DOPE BAG®

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CAUTION: 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

RUGER KP95DC

PLASTIC-framed guns are certainly nothing new. The groundbreaking Glock 17 was introduced some 13 years ago, and since that time, Smith & Wesson, Colt, Heckler & Koch and others have all added polymer-framed handguns to their lines.

Today's synthetic-framed guns generally employ steel inserts embedded in the polymer to provide metal-to-metal contact for the slide and frame. Ruger's new KP95DC, unveiled at the 1996 SHOT Show, is the first large-caliber, center-fire handgun by a major U.S. manufacturer in which the metal inserts have been eliminated and the steel slide rides directly on polymer frame rails.

This is made possible by Ruger's development of a new proprietary polymer based on Dow Chemical's Isoplast, a combination of urethane resin with long-strand fiberglass fibers. After several years of research, Ruger engineers modified the basic Isoplast formulation to produce a handgun frame that is tough, resilient, corrosion-resistant and unaffected by most lubricants, and more economical to produce than a steel or aluminum frame. Eliminating the steel inserts further simplified production.

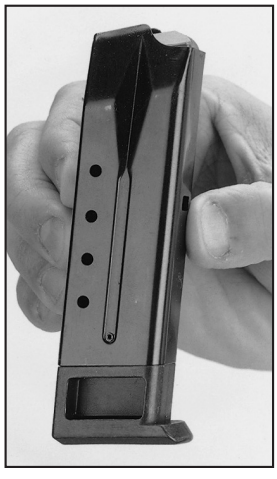
Other than its polymer frame, the new 9x19 mm Ruger is a conventional locked-breech, recoil-operated semi-automatic pistol of comparable size to the firm's compact P93 9 mm. Features include ambidextrous decocking levers and magazine release buttons, an oversized recurved trigger guard and high-visibility fixed sights. The P95 also comes in a double-action-only version.



The new Ruger KP95DC is a 9 mm polymer-frame pistol of the same size as the firm's P93 model.

Magazine capacity is limited to 10 by a plastic block that forms the lower .9" of the magazine and that is pinned to the steel magazine body. A 15-round magazine is available for police and overseas sales, and the new gun will accept any P-series 15-round 9x19 mm magazines.

The KP95 firing mechanism is functionally identical to that of other P-series guns (see January 1996, p. 37), and in fact many P95 parts are interchangeable with those of the P93. In several respects, however, the new gun differs markedly from its aluminum-framed sibling. Most striking is the replacement of the M1911-style swinging link system for an angled-cam arrangement with separate locking block very similar to the Peters Stahl locking system used on the Springfield Armory Omega and Linkless M1911-A1 pistols of the late 1980s and early 1990s (July 1988, p. 38 and August 1991, p. 72).

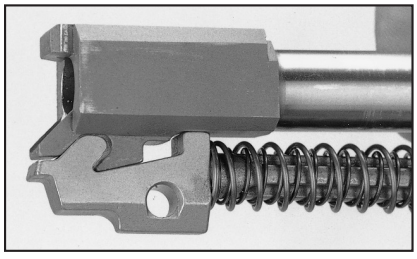


Magazine capacity is limited by a plastic block pinned into the bottom of the box.

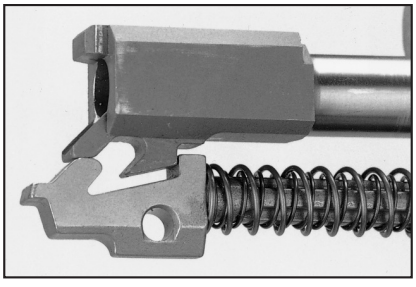
Barrel lockup is via the engagement of a shoulder on the barrel with the front face of the ejection port. A single investment-cast part that Ruger calls the camblock serves as both full-length fluted recoil spring guide and locking block, and is positioned in the frame by the slide stop pin. Angled cams at the rear of the block contact similar surfaces on

RUGER KP95DC

MANUFACTURER: Sturm, Ruger & Co., Dept. AR, 200 Ruger Rd., Prescott, AZ 86301
MECHANISM TYPE: recoil-operated semi-automatic pistol
CALIBER: 9x19 mm
OVERALL LENGTH: 7¼"
BARREL LENGTH: 3.9"
WEIGHT: 27 ozs.
WIDTH: 1 9/16"
HEIGHT: 5¾"
MAGAZINE CAPACITY: 10
TRIGGER: 9¼ lbs. double-action; 5¼ lbs. single-action
SIGHTS: three-dot; fixed front with rear drift-adjustable for windage
ACCESSORIES: extra magazine, magazine loading tool, plastic storage case, padlock
PRICE: $351

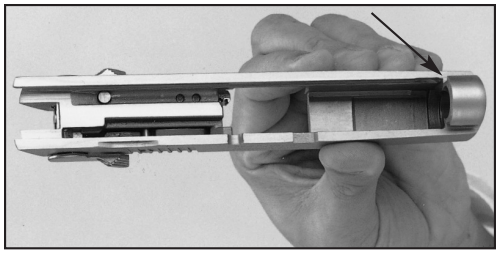


Upon firing, the barrel moves rearward, riding down the angled face of the camblock and unlocking from the slide. As the slide returns, the barrel lug rides up the inclined top surface of the camblock to reengage.



the underside of the barrel, camming the barrel down out of lockup during recoil and up into lockup when the slide returns to battery. This new locking system enabled Ruger engineers to move the slide stop pin forward to the frame location having the thickest possible walls.

Also different is the P95 slide, which has two slots in the spring tunnel to accommodate guide rails in the frame. These additional rails distribute slide recoil forces, especially vertical torque, along a greater area, contributing to frame longevity and give the P95 the distinction of being one of the few pistols having both inside and outside frame rails.



The slide rides both inside and outside the frame. The spring tunnel (arrow) is grooved to match rails in the frame front.

To disassemble the KP95DC, first ensure that it is unloaded. Lock the slide back, and using a punch or probe, push the ejector down and forward. Release the slide, align the witness marks on the left side of the slide and frame, and push the slide stop pin out to the left. While it is captive in other P-series guns, the slide stop pin is fully removable in the P95. Then simply pull the slide, recoil system and barrel forward off the frame. Invert the slide and lift out the camblock and barrel. This is all the disassembly required for routine maintenance. Reassembly is in reverse order.

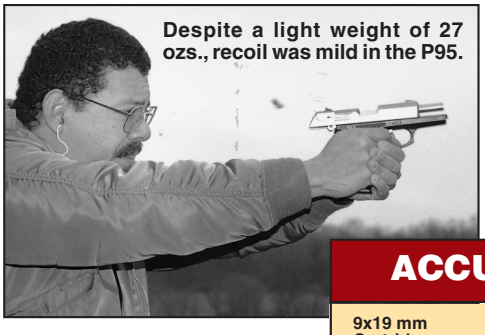
The test KP95DC we received had a stainless steel slide, hammer, trigger, slide stop and magazine catch, which contrasted nicely with its black polymer frame. A blued slide is an option.

The grip portion of the polymer frame had heavy molded serrations to give a better hold on the rather slippery grip. Ruger is reportedly considering fitting the law enforcement versions of the P95 with a slip-on rubber grip from Hogue.

An interesting feature is the stamping of the serial number on a metal plate set into the left side of the grip. Ruger states that the plate is permanently molded into the grip and cannot be removed without significant frame damage. A second, hidden serial number has been strongly rumored.

The KP95DC was fired for accuracy with the results shown in the accompanying table, and function-fired with Black Hills, Federal, Hornady, PMC, Remington, Speer and Winchester ammunition. There were no failures of any kind.

At 27 ozs., the P95 was the lightest P-series gun we have tested. Felt recoil was lighter than expected, however, presumably because of the pistol's captive dual recoil springs and the shock-absorbing qualities of its polymer frame. The P95's grip size and shape was judged to be on a par with other P-series guns, being only .100" greater in circumference than that of the P93. The new pistol also maintains the P93's trigger position in relation to both grip and bore. Our KP95DC's trigger pull was comparable to that of the P944 we tested a few months ago: a long yet light and even double-action pull, combined with a single-action pull that was slightly heavy and creepy.



Despite a light weight of 27 ozs., recoil was mild in the P95.

Test firing revealed one relatively minor quirk: with several brands of ammunition, some empty cases ejected almost straight back, a few even hitting the shooter in the chest. While this did not impair reliability, it was distracting, especially during aimed fire.

Our KP95DC shot to point of aim at 25 yds. The sights were deemed adequate for defensive shooting or plinking.

Since it is the frame that absorbs the impact of the recoiling slide, we wondered what signs of wear, if any, would be evident after test-firing. After 200 test-fire rounds, our examination of the recoil-bearing surfaces in the frame revealed no wear. Moreover, the slide stop pin hole, which is battered each time the slide slams into battery, showed no elongation.

According to Ruger, after 20,000 rounds of law-enforcement-only +P+ 9 mm ammunition, a KP95DC prototype showed almost no wear or loss of accuracy or reliability. Such durability—much more than the average shooter will fire in a lifetime—implies that the design could be adapted to the .40 S&W and .45 ACP rounds, though Ruger officials state that neither chambering is currently planned.



The P95 uses many of the same frame component parts as other P-series guns. Raised arm on the sear (arrow) depresses the firing pin block when the trigger is pulled.

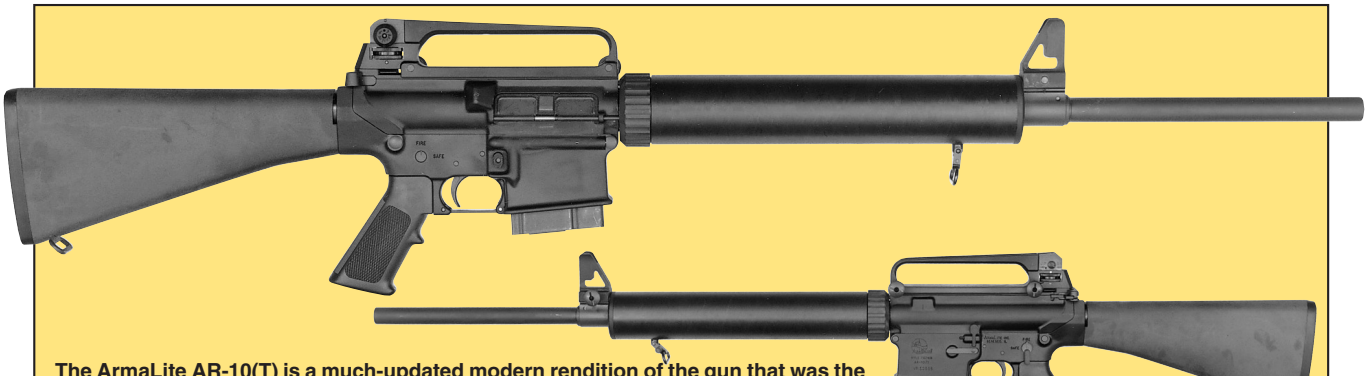
The KP95DC combines light weight, high reliability and good accuracy with the economy provided by a polymer frame; and its Ruger heritage, American manufacture and suggested list price of $351 will likely make it appealing to both civilian and police buyers.

ACCURACY RESULTS

9x19 mm Cartridge	Vel. @15' (f.p.s.)	Smallest (ins.)	Largest (ins.)	Average (ins.)
Black Hills 124 gr. JHP	1089 Avg. 23 Sd	2.42	4.45	3.46
Hornady No. 9020 90 gr. XTP JHP	1337 Avg. 15 Sd	1.92	2.98	2.37
Win. No. X9MMTCM 147 gr. FMJ Subsonic Match	949 Avg. 10 Sd	2.20	3.73	3.06
Average Extreme Spread				2.96

Five consecutive 5-shot groups from 25 yds., fired from Ransom Rest. Abbreviations: Sd (standard deviation), JHP (jacketed hollow point), XTP (Extreme Terminal Performance), Win. (Winchester), FMJ (full metal jacket)

ARMALITE AR-10(T) RIFLE



The ArmaLite AR-10(T) is a much-updated modern rendition of the gun that was the direct ancestor of the AR-15 and M16 rifles. This version has a detachable carrying handle and front sight, along with a heavy barrel and fiberglass tube handguard.

THE ArmaLite AR-10 rifle had little significance in its own right, with fewer than 10,000 made in the late 1950s, and issued only in places like Portugal and the Sudan. Its real importance was that it opened the way for the AR-15 rifle by showing that modern materials like plastic and forged aluminum could radically reduce the weight of a service rifle.

The original ArmaLite firm was a division of Fairchild Engine and Airplane Co., formed to develop and manufacture a line of lightweight arms that included the familiar AR-7 .22. The failure of the AR-10, along with problems in the aircraft business at the time, led Fairchild to sell the rights to the AR-15 to Colt for $75,000 plus a royalty on future production.



Other ArmaLite products made their way to different manufacturers, with the AR-7 going to Charter Arms, the AR-180 going to Howa and then Sterling; the company name finally came to rest with Elisco Tool Co. in the Philippines. Much of the parts inventory went to a firm called Timberline-Hawk (Dept. AR, Box 231, Audubon, IA 50025).

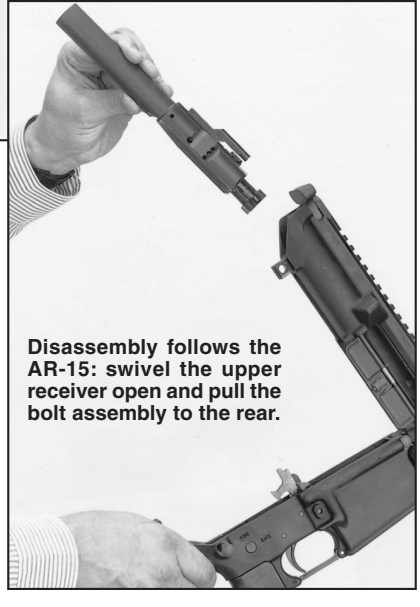
Mark Westrom, president of Eagle Arms, one of the prominent makers of AR-15 clones, bought the ArmaLite name from Elisco and changed his company name from Eagle Arms to ArmaLite, Inc.

One might have assumed that interest in a failed 40-year-old design like the AR-10 would have been minimal, but the success of the Knight SR-25 (September 1993, p. 46) proved that there remains a nucleus of shooters who like the AR-15 operating system, but demand something a bit more potent in the ammunition department.

Like SR-25 manufacturer C. Reed Knight, Westrom recognized the futility of recreating the AR-10 line-for-line when the world is full of combat-tested AR-15 components. So the new ArmaLite AR-10(T) is, like the SR-25, a mixture of AR-15 and new components.

Unlike the Knight, however, it looks much more like a pumped-up AR-15. Three versions are available—the AR-10A2, with fixed carrying handle and front sights; the AR-10A4, which adds detachable handle and front sight; and the AR-10(T), which has a screw-on tubular handguard in place of the familiar split guard, a 24" barrel and a two-stage match trigger.

Our sample rifle was the AR-10(T), a 12-lb. behemoth that emphasized the contrast with the original 7½-lb. AR-10. The black anodized aluminum receiver has the M16A2-style shell deflector, but not the bolt forward assist that has generally been attacked over the years as an unnecessary frill added to the M16A1 at the insistence of the Army.



Disassembly follows the AR-15: swivel the upper receiver open and pull the bolt assembly to the rear.

In contrast to the slab-sided appearance of the Knight's SR-25, the AR-10 is contoured much more like the AR-15, with the "fence" that protects the magazine button and a rounded section at the rear.

The familiar finger-groove A2-style pistol grip and the winter trigger that dates from the first AR-10s have been retained,

ARMALITE AR-10(T)

MANUFACTURER: ArmaLite, Inc., Dept. AR, Box 299, Geneso, IL 61254
MECHANISM TYPE: gas-operated semi-automatic rifle
CALIBER: 7.62x51 mm
OVERALL LENGTH: 43½"
BARREL LENGTH: 24"
WEIGHT: 12 lbs., 2 ozs.
MAGAZINE CAPACITY: 10
TRIGGER: two-stage, 6 lbs. pull
SIGHTS: post front, aperture rear adjustable for windage and elevation
STOCK: black plastic: length of pull, 14¼"; drop at heel, 2"; drop at comb, 2"
ACCESSORIES: spare magazine, bolt block
PRICE: $1995

as has the long A2 buttstock that, when combined with the larger AR-10 receiver, gives the rifle a pull length of 14¼".

One feature not brought forward is the operating handle, which in the original AR-10 was located inside the carrying handle. This obviously would interfere with the making of a flatttop version, so the familiar AR-15 style T-handle was specified.

The bolt is stepped down at its rear to allow the use of the AR-15 receiver tube. An AR-15-style buffer with counterweights is used, though ArmaLite claims it is dimensioned for the AR-10.

The bolt is black phosphated on its outside, but is chrome-plated inside for corrosion resistance. The piston ring is a single wrapped strip, much like a small Slinky toy. The manufacturer claims this prevents gas blowby that can occur if the splits in conventional rings align. The bolt head has flared, rather than straight-sided, lugs.

The firing pin of early versions floated, but the firm found this could cause slam-fires, especially with sensitive bench-rest primers, so a buffer spring is now supplied to help prevent accidental discharges.

The longer ejection port needed for 7.62 mm ammunition requires a special ejection port cover and spring.

The receiver of the A4 and (T) models is topped with a Picatinny rail that will accept most Weaver-specification rings and accessories. The aluminum handguard attaches to it by knurled and coin-slotted thumbscrews and is fitted with a standard A2-type sight, but with half-minute adjustments for both windage and elevation.

The front sight attaches to a 1.35" section of Picatinny rail atop the gas block and can quickly be removed for convenient scope use by turning out its thumbscrew. The front sight itself is of AR-15 pattern, allowing somewhat laborious elevation adjustment, but is square-sided.

The fore-end tube is fiberglass and is attached to the receiver by a large ribbed ring. This was too tight for easy removal on our sample; the maker recommends a strap wrench for the job.

While the lesser AR-10s have 20" chrome-lined button-rifled barrels, the 24" AR-10(T) barrel is cut-rifled in the 5R pattern of the M24 sniper rifle. The muzzle has a dished crown to protect the rifling origin.

The trigger is a two-stage match unit that has no pull weight adjustment, but that can be adjusted for second-stage sear engagement by turning a hex socket screw. It resembles the Milazzo/Krieger trigger (April 1994, p. 55) far more than the original AR-10 unit. The trigger and hammer pins are the old .154" diameter used by most aftermarket AR-15 suppliers in contrast to the .172" pins now used by Colt (February 1994, p. 26).

In contrast to the SR-25, which uses original 20-round AR-10 magazines, the new ArmaLites use 10-round magazines to adhere to the Violent Crime and Law Enforcement Act's 10-round limit. For those who want 20-round capacity, the firm acquires pre-ban M14 magazines, machines off the magazine latch plate, shortens the feed lips, replaces the follower and cuts a slot down the back of the magazine to accommodate a spring-loaded plunger that actuates the AR-10 bolt stop. The firm can make these modifications to buyer-supplied magazines.



The carrying handle is removable in the style of the Colt Competition H-BAR for very easy scope mounting.

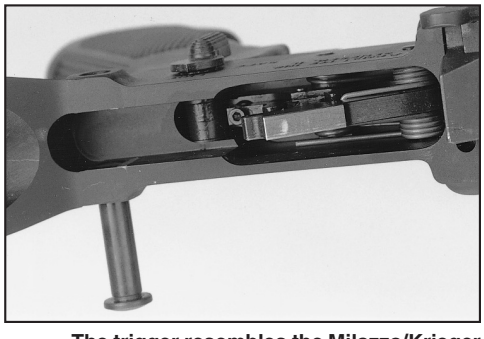
When loading the modified magazine, the plunger must be pressed in to allow loading the second round. Subsequent rounds can be loaded conventionally. The plunger presses up on the AR-10's bolt stop, which is larger than the corresponding unit on the AR-15, as the last round of a magazine is fired.

Disassembly of the AR-10 follows the AR-15 pattern. Remove the magazine and clear the chamber by retracting and releasing the operating handle. Press left to right on the captive rear takedown pin and swivel the upper receiver forward. Pull out on the operating handle, withdrawing it and the bolt from the upper receiver. To separate the two receiver halves, press the captive hinge pin left to right.

To disassemble the bolt, pull out the firing pin retainer right to left and let the firing pin and buffer spring drop out the rear of the bolt. Then rotate the bolt head to allow the cam pin to be pulled out past the bolt carrier key. The bolt head then can be pulled out of the carrier.

The AR-10(T) was fired for accuracy with results shown in the accompanying table, and function-fired with Federal, Lapua and Samson ammunition. There were a few feeding failures with Samson SPBT ammunition, but feeding was perfect with the HPBT ammunition that will be this rifle's steady diet.

We quickly discovered that the AR-10 had the annoying habit of throwing the first shot of a group above its fellows, a common problem in pistols, but not one we expected in this rifle. The manufacturer suggests a break-in period of 200 rounds, and that might help the problem. We dealt with it by topping up the magazine before the last round was fired, avoiding the manually-loaded first round.



The trigger resembles the Milazzo/Krieger unit more than it does the original AR-10 trigger. Sear engagement can be adjusted.

We found that inserting rounds into the magazine while holding in the bolt stop plunger was a chore. Our solution was to press in on the plunger with a bullet point, shove the follower down with the thumb until the plunger cleared its slot, and then load a couple of rounds. The remaining eight then would load normally.

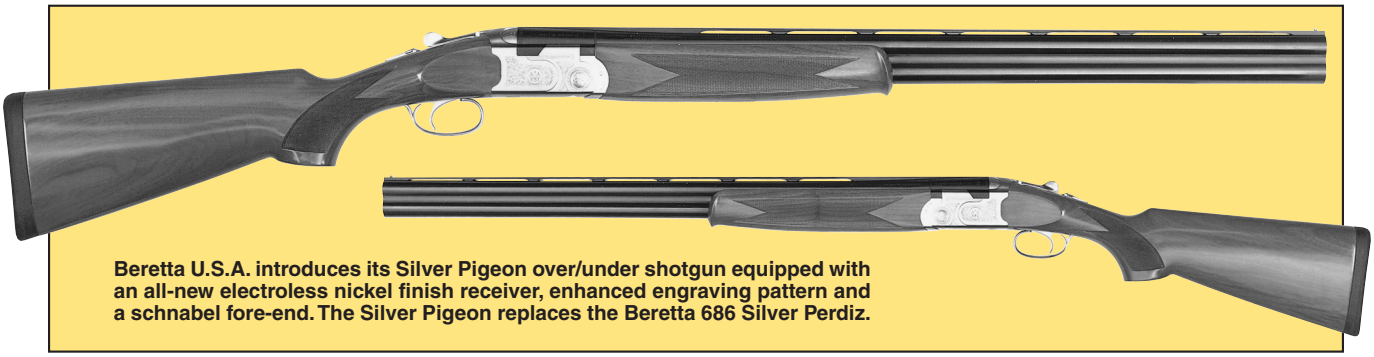
As might be guessed, the AR-10(T) is a pleasure to shoot, with minimal recoil and muzzle blast, thanks to its heft and long barrel. We would have preferred a lighter trigger pull weight, given the gun's role as a precision target arm. Even a crisp and clean 6 lbs. is still 6 lbs.

ACCURACY RESULTS

7.62x51 mm Cartridge	Vel. @15' (f.p.s.)	Smallest (ins.)	Largest (ins.)	Average (ins.)
Federal No. 308M 168-gr. BTHP	2616 Avg. 15 Sd	0.56	1.43	0.93
Lapua No. 185-gr. BTHP	2587 Avg. 10 Sd	0.98	2.18	1.56
Samson No. 150-gr. BTSP	2665 Avg. 24 Sd	0.93	1.79	1.43
Average Extreme Spread				1.30

Five consecutive 5-shot groups from 100 yds., fired from sandbags. Abbreviations: Sd (standard deviation), BTHP (boattail hollow-point), BTSP (boattail soft-point)

BERETTA SILVER PIGEON



Beretta U.S.A. introduces its Silver Pigeon over/under shotgun equipped with an all-new electroless nickel finish receiver, enhanced engraving pattern and a schnabel fore-end. The Silver Pigeon replaces the Beretta 686 Silver Perdiz.

WHEN we reviewed the very basic Beretta Model S686 Essential (June 1995, p. 55), we presented it as for those "who want the features of the 686 without the 'bells and whistles'."

The next step up in the well-proven 686 shotgun line is the Onyx (December 1989, p.49), that we called "for the hunter who prefers a tastefully subdued appearance." The Onyx's appearance differed from the Essential's mainly by the addition of side ribs, better wood and metal finish, gold inlay on the sides and bottom of the action and a gold-plated trigger. The next level of the 686 line, the 686 Silver Perdiz, has been recently replaced in the Beretta line-up by the 686 Silver Pigeon.

Following the pattern of the earlier guns, the changes and improvements to the Silver Pigeon grade are mainly cosmetic, concentrating on ornamentation and engraving.

The only externally-blued parts on the Silver Pigeon are the chrome-lined 28" barrels, their side ribs and the non-tapering, .23" ventilated top rib. The top rib is cross-hatched with a single .12" front bead, and the barrels accept the interchangeable Beretta Mobilchokes that are supplied with the gun.

The barrels are assembled on a monobloc that is engine-turned on its interior surfaces.

The action body has a satin electroless nickel finish, and is decorated with rolled scroll engraving on all sides, as well as on the trigger guard, fore-end latch and top lever. The only visible external screw is in front of the trigger guard, its head engraved and locked in place by a single brass set screw.

The light walnut stock is finished to a very high gloss with a schnabel fore-end tip and bordered checkering at 20 lines per inch on the gun's fore-end and pistol grip. The stock is not equipped with a grip cap and the 1/2" chocolate-colored rubber recoil pad is solid.

As with the rest of Beretta's 686 line, the automatic safety is positioned behind the top lever and houses the selector switch. With the selector to the right, exposing two red dots,



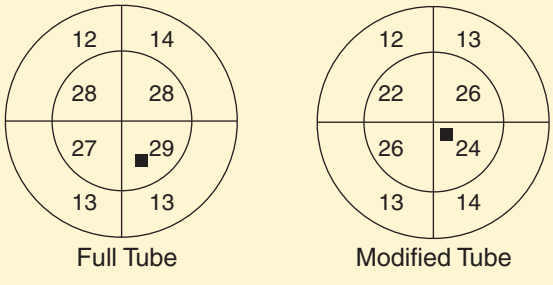
The Silver Pigeon was quick-handling in shooting at sporting clays, but we would have preferred a bit more rounded fore-end shape for the maximum shooting comfort.



The Silver Pigeon's action body has an electroless nickel finish and is well-decorated with rolled scroll engraving on all sides. The chrome-lined barrels are fitted into a monobloc.

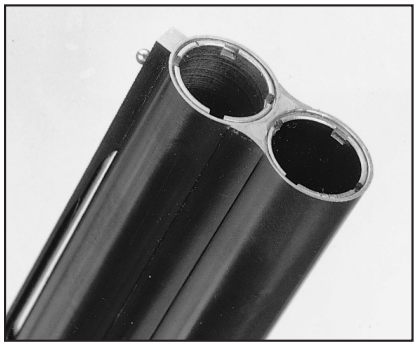
BERETTA SILVER PIGEON

AVERAGE OF 10 PATTERNS AT 40 YDS.



■=Point of Hold
Winchester Xpert Light Field 3¼-1-6
Pellet count—213

Total Hits	164 (77%)	Total Hits	150 (70%)
21.2" Inner Circle	112 (53%)	21.2" Inner Circle	98 (46%)
30" Outer Ring	52 (24%)	30" Outer Ring	52 (24%)



The barrels are threaded for the Beretta Mobilchoke system of interchangeable choke tubes. Improved cylinder, modified and full-choke tubes are standard items.

the top barrel fires first. Moving the button to the left, exposing a single red dot, selects the gun's bottom barrel as the first to fire. The single gold-plated trigger uses an inertia-type reset for firing the second barrel.

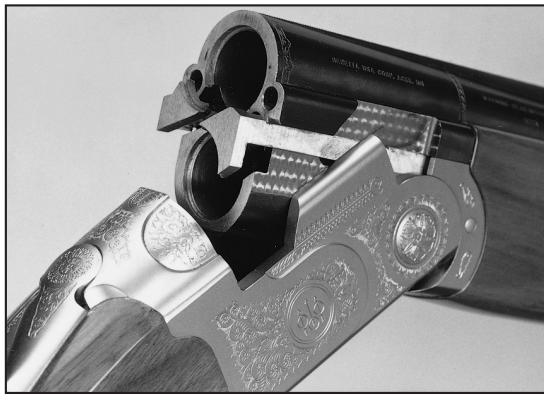
The hammers are cocked by rods in the bottom of the action that are pushed back by a pair of levers in the fore-end when the action is opened. This system provides selective ejection.

The Silver Pigeon was pattern-tested using Winchester Xpert Light Field loads with the results shown in the accompanying table, and function fired with a variety of foreign and domestic loads at sporting clays. There were no malfunctions of any kind.

One of our staffers who is slight of build often has problems with inertia-type triggers not resetting to the other barrel. During the course of our patterning and test firing, the Silver Pigeon gave him no trouble whatsoever.

Another nuisance we've often experienced is with guns having deep, sharp checkering that rubs the fingers raw after a day of shooting. The checkering on the Silver Pigeon strikes a balance between comfort and function and presented no problems.

Handling will hold no surprises to those who've fired earlier 686 variants, with a very neutral feel that is appropriate for a wide variety of shooting activities.



Like other Beretta over-unders, the Silver Pigeon is held closed by a bolt that engages a pair of holes on either side of the monobloc. This allows a low action body.

The ornamentation of the action body places the Silver Pigeon grade above the Essential and Onyx, but the stock finish seemed less than adequate for a gun of this price range. The wood stood higher than the metal along virtually all lines, and at the wrist the wood stood up nearly a full 1/8" higher, leaving it vulnerable to snagging and splintering.

The high gloss finish was deep and a little milky, and obscured the light walnut's grain. The finish was also so susceptible to chipping that we had to be extremely deliberate not to chip it along edges when assembling or disassembling the gun, and could not help but chip it slightly about the tang when operating the top latch.

Had the attention given to the Silver Pigeon's action decoration been given equally to our sample's stock, this gun would have been more appealing to those here who tested it.

SILVER PIGEON

MANUFACTURER: Fabbrica d'Armi Pietro Beretta, S.p.a., 18 Via Pietro Beretta, 25063 Gardone V.T. (Bs), Italy
IMPORTER: Beretta USA Corp., Dept. AR, 17601 Beretta Dr., Accokeek, MD 20607
MECHANISM TYPE: over-under shotgun
GAUGE: 12, 3"
OVERALL LENGTH: 45¾"
BARREL LENGTH: 26", 28" (tested)
WEIGHT: 6 lbs., 13 ozs.
TRIGGER: single selective, 5 lbs. pull both barrels
STOCK: American walnut: length of pull, 14½"; drop at heel, 2¼", drop at comb, 1½"
ACCESSORIES: choke tubes, spanner
PRICE: $1544

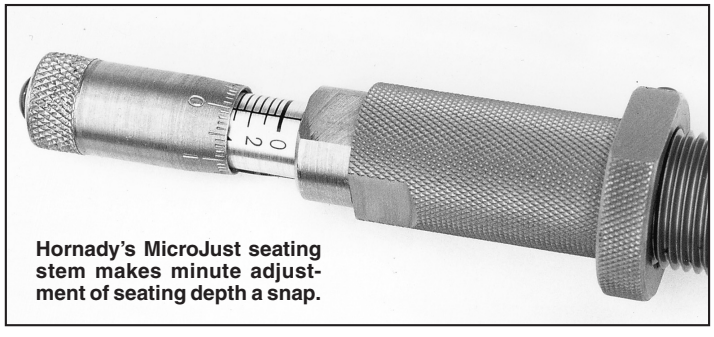


The tang-mounted automatic safety houses the barrel selector switch. Moving the switch to the left exposes a single red dot and selects the bottom barrel to fire first.

HORNADY MICROJUST

HANDLOADERS who spend hours and hours toiling over all the loading variables that can have an affect on accuracy will likely appreciate the all-steel MicroJust seating stem recently introduced by Hornady Manufacturing Co.

Bench-rest shooters have demonstrated time and time again that the close control of seating depth is an important part of consistent and accurate shooting. The Microjust stem is an affordable way to quickly and easily convert any Hornady New Dimension seating die into a calibrated seating die that can be set to a desired bullet seating depth for a particular rifle and load combination.



Hornady's MicroJust seating stem makes minute adjustment of seating depth a snap.

To use, remove the standard seating depth adjustment stem on your die and replace it with the MicroJust stem. Bullet seating depth can be precisely adjusted and set in .001" increments by simply turning the calibrated adjustment knob.

Increments marked on the stem can be recorded for future reference, thus eliminating the need for trial-and-error seating depth adjustments at a later date.

Available from: Hornady Mfg. Co., Dept. AR, P.O. Box 1848, Grand Island, NE 68802-1848, phone: (800) 338-3220. Price: $14.95.