCESSORIES: hard plastic case, Talley scope bases and rings; optional Jewell trigger or stainless steel barrel

SUGGESTED RETAIL PRICE: \$3,100

Ed Brown's Model 702 action is one of the best platforms extant for an accurate bolt-action rifle. As a gunsmith—and a fastidious one at that—Brown was frustrated with the lack of quality and concentricity of many factory bolt-actions he worked into custom guns, so he came up with one of his own—the Model 702. Brown's bolt rifles are of the semi-custom variety, in that you get all the accuracy enhancing benefits of a custom-built, precision hunting rifle, but not all the extra option choices of a full-blown custom gun. Essentially, it's like buying a "package" of options on a new truck—in this case

determining caliber, length of pull, trigger unit and barrel maker—among eight different models of the 702 from serious tactical rifles down to the new Damara.

The new Damara is a lighter, short-action version of the firm's Denali (March 2003), which itself is a lightweight Savanna (August 2001, p. 80). The Damara is designed as a "mountain" gun for hunting in rigorous conditions, but can also be appreciated by anyone who values a light, responsive, accurate rifle.

Brown opted for no lightening cuts on the action or barrel, as such weight-eliminating methods can sometimes lead to less consistent accuracy. Accuracy

is the goal of the Damara and, metal-wise, its only concession to weight loss is a 22" (21½" forward of the receiver ring) barrel—even the trigger guard and floor-plate are of blued steel.

The 702 action has been well covered, so we'll focus on what sets the Damara apart. Brown elected to use McMillan's graphite stock on the Damara, which is more lightweight than Kevlar, but is still strong and rigid. The molded-in checkering on the wrist and fore-end is a fairly coarse 16 lines per inch to help you hold onto the little rifle. Without the action, the test stock weighed a superlight 1-lb., 5 ozs., including the 1" Pachmayr Decelerator

WARNING: Technical data and information contained herein are intended to provide information based on the limited experience of individuals under specific conditions and circumstances. They do not detail the comprehensive training procedures, techniques and safety precautions absolutely necessary to properly carry on similar activity. Read the notice and disclaimer on the contents page. Always consult comprehensive reference manuals and bulletins for details of proper training requirements, procedures, techniques and safety precautions before attempting any similar activity.

SHOOTING RESULTS (100 YDS.)

7 MM WSM Cartridge	Vel. @ 15' (f.p.s.)	Energy (ft.-lbs.)	Group Size In Inches		
			Smallest	Largest	Average
Federal No. P7WSMS1 150-gr. Nosler Solid Base	3048 Avg.	3,096 19 Sd	0.89	1.03	0.93
Federal No. P7WSMA1 160-gr. Nosler AB	3029 Avg.	3,261 11 Sd	0.98	1.14	1.04
Winchester No. 145-gr. Ballistic Silvertip	2972 Avg.	3,053 8 Sd	0.78	1.08	0.86
Average Extreme Spread:			0.94		

Measured average velocity for 10 rounds from a 22" barrel. Range temperature: 53°F. Humidity: 51%. Accuracy for five consecutive, five-shot groups at 100 yds. from a Caldwell Lead Sled. Abbreviations: AB (AccuBond), Sd (standard deviation).

recoil pad. The remainder of the rifle's 6-lb., 2-oz. weight (unscoped) is made up by the barreled action. Bedding is by way of integral aluminum pillars and individually hand-applied Marine Tex compound.

The 22" barrel on our sample is a match-grade,

hand-lapped and precision-chambered, exclusive Shilen with five-groove button rifling in a No. 1½ sporter contour, which tapers from 1.179" at the front of the receiver ring to 0.548" at the muzzle. It is free-floated along its entire length, and the rifling is



The Damara features a sporter-profile barrel, massive recoil lug, fluted bolt, three-position safety and a pillar-bedded, light-weight synthetic stock. The scope is a 4-12X Swarovski.

protected by a recessed target type crown at the muzzle. It's final contour is cut by Brown to reduce weight but not overheat when shot quickly.

Our test 7 mm WSM Damara arrived with a Shilen barrel and trigger. Using a Caldwell Lead Sled, we tested it for accuracy at 100 yds. with the results shown in the accompanying table. The 100-yd. accuracy was excellent, averaging 0.94" for three loads from Federal and Winchester. The slender barrel heated

up quickly, but groups did not open up appreciably in rapid fire strings. Accuracy was facilitated by the trigger's crisp and uniform 1½-lb. pull.

Reliable feeding of WSM cartridges is a tricky business, and all was fine until we slightly bowed the internal magazine box during our fourth disassembly and after firing about 250 rounds. This led to feeding difficulties from the right side of the staggered magazine. Once diagnosed, the problem was easily fixed with a pair of padded pliers. Finicky feeding is endemic to the WSMs, so exercise care in handling magazine parts.

The Damara points well, is not whippy in its handling, and is solid and steady on the target. When fired standing, kneeling, prone or from the bench; we found the balance to be excellent; and the efficient stock design made the punishing 7 mm WSM far more pleasant.

We have nothing but praise for the craftsmanship, smoothness of operation, accuracy and reliability of the Damara. It's one of the finest rifles we've ever evaluated. For those who want a lightweight rifle with no compromise in the accuracy department, it is an excellent choice. At a suggested retail price of \$3,100, however, the Damara is pricey. Nonetheless, get one into your hands, see the groups it turns in and you'll find it's worth every penny.

Bedding on the Damara is by way of aluminum pillars and Marine Tex bedding compound in the light-weight 1-lb., 6-oz., graphite McMillan stock (below).



The two-lug bolt is of 8620 steel and has a 0.702" body diameter, a 0.98" diameter across the lug circle. The extractor is a .249"-wide, AR-15-style unit, while ejection is via a spring-loaded plunger in the bolt face.



Ed Brown's Model 702 action has a 1.36"-diameter cylindrical receiver of 4140 chrome-moly steel that is heat-treated before it is machined from bar stock.



A 0.230"-wide and 1.09"-thick recoil lug is sand-wiched between the barrel shoulder and receiver. The custom barrel contour is optimized for weight reduction without compromising accuracy.

Kel-Tec P-3AT



Kel-Tec's P-3AT is essentially a mini-mally beefed-up .380 ACP version of the company's very successful P32 .32 ACP pistol. The new gun retains practically all the attributes of the earlier pistol, achieved with a significant increase in power, but a negligible increase in size and weight.

The P-3AT is a locked-breech pistol with a 7075-T6 aluminum block pinned inside a DuPont ST-8018 polymer frame. Upon this frame rides a 4140 carbon steel slide and barrel. Because of the locked breech, the slide of the P-3AT is smaller and lighter than what would be found on a blowback-operated pistol. Trigger operation is double-action-only (DAO). Upon firing, the slide and barrel both move rearward, with the barrel unlocking and camming down after

about 1/4" of travel.

Neat features of the gun's operation include the fact that the slide partially cocks the hammer, leaving it resting against the hammer block, requiring a fairly light trigger pull. Also, the rebounding firing pin is so lightweight, given the power of the firing pin retracting spring, that it cannot strike and activate a cartridge primer should the gun be dropped. This obviates a disconnecter and/or external safety, thus there are no protrusions to impede a smooth draw.

The result of this clever engineering and the high-tech materials is a .380 ACP-cal. pistol that weighs a mere 8.4 ozs. unloaded. That is not a misprint. The gun really weighs little more than half a pound. Moreover, it is only 0.77" wide. The significance of this cannot be overstated.

Many authorities view the .380 ACP as the absolute minimum caliber acceptable for self-defense. Others conclude that any gun you have access to is the best gun to use, and that is difficult to argue against. With the P-3AT, you now have a gun that is as small or smaller than any practical carry gun available, but which is chambered for a round of not inconsiderable efficacy. This is a gun that law enforcement personnel and legally armed civilians can have on their person almost constantly, regardless of either the weather or clothing constraints.

The P-3AT we received for testing was a reasonably handsome version with hard chromed slide and gray polymer grip frame. The gun is also available in blued slide/black frame or Parkerized slide/black frame combinations. Our

P-3AT originally came with an optional belt clip on its right side that, while it did not get in the way, was of dubious utility. Also, the hex-head nut on the opposite side of the clip quickly raised a blister during shooting sessions.

Shooting impressions with the P-3AT were good. The gun is small, but not too small to be handled without fumbling, even by large-handed shooters. Molded checkering on the integral grip panels and grooves at the corners of the frontstrap and backstrap work with the thinness of the gripframe to make this gun easy to hold.

Despite the relatively potent clambering, the gun was not difficult to control with most loads. However, Remington's 102-gr. Golden Saber cartridges were rather unpleasant to shoot, though some regard them

as the carry load in this caliber. Practical accuracy at 7 yds. was fairly simple to achieve with the peaked muzzle serving as a sight. An orange dot in the front and an orange notch in a scallop at the rear of the slide can be aligned for more precise shooting.

During our accuracy testing, following some break-in shooting with generic ball ammunition, the P-3AT trigger stopped functioning. The trigger bar would no longer cock and release the hammer

when the trigger was pulled, or would do so only intermittently. The worse news is that one of our testers experienced this very same problem with a P32. The good news is that Kel-Tec is quick to fix and return such guns. Of course, that is cold comfort in a crisis.

The gun was returned to us and completed testing without further difficulty. In fairness, the malfunctioning P32 was likewise repaired some years ago and has not misfired since.



The peaked slide (above) allows for rapid orientation of the pistol on target. The barrel, though thin, functioned fine.

Despite its more potent chambering, the .380 ACP-cal. P-3AT (1.) is scarcely larger than the .32 ACP Kel-Tec P32 (far l.)



The P-3AT strips to its major components with removal of a single pin. There's just the slide, nested recoil springs, guide rod, barrel, assembly pin, frame and magazine.

SHOOTING RESULTS (7 YDS.)

.380 ACP Cartridge	Vel. @ 15' (f.p.s.)	Energy (ft.-lbs.)	Group Size In Inches		
			Smallest	Largest	Average
Federal P380HS1 90-gr. Hydra-Shok JHP	890 Avg. 158	14 Sd	2.5	3.5	2.68
Remington GS380B 102-gr. Golden Saber BJHP	758 Avg. 130	40 Sd	2.25	4.43	3.41
Winchester S380 95-gr. SXT JHP	839 Avg. 149	13 Sd	2.0	3.25	2.68
Average Extreme Spread:			2.92		

Measured average velocity for 10 rounds from a 2 3/4" barrel. Range temperature: 55° F. Humidity: 43%. Accuracy for five consecutive, five-shot groups at seven yds. fired from sandbags. Abbreviations: BJHP (brass jacketed hollow-point), JHP (jacketed hollow-point), SXT (Supreme Expansion Technology), Sd (Standard deviation).

However, as reliability is paramount in a carry gun, we'd urge any purchaser to immediately and thoroughly wring out the P-3AT—and have any problems corrected by Kel-Tec itself—before carrying it for personal protection.

On the positive side, the gun fed, fired and extracted all types of ammunition. Extraction in particular was extremely strong, with dented cases flung far and wide. One absent feature we would have liked is a slide hold-open device.

We've carried the P-3AT everywhere that it is legal to do so, including occasions that demanded thin, lightweight dress slacks and no jacket. We've even carried it in the pocket of swimtrunks while sunbathing. Placed in an Uncle Mike's No. 1-size Inside-the-Pocket holster, it is an unsurpassed amalgam of light weight, rapid accessibility and decent power. While we still opt for a bigger gun when possible, we do not eschew the P-3AT at such times—we carry it in addition to our primary defensive arm. It's that light and convenient.

We reiterate our concerns about the pistol's reliability. Thorough testing is essential to making sure your pistol operates as it is

supposed to. While that is true of every gun, it is even more so with carry guns and with this gun in particular. However, once reliability is established, we know of no other carry gun quite like the .380 ACP-cal. Kel-Tec P-3AT.

KEL-TEC P-3AT

MANUFACTURER: Kel-Tec CNC Industries, Inc. (Dept. AR), 1475 Cox Road, Cocoa FL 32926; (321) 631-0068; www.kel-tec.com

CALIBER: .380 ACP

ACTION TYPE: recoil-operated semi-automatic pistol

CONSTRUCTION: polymer frame, carbon steel slide

FINISH: blue, hard chrome (tested), Parkerized

OVERALL LENGTH: 5 1/4"

WIDTH: 3/4"

HEIGHT: 3 1/2"

BARREL: 2 3/4"

RIFLING: six groove; 1:9"

LH twist

WEIGHT EMPTY: 8.4 ozs.

MAGAZINE: six-round, single-column detachable box

SIGHTS: fixed, orange dot front, single orange dot rear

TRIGGER: double-action-only; 8-lb, 2-oz. pull

STOCKS: integral checkered polymer

ACCESSORIES: nylon carrying case; optional belt clip, trigger shoe, extended magazine

SUGGESTED RETAIL PRICE: Blued \$305, Parkerized \$345, Hard Chrome (tested) \$360

Thompson/Center 22 Classic Benchmark



The Benchmark is built on the T/C/ 22 Classic semi-automatic action with a heavier barrel and a stock well suited to competition or short-range varminting.

When Thompson/Center Arms introduced the original T/C 22 Classic in 2000, it surprised the industry on two counts. The first was that a company known for single-shot rifles and shotguns would produce a semi-automatic rifle. The second was that T/C did it so well. The slim, stylish and lightweight 22 Classic has proven to be an excellent field gun and is a squirrel or rabbit's nightmare. But T/C realized the potential that was apparent when we tested that rifle in these pages (January 2001), and it shot one 0.51" 10-shot group at 50 yds. with one load. It was clear that, in target rifle guise, the 22 Classic field gun might transform into a competitive match rifle. Thus was born the T/C 22 Classic Benchmark.

This rifle incorporates all of the most noteworthy mechanical features of the original, including a barrel that is actually threaded into the solid steel receiver for enhanced rigidity. However, the tapered 22" barrel of the 22 Classic has been replaced with a shorter, heavier, 18" bull barrel. The heavy tube adds stabilizing weight while the short length maximizes stiffness but still gets the most from 22 LR ballistics. The short length also improves handling on a rifle that might be unwieldy with a longer bull barrel.

Also included is the 22 Classic action, consisting of a fire control assembly that itself forms rails upon which the steel bolt rides in this blowback-operated semi-automatic. The fire control assembly contains the hammer, safety lever,

bolt hold-open device, ejector and one-piece trigger/sear/disconnector in a single compact unit.

The Benchmark's most salient feature is no doubt its stock. The laminated hardwood resists warpage from damp weather and has a handsome appearance. Somehow, the stock designers managed to retain a suggestion of the lines of the original 22 Classic, though the Benchmark's stock is considerably different. In some ways, it is an exaggeration of the lines found on the earlier gun.

The Benchmark's comb has an extremely pronounced Monte Carlo rise with cheekpiece. The wrist is not as open as the field gun, and the fore-end is flat and very wide for benchrest shooting. The barrel is free-floated

T/C BENCHMARK

MANUFACTURER:

Thompson/Center Arms Co., Inc. (Dept. AR), P.O. Box 5002, Rochester, NH 03866; (603) 332-2333; www.tcarms.com

CALIBER: .22 Long Rifle
ACTION TYPE: blowback-operated semi-automatic rifle

OVERALL LENGTH: 35"
BARREL: 18" blued carbon steel, heavy target-style configuration with target crown

RIFLING: button-rifled, six-groove, 1:15" RH twist

MAGAZINE: 10-round, detachable steel box

WEIGHT: 6 lbs., 13 ozs.

SIGHTS: none; drilled and tapped for scope mounting

TRIGGER: single-stage, non-adjustable; 4½-lb. pull

STOCK: laminated hardwood with satin finish; length of pull, 13¾"; drop at heel, 2"; drop at comb, 3/4"

ACCESSORIES: sling swivel studs, trigger guard safety lock

SUGGESTED RETAIL PRICE: \$481

SHOOTING RESULTS (50 YDS.)

.22 Long Rifle Cartridge	Vel. @ 15' (f.p.s.)	Energy (ft.-lbs.)	Group Size In Inches		
			Smallest	Largest	Average
CCI 0033 Green Tag 40-gr. Solid	1019 Avg.	92	0.75	1.25	0.93
Federal 900 GMM 40-gr. Solid	1130 Avg.	114	0.44	0.88	0.71
Winchester XT22LR 40 gr. Solid	1129 Avg.	114	1.25	1.94	1.56
Average Extreme Spread:			1.06		

Measured average velocity for 10 rounds from an 18" barrel. Range temperature: 55° F. Humidity: 43%. Accuracy for five consecutive, 10-shot groups at 50 yds. from sandbags. Abbreviation: GMM (Gold Medal Match).

within the laminate stock.

The stock is misleading in appearance. It doesn't feel quite as good as you imagine it will when you shoulder it. On the other hand, it mounts much faster than you'd expect and there's plenty to hang on to. The comb does a good job of aligning the eye with

the scope. The Benchmark has no iron sights and is drilled and tapped to accept Weaver-style or all-steel Warne Maxima bases and rings. We fitted ours with T/C's own 2-7x28 mm riflescope.

The T/C barreled action was developed using Federal ammunition, and it



The Benchmark's stock is distinctive yet evocative of the T/C 22 Classic field gun. It's a handful, but stable and resistant to warping.

shows. From an accuracy standpoint, the Benchmark likes Federal Gold Medal Match 900 just fine and tolerates CCI Green Tag, but has problems with Winchester T22 target ammunition. There were no failures to feed, fire or eject with any brands, but the accuracy differences were significant. Ejection was pleasantly mild. Cases always ejected cleanly, but were not flung into other lanes or at other shooters.

The trigger was adequately light, with just a bit of take-up and hardly any creep. We liked the

controls in general and particularly the magazine release at the front of the trigger guard. The banana-curved magazine itself was startlingly robust; one of the stoutest we've seen on a rimfire. A loading tool that holds back the spring as you fill the magazine made loading a cinch. The fact that the magazine extends so far beneath the gun bothered some off-hand shooters who like to place their support hand under the receiver, but they soon adjusted.

Accuracy with Federal Gold Medal Match ammunition was outstanding, more than satisfactory for such endeavors as Rimfire Silhouette, Sportsman's Team Challenge and NRA Light Rifle shooting. With a powerful scope, the Benchmark could even get you started—recreationally—in 50-yd. Benchrest shooting, although it likely wouldn't be competitive in matches (very few semi-automatics ever are).

Overall, we liked the 22 Classic, and we like the Benchmark version as well, though it may not be a generalist's gun. The threaded barrel, solid steel receiver, reliable action and good controls are all beneficial carry-overs from the field gun, and the new stock and short bull barrel should lend themselves to the above-mentioned organized sports. If you are looking to compete in those shooting disciplines, T/C has given you another sound option when selecting an appropriate rifle.



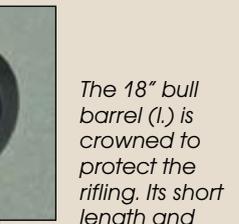
The high, visually arresting Monte Carlo-style comb aligns the eye with the rifle-scope. The stock is of wood laminate.



The magazine release is conveniently located ahead of the trigger guard. The sturdy magazine holds 10 rounds.



The fore-end is broad and flat to facilitate shooting from a bench or to accommodate the myriad holds of match shooters.



The 18" bull barrel (l.) is crowned to protect the rifling. Its short length and thick walls make the barrel extra rigid to improve accuracy. It proved plenty accurate with Federal ammunition.

Cylinder & Slide Safety Fast Shooting Kit



Although it is generally recognized that carrying an M1911 Government Model pistol with a round in the chamber, the hammer cocked and the thumb safety engaged allows the fastest and most accurate defensive shooting, many law enforcement agencies and armed citizens are leery of carrying a gun in “condition one” or “cocked and locked” mode.

An alternative is available with the Safety Fast Shooting (SFS) Kit marketed by Cylinder & Slide (C&S) of Fremont, Neb., which is well known for its custom handguns and aftermarket handgun parts.

Produced by R.D.I.H. of Belgium, the SFS has a replacement safety plunger spring, an ambidextrous extended cocking lever that replaces the stock thumb safety, replacement Series 80 upper and lower levers and a special hammer assembly. Also included is a new mainspring, although an unmodified factory mainspring can be used.

The heart of the system is the hammer assembly, which consists of a part called the hammer ring that contains the hammer hooks and is connected by the hammer strut to the mainspring, and a part called the hammer, which incorporates the hammer spur. Both parts rotate somewhat independently around the hammer pin axis, and are connected via interlocking lugs. Also linked to

the hammer is the thumb safety-like cocking lever. Sandwiched between the hammer and hammer ring is a circular spring that tensions the hammer rearward.

To use the kit after it is installed, first retract and release the slide to load a live round in the chamber. That cocks the hammer assembly: The hooks on the hammer ring engage the sear, and the spur of the hammer is tensioned rearward in the familiar position by the aforementioned circular spring. To put the pistol into the SFS mode, push the cocked hammer forward; it will move nearly to the normal “hammer down” position. That action also lifts the cocking lever into the thumb safety notch in the slide.

To fire the gun, simply thumb the cocking lever down. That action automatically flips the spur of the hammer to its cocked position. Pulling the trigger causes the sear to release the hooks on the hammer ring and allows the ring to rotate forward under mainspring tension. The hammer, which is connected to the hammer ring by interlocking lugs, also rotates forward, striking the firing pin and igniting the cartridge primer.

The kit also incorporates a small, flat drop safety mounted on the hammer ring, and that rests between the hammer and frame when the hammer is pushed forward. That prevents an inadvertent

discharge even if the gun is dropped hammer-down.

We installed SFS Kits in both a Springfield Champion in .45 ACP and a Colt Delta Elite in 10 mm Auto. Installation closely follows the instruction sheet, and involves little more than replacing the stock components with the corresponding components from the kit. Neither the kits nor the frames require modification for proper functioning though dimensional variations among various M1911 frames may rarely require slight modification.

During more than 200 repeated cycles of drawing and firing from the SFS mode, both kits worked flawlessly, and the replacement Series 80 levers

worked properly in the Series 80 Colt Delta Elite in which they were installed.

Criticisms of the SFS Kit are minor. Some may find the radical shape of the hammer spur to be off-putting; we’d suggest a more traditional round spur, as well as a steel right-side cocking lever.

Available from: *Cylinder & Slide, Inc. (Dept. AR), 245 East 4th St., Fremont, NE 68025; (402) 721-427; www.cylinder-slide.com. Suggested retail price: \$170 (blued), \$180 (stainless).*



The kit has a replacement safety plunger spring, an ambidextrous cocking lever (replacing the stock safety), a new mainspring, replacement Series 80 upper and lower levers and a special hammer unit.

Pushing the hammer forward (above) causes the SFS’s cocking lever to rise into the thumb safety notch in the slide. To fire the gun, simply thumb the cocking lever downward. That flips the hammer back to the cocked position, allowing firing with a pull of the trigger.

