

A Step Apart

The Browning Maxus



Browning completely overhauled the Gold design, and in doing so gave the Maxus a laundry list of worthwhile features—not to mention a look all its own.

BY AARON CARTER, Managing Editor



Since Mossberg's 1988 introduction of the Model 835 Ulti-Mag, the first $3\frac{1}{2}$ "-chambered 12-ga. shotgun, many customers have demanded that new models handle that lengthiest of 12-ga. options. In an effort to make sales, companies complied with the request.

The problem is, unlike pump-action shotguns, such as the Ulti-Mag, Browning BPS or Remington Model 870 Express Super Mag, which pose few design problems for handling $2\frac{3}{4}$ ", 3" and $3\frac{1}{2}$ " shotshells interchangeably, the same cannot be said for semi-automatics. Operating on propellant gases or kinetic energy rather than human strength, reliable functioning through widely varying intensity levels in loads spanning the 12-ga. spectrum creates a difficult engineering challenge, especially with low-power $2\frac{3}{4}$ " shells. For most $3\frac{1}{2}$ "-chambered semi-automatics, the lightest loads that function *reliably* typically contain

$1\frac{1}{8}$ ozs. of shot. Browning's flagship autoloader, the Gold, is no different. What about the overwhelming 1-oz. options? Such was a key motive for Browning making the new Maxus, which Browning liaisons report as meaning "the maximum," "the ultimate," "nothing exceeds it," "superior," and "the best."

But, the company didn't stop there. It completely overhauled the Gold design, and in doing so gave the Maxus a laundry list of worthwhile features—not to mention a look all its own. As such, the Maxus is, in terms of reliability, appearance and performance, a step apart from its brethren, as well as the competition.

Short-Stroke—Basic Operation

Like Browning's Gold shotgun, which debuted in 1994, the Maxus uses a gas-operated, short-stroke piston system, albeit with several notable upgrades.

BROWNING MAXUS



The Maxus' trimness, light weight, and shotshell interchangeability enables it to fulfill many roles.

Immediately after the wad's gas seal passes the dual ports, which are located side-by-side in the bottom of the barrel, high-pressure propellant gases flow through the ports and the gas bracket and push the piston rearward, forcing the piston sleeve and operating rod—the latter of which is located on the left side, as opposed to the right side on the Gold—backward. Energy from the operating rod is transferred to the bolt carrier, which, moving rearward, forces the lug—at the back of the bolt—to disengage from its seat in the barrel extension.

As the bolt carrier retracts, the bolt's cross pin and an angled cutout in the carrier force the bolt's "hook"—on the bottom, rear—to drop into a corresponding recess in the carrier. The hook comes to rest against a separate, spring-loaded—no doubt to reduce wear—piece of steel possessing an identical angle, which

forces the bolt and bolt carrier to move rearward in unison. As the bolt assembly retracts, the extractor, previously at rest in a large, rounded cutout in the barrel, extracts the hull. The hull continues moving rearward with the bolt assembly until contacting the spring-loaded ejector in the barrel extension's left side, opposite the extractor, at which point the hull is ejected through the ejection port. During this process, the hammer is cocked.

During rearward movement of the bolt assembly, the link, located on the rear of the bolt carrier, compresses the recoil spring in the buttstock. After reaching its full rearward travel, the recoil spring rebounds, forcing the bolt assembly forward, where it chambers an awaiting shotshell and completes lockup. A short coil spring around the magazine tube serves as a return spring for the piston assembly.

Browning's Maxus Afield & On The Range

I was not the first person to hunt with the Maxus I carried in South Dakota last fall. In fact, the gun I shot—one of the first 20 Maxus guns in existence—had already cycled thousands of rounds in factory torture tests, Argentine dove shoots and Midwestern snow goose hunts. In the three days I took my turn with it, I shot it at lots of pheasants and even more clay targets before reluctantly giving it back. The Maxus impressed me with its soft recoil, sure handling and light weight. Browning engineers took their time with the Maxus, developing it over nearly five years. My first impression is that they got the gun right.

Unlike its predecessor, the Gold, which started as a 3" gun and was

stretched to chamber 3½" ammunition, the Maxus was designed from the beginning to handle the extra stress of 3½" shells. Inside, it's a more robust gun than the Gold, but you would never know that to pick it up. The Maxus is lighter and slimmer than the Gold, especially in the front end. A lightened magazine tube and slimmed-down fore-end make it feel almost like a lively over-under—in fact, I think it's livelier than a lot of 12-ga. over-unders.

The light, lean Maxus fits perfectly into the venue Browning chose for introducing the gun to the press: R&R Pheasant Hunting (r-rpheasanthunting.com) near Seneca, S.D. For three days we walked long stretches of sorghum and corn, with pheasants popping up all around us in

increasing numbers as we approached the blockers. At the advice of owner Sal Roseland, we shot Winchester Super Pheasant loads of 1½ ozs. of No. 4 shot at 1300 f.p.s., a load that is stout in recoil in a lightweight gun, especially when you shoot it enough for a 10-bird limit (R&R has a preserve license). Throughout the hunt the Maxus was neither a strain on the arms or a pain in the shoulder. Despite its light weight, it shot very softly and I made plenty of fast follow-up shots and a couple of doubles.

In the afternoons, we took the guns to R&R's 5-Stand sporting clays layout, where flat upon flat of 2¾-dram, 1½-oz. loads awaited. If there's a faster way to make empty hulls than by offering outdoor writers free ammunition, I don't know what it is. Even so, after a lot of shooting, I finished the afternoon 5-Stand sessions feeling fresh and unbruised. My pre-production gun did



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A Maxus in Duck Blind camo is ready for the hunt. The Maxus handles a wide range of ammunition, from light target loads to 3½" waterfowl and turkey stoppers. It's a versatile gun, and a good choice for the person who wants to use one gun for many different kinds of hunting.

Photos by Phil Bourjaily

The Browning Maxus can be quickly disassembled without special tools, making transport and cleaning easy and fast.



Active Valve, Updated

Traditionally, 12-ga., 3½"-chambered semi-automatic shotguns have exhibited intermittent reliability when loaded with 2¾", 1-oz. loads; however, 1½- and 1¼-oz. loads typically cycle without issue. As such, company literature often denotes one of the latter as the minimum recommended. Such is the case even with Browning's own Gold and Silver shotguns. So, in creating, "The most reliable shotgun the world has ever known," as Browning advertising proclaims,

company engineers had to resolve a shortfall of previous semi-automatic shotgun designs—a difficult task, to be sure. To ensure the Maxus' functionality with, as well as interchangeability between, light, 2¾", 1-oz. loads through the highest-payload 3½", 2¼-oz. turkey options, and everything between, Browning revamped the Gold's "Active Valve" system.

To accomplish this, Browning created the Power Drive gas system, which features a "... new sealing system to encapsulate the maximum gas from the light loads." In essence, the so-called "active ring system"

suffer a couple of failures to feed with target loads, although Maxus designer Marc Lesenfants was on hand to trace the problem to an out-of-spec magazine latch spring. Aside from that minor problem, the guns gave us no trouble whatsoever.

One evening we sat out for doves, although the unseasonably cool weather had pushed most of them south. Since my two-bird bag made me high gun for the entire group, it wasn't exactly a hot barrel hunt, but the Maxus helped me make the most of the two chances I got. With its sure-pointing, light weight, soft recoil and Speed Load feature, the Maxus seems like a natural choice for the dove field.

Since that hunt I've had the chance to shoot the Maxus at clay targets at home. I've been able to alternate shots with the Maxus and several other semi-automatics to test felt recoil. Pound for pound, it is as soft-shooting a semi-automatic as I've ever tried. The Inflex Technology recoil pad has angled ribs inside; you can see them when you remove the pad. When the pad compresses under recoil, they ribs are supposed to direct the gun down and away from your face. Although I am skeptical of the claims made for high-tech recoil

pads (they work, just not as well as manufacturers say they do) the Inflex pad does seem to keep the Maxus out of your face exactly as advertised.

The Maxus has some unique features, with the fore-end latch being the one you notice immediately. It is sized to hold an Uncle Mike's swivel, and the latch-clamp allows you to easily attach and detach a sling. The biggest plus to the magazine-capless design: If you have to disassemble the gun in the field, there's no more worry about dropping and losing a magazine cap—and if you've ever had to take a balky gun apart while standing in knee-deep water as I have, you know what I'm talking about.

The safety is easy to find and manipulate, and it reverses in moments for left-handed use. The Maxus has an enlarged trigger guard, too, that makes it easy to shoot with gloves on, although I have not yet hunted with the gun in cold weather. Overall, the Maxus is an impressive shotgun. It's a fitting tribute to the genius of John Browning, as well. Browning invented the gas-operated firearm and the semi-automatic shotgun, but he never made a gas-operated shotgun. You can only imagine that he would look at the Maxus and approve.

—PHIL BOURJAILY, FIELD EDITOR



Long, light, slim and soft-shooting, the Maxus meets the needs of pheasant hunters perfectly: It's easy to carry and soft-shooting with heavy loads.

is an elastomeric seal inside the piston that captures additional gasses from low-power loads necessary for operation. With most 2¾", 1-oz. loads, then, the majority of the gases are utilized.

Although the active ring system aids functioning with light loads, had Browning's engineers left the number, configuration, positioning and geometry of the exhaust ports unchanged, its use would have been impossible. Since heavily loaded shotshells produce a higher volume of propellant gases, most of which is unnecessary for proper functioning, the seal would have "encapsulated" too much gas. Like the Gold, Silver and their Winchester counterpart, the Super-X3 (SX3), the exhaust ports on the Maxus' piston are on two planes; however, they are fewer in number, of different shape, and are substantially larger—optimized to expel gases faster. Excess gases are expelled from the exhaust ports through the fore-end, on either side of the barrel.

Energy from the aluminum piston is imparted to the aircraft-grade aluminum piston sleeve and steel operating rod. To further enhance reliability, particularly with the light, 2¾", 1-oz. loads, the "stroke" has been lengthened 20 percent; however, the advantages of the short-stroke system have been maintained.

Filled To The Max

Like its Gold and Silver siblings, the Maxus' 9"-long receiver is made from strong, yet lightweight, aircraft-grade aluminum alloy; however, the Maxus follows suit with the former's non-semi-humpback profile. Instead of the Gold's vertical receiver face, though, the Maxus' receiver has a rearward-angling portion, the lines of which carry over to the ejection port—both of which make for a modernistic appearance. Below the ejection port, in embossed lettering, is the gun's name. Directly in front of "Maxus" is the bolt-release button, and similarly located on the opposite side of the receiver is the magazine cut-off lever. Under most circumstances, the Maxus' magazine cut-off is unnecessary; however, when the situation dictates changing the chambered shotshell in short order, it could prove invaluable. Essentially, it enables the user to remove a chambered shotshell without cycling another from the magazine. Unlike most semi-automatic shotguns, though, the Maxus' magazine cut-off lever is easily

accessed and activated. Pulling the lever rearward rocks the inner portion of the cutoff into position in front of the awaiting shell in the magazine tube, blocking it, while pushing the lever forward allows unimpeded firing.

To quicken reloads, the Maxus features "Speed Load Plus," which allows, from the bolt-open mode, the first shotshell inserted into the magazine to be automatically fed onto the elevator, and then chambered. The Maxus can also be loaded from the traditional modes: dropping a shotshell through the ejection port and depressing the bolt-release button, or, with the bolt closed, loading the magazine and then retracting and releasing the operating handle. Just as Speed Load Plus lessens loading time, pushing inward on the shell stop quickens unloading.

Pushing out the Maxus' two trigger guard pins allows for removal of the trigger group, the components of which are newly designed. Coined "Lightning Trigger System," Browning reports an average lock-time of 5.20 milliseconds, or as the company's literature touts, "...24 percent faster than the nearest competing autoloader..." According to Marc Lesenfants, primary designer of the Maxus, this is achieved through an increase in leverage—approximately 40 percent—a strengthened hammer spring and a lighter, thinner hammer made of CK75 steel alloy. At odds with the new gun's Mossy Oak Duck Blind camouflage and matte-black finish options, is the company's signature gold-plated trigger shoe, a feature carried over from the Gold.


The Maxus' large, round cross-bolt-style safety, the face of which is checkered for enhanced purchase, differs from that of its Gold predecessor, which is triangular in shape. It is similarly located and equally easy to manipulate. The Maxus' trigger guard is sized appropriately to facilitate a gloved finger.

The shotgun is shipped with a magazine adapter (plug) installed, thereby restricting capacity to three shotshells—two in the tubular magazine and one in the chamber; however, the plug's "TurnKey" design makes removal quick and easy. With the fore-end removed, a house or vehicle key or standard, flat-blade screwdriver, is inserted into the slot at the end of the magazine tube, then pushed inward and rotated one-quarter turn, which aligns the plug with the slot. This completed, angling the Maxus downward allows the adapter to slide out. Absent the plug, the 3"-chambered version holds four 2¾" or three 3" shotshells in the magazine, and the 3½"-chambered Maxus adds the ability to accommodate three 3½" shells.

Nearing the end of the tubular magazine is a cutout to which the new "Speed Lock Forearm" is secured—it is tensioned by a coil spring inside the fore-end, which compresses against the gas bracket. Instead of the traditional magazine cap, such as found on most tubular magazine-fed semi-automatic and pump-action shotguns, the Maxus' fore-end is secured via the



The Maxus' Speed Lock Forearm quickens removal.



The piston and piston sleeve with the operating rod can be disassembled to facilitate thorough cleaning.

"Speed Lock" lever, quickening removal for takedown. Depressing the release button forward of the Speed Lock lever enables the latter to be lifted, thereby freeing the fore-end for removal. Even with the Speed Lock Forearm removed, the Power Drive gas system remains steadfast. When secured, a hook on the front of Speed Lock lever serves as the quick-release front sling swivel point—without interfering with the fore-end's aesthetically pleasing lines. The fore-end continues the receiver's lead, providing rearward-sweeping angles contributing to the Maxus' modernistic look. With this, the fore-end features the rugged, tactile Dura-Touch Armour Coating, along with molded-in textured surfaces, which enhance purchase.


Like the Speed Lock Forearm, the Maxus' buttstock is also made of a lightweight, yet strong composite material and features the sprayed-on and baked Dura-Touch coating. Unlike the Gold and Silver, the Maxus has a close-radius pistol grip, which Browning reports is "to maximize control"—a welcome addition on a 3½"-chambered shotgun. Molded into the buttstock is the rear sling swivel stud. Capping the buttstock is the company's soft, contoured Inflex Technology recoil pad, which is also used on some of the company's Cynergy over-under shotguns. According to company literature, "Inflex Technology is engineered with directional deflection to pull the comb down and away from your face ... for even greater comfort and faster follow-up shooting." Length of pull, drop and cast adjustments can be made by removing, adding or exchanging the included spacers and shims.

The Maxus' barrel—available in 26" and 28" lengths—is manufactured from rolled, tempered steel bars that are stress-relieved then, according to the company, are "precision drilled, reamed and honed to exacting specifications." Topping the barrel is a flat, low-lying ventilated rib—the cutouts of which enhance

the Maxus' appearance—on the same plane as the receiver, with a simple white bead for sighting. Like those of the company's other shotguns, the Maxus features what Browning has coined, "Total Barrel Dynamics," which addresses the interrelationship between back-boring, forcing cone length and choke.

A longtime promoter of back-boring, Browning proclaims that "0.742" Back-Bored Technology," "... represents the ideal bore diameter." The reason? "[It] reduces friction between the shot cup and the barrel to propel the shot pellets to a higher velocity for minimal shot deformation and maximum pattern uniformity," touts Browning literature. One can only speculate that a bore diameter of 0.742" could allow gases to bypass the wad, especially in cold weather, as there is no "standard" wad design in terms of gas seal length/depth, width, subtlety and material. Browning engineers claim that's not the case. The SAAMI-listed 12-ga. bore diameter is 0.725" + 0.020", so the bore is within recommended tolerances. So, is 0.742" back-boring extreme? Not if one considers that Mossberg uses 0.775"—true 10-ga. diameter—back-boring in its 3½"-chambered semi-automatic shotgun, the 935 Magnum. And, perhaps not surprisingly, Winchester uses 0.742" back-boring in its Super-X3.

According to Browning, the 2.5"-long Vector Pro forcing cone "... reduces constriction from the forcing cone on the shot column, leading to significantly fewer deformed pellets and more uniform patterns with more pellets in the central part of the pattern." No arguments there; lengthening forcing cones is standard practice to enhance patterns. The Vector Pro's long, gradual 0.7-degree taper is made possible by back-boring the barrel to 0.742". Like the Vector Pro forcing cone, the Invector-Plus choke tube system for which the Maxus is threaded, also features a longer taper for improved performance. Browning also claims the design, "eliminates gases slipping between the choke tube and barrel that could damage the choke tube and the barrel."



Integral with the Maxus' trigger group is the new Lightning Trigger (l.), which has an average locktime of 5.20 milliseconds. The gun's bolt assembly (above) resembles that of the Browning Gold.

Testing The Maxus

According to Browning, "Several innovative technologies combine to make the Maxus deliver up to 18 percent less felt recoil for greater shooting comfort, 44 percent less muzzle jump for more accurate follow-up shots, plus 19 percent faster bolt speed and 24 percent faster locktime than the nearest competitor." Lacking the equipment necessary to quantify the aforementioned percentages, at least those not subjective in nature, I take the numbers at face value.

What I can report, however, is how the Maxus handled, performed and felt during testing. To test reliability, I subjected the Maxus to rigorous range work, including function-testing, patterning and, to evaluate its handling characteristics, sporting clays. Opinions concerning the Maxus were formed throughout the testing phase.

To check load versatility, at random I loaded the 3½"-chambered Maxus with three 12-ga. shotshells that represented not only differences in manufacturer, but also length (two were identical, though), shot charge, propellant weight, shot size and velocity. The loads, Winchester 2¾", 1-oz. AA Super Sport Sporting Clays, Polywad 2¾", 1⅛-oz. Spred-R, and Remington 3½", 2¼-oz. Premier Magnum Turkey, all functioned without issue, regardless of order. Most impressive, though, was the flawless functioning of the former. Not only did they cycle reliably, but did so immediately after 3½" shotshells!

Function-testing the Maxus made obvious, to both shooters and bystanders, the real reduction in muzzle flip. As for Browning's reported 18-percent reduction in recoil, though, the difference was less apparent. Although the Power Drive Gas System, Inflex Technology recoil pad and, perhaps, Vector Pro forcing cone and 0.742" back-boring, serve to lessen felt recoil, the Maxus is by no means "... very pleasant to shoot, regardless of loads," as Browning literature suggests. At 6 lbs., 15 ozs. (28"-barreled,

3½"-chambered version), it can't be—as dictated by physics. That said, although not "pleasant," recoil from magnum loads, especially 3½" shotshells, is tolerable.

Relegating the Maxus to a Caldwell Lead Sled for consistency, the patterning paper revealed the benefits of Browning's Total Barrel Dynamics. Using the supplied flush-fitting, Invector-Plus full choke tube and Federal 3" Black Cloud shotshells with 1¼ ozs. of BB-size shot, at 40 yds. the Maxus performed as advertised, exhibiting "more uniform patterns with more pellets in the central part of the pattern."

Function-testing and patterning complete, it was time to evaluate the Maxus' handling qualities at the sporting clays course. Immediately noticeable were the Maxus' light weight and ergonomics, both of which enhanced handling and belie its true capability. In most cases, it represents a respectable weight savings over like-chambered models, imposing less user fatigue during extended carry and faster response.

Regardless of target type or presentation, the Maxus shouldered fluidly and without snagging, then remained steadfast, thanks to the contoured, slightly tacky, Inflex Technology recoil pad. The flat, low-lying rib, on the same plane as the receiver, and light weight, sped instinctive "snap-shooting" on going-away targets, while the slightly barrel-heavy balance contributed to fluidity on incoming and crossing targets—the same two qualities that would make the Maxus equally useful for pursuing upland birds as waterfowl.

Considering the course's degree of difficulty, and being my first sporting clays session with the Maxus, breaking 29 out of 50 was a respectable showing. Best of all, the Maxus fed the Rio target loads and my handloads, both of which contained 1 oz. of shot and a propellant charge equivalent to 3 dram, without issue.

Best described as lively, trim and svelte, the Maxus looks and feels like anything but the typical 3½"-cham-

bered field gun; its fore-end, thin and textured at the top, palming-filling at the bottom; a minimalist buttstock with a tight, close-radius pistol grip with textured panels for controllability; and a petite receiver, measuring only slightly more than 1½" across. In sum, it makes for a shotgun that's not only aesthetically pleasing, but suitable for a range of uses and users.

With the Maxus, Browning has achieved a worthy goal. Not only does it function with light, 2¾", 1-oz. 12 ga. loads, but all others up through 3½", 2¼-oz. magnum shotshells. Along with that, the Maxus offers a host of features that simplify operation and maintenance, as well as enhance handling, reliability and appeal. Come to think of it, what more could you ask for?



BROWNING MAXUS

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PORTUGAL 351 258 35 90 00

IMPORTER: BROWNING (DEPT. AR),
ONE BROWNING PLACE, MORGAN, UT
84050 (801) 876-2711
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MECHANISM TYPE: SHORT-STROKE,
GAS-OPERATED, SEMI-AUTOMATIC SHOTGUN
GAUGE: 12, 3", 3½"(TESTED)

RECEIVER: ALUMINUM ALLOY (MOSSY OAK
DUCK BLIND OR MATTE BLACK)

OVERALL LENGTH: 47¼" (3");
49¼" (3½")

BARREL LENGTH: 26", 28" (TESTED)
WEIGHT: 6 LBS., 14 OZS. (3"); 6 LBS.,
15 OZS. (3½")

MAGAZINE CAPACITY: ABSENT TURNKEY
PLUG, FOUR (2¾"),
THREE (3" AND 3½")

TRIGGER PULL: SINGLE-STAGE, NON-
ADJUSTABLE; 7 LBS., 7 OZS.

STOCK: COMPOSITE, DURA-TOUCH
ARMOUR COATING IN MOSSY OAK
DUCK BLIND (TESTED) OR MATTE-BLACK;
LENGTH OF PULL, 14¼"; DROP AT COMB,
1¾"; DROP AT HEEL, 2"

CHOKES: INTERCHANGEABLE INVECTOR-
PLUS CHOKE: IMPROVED CYLINDER,
MODIFIED AND FULL

SIGHTS: WHITE FRONT BEAD

ACCESSORIES: THREE CHOKE TUBES, CHOKE
TUBE WRENCH, TWO SPACERS, FIVE SHIMS,
CABLE LOCK, INSTRUCTION MANUAL.

SUGGESTED RETAIL PRICE: \$1,199 (3"
MATTE BLACK); \$1,379 (3½" MATTE
BLACK); \$1,339 (3" MOSSY OAK DUCK
BLIND); \$1,499 (3½" MOSSY OAK
DUCK BLIND)