



# Browning BAR ShortTrac .270 WSM

## BAR SHORTTRACK

**MANUFACTURER:** Miroku Firearms Mfg. Co., 537-1 Shinohara-Nangoku City, Kochu Pref., Japan

**IMPORTER:** Browning Arms Co. (Dept. AR), One Browning Place, Morgan, UT 84050; (800) 333-3288; www.browning.com

**CALIBER:** .243 Win., .270 WSM (tested), 7 mm WSM, .308 Win., .300 WSM

**ACTION TYPE:** gas-operated, semi-automatic, center-fire rifle

**RECEIVER:** matte anodized aluminum

**BARREL:** 23", hammer-forged, blued steel

**RIFLING:** seven-groove, 1:10" RH twist

**MAGAZINE:** detachable box on hinged floorplate; three-round capacity

**SIGHTS:** none; receiver drilled and tapped for scope bases

**TRIGGER PULL:** single-stage; 4 lbs.

**STOCK:** European walnut; length of pull, 13 3/4"; drop at heel, 1 1/8"; drop at comb, 1 5/8"

**OVERALL LENGTH:** 42 7/16"  
**WEIGHT:** 7 lbs., 5 ozs.

**ACCESSORIES:** six shims for adjusting stock dimensions, trigger lock

**SUGGESTED RETAIL PRICE:** \$965

Introduced in 1967, the gas-operated Browning BAR has proven to be a reliable and very successful semi-automatic sporting rifle. But, with development of the Winchester Short Magnum family of cartridges, Browning has made some radical aesthetic and ergonomic changes to the venerable BAR.

The standard Safari and Lightweight Stalker BARs are still offered, but the new LongTrac and ShortTrac bring modern European styling to the design. The ShortTrac (designed for short-action length cartridges) is offered in .243 Win., .308 Win., .270 WSM,

7 mm WSM and .300 WSM, while the LongTrac handles the longer .270 Win., .30-'06 Sprg. 7 mm Rem Mag. and .300 Win. Mag.

The European-style walnut fore-end and contoured buttstock differentiate the ShortTrac from more traditional American-style BARs. The .270 WSM we received has a more angular fore-end that extends farther to the rear, covering the front of the lower receiver. There are pronounced ascending thumb grooves on either side of the fore-end, and the belly is checkered in an angular pattern. A sling swivel stud protrudes from the front of the fore-end.

The buttstock has a full pistol grip, again with fine checkering, and seemingly arbitrary angular lines on its surface. A user-adjustable shim system (as is often found on shotguns) allows the shooter to tailor the gun to his or her dimensions. Each gun includes six spacers that install between the buttstock and receiver, allowing adjustments to the drop of comb, drop at heel and cast on or off. The 1" soft rubber recoil pad is radiused at its top to aid in rapid mounting and is contoured to the lines of the butt.

The BAR's basic operation remains unchanged.



The Browning ShortTrac combines the tried-and-true design features of the nearly 40-year-old BAR sporting rifle with modern European styling and WSM chamberings.

The seven lugs of the bolt head rotate 60 degrees to engage recesses in the barrel, providing steel-on-steel lock-up. The head is rotated by a cam pin in the bolt sleeve, or carrier, after that part has moved rearward about 3/16". The spent cartridge case is withdrawn by a hook extractor on the right side of the bolt head and ejected by a plunger ejector on the left.

The short-stroke piston system operates much like that of the M1 Carbine. On firing, propellant gasses pass through a hole in the barrel and drive a captive piston rearward. This in-

turn strikes a heavy inertia piece that, working through the action bars, unlocks the action. Gas is regulated by a screw passing diagonally into the right side of the cylinder.

The bolt-release lever is at the right front of the receiver, and it has been extended and recontoured due to the lengthened fore-end. After the last round of a magazine is fired, the magazine follower presses the lever up into engagement with the right slide bar, locking the bolt assembly open. Pressing the lever down disengages it from the slide, allowing the bolt to slam home.

## SHOOTING RESULTS (100 YDS.)

.270 WSM Cartridge	Vel. @ 15' (f.p.s.)	Energy (ft.-lbs.)	Group Size In Inches		
			Smallest	Largest	Average
Winchester Power Point 150-gr.	3003 Avg. 35 Sd	3004	1.78	3.42	2.78
Winchester Ballistic Silvertip 150-gr.	3103 Avg. 16 Sd	3208	1.86	5.58	3.28
Federal Vital-Shok 140-gr. TBBC	3084 Avg. 14 Sd	2957	1.62	3.86	2.82
Average Extreme Spread					2.96

Measured average velocity for 10 rounds from a 23" barrel. Range temperature: 78° F. Humidity: 49%. Accuracy for five consecutive, five-shot groups at 100 yds. from a sandbag. Abbreviations: TBBC (Trophy Bonded Bear Claw), Sd (standard deviation).

The trigger assembly, riding in a polymer housing, is removed by driving out a pair of pins. The floorplate and trigger guard, too, are of molded composite, and the three-round-capacity magazine can be loaded simply by pulling back on its catch in

front of the trigger guard and inserting ammunition. The box may be separated from the floorplate by pulling up on its rear end. The safety is a trigger-blocking crossbolt at the rear of the trigger guard.

All ShortTrac barrels are produced by Fabrique Nationale in Belgium (Browning's parent company) and are of hammer-forged, blued steel with a high polish. This is in contrast to the attractive matte-anodized finish of the rifle's receiver. No iron sights are supplied, but the receiver is drilled and tapped for scope mounting.

Our sample .270 WSM was rifled with a 1:10" right-hand twist and featured a slight recess at the muzzle crown to protect the rifling. It was function-fired and shot for accuracy with results shown in the accompanying table. There were no failures of any kind.

The ShortTrac is a handsome, if non-traditional looking, addition to the BAR line. It brings clever features from the company's shotgun side into a lightweight, handy—and thanks to its WSM chamberings—powerful rifle that we would take afield anytime. 

The magazine floorplate (r.) is of molded composite, and the three-round-capacity magazine can be loaded simply by pulling back on its catch (below, arrow) in front of the trigger guard and inserting ammunition. The box may be separated from the floorplate by pulling up on its rear end.



The ShortTrac's bolt-release lever (below) is at the right front of the receiver, and it has been extended and recontoured due to the lengthened fore-end.



The trigger assembly (above), is contained in a polymer housing that may be removed by driving out a pair of pins, much like with many semi-automatic shotguns. The safety is a trigger-blocking crossbolt at the rear of the trigger guard. Like the lines of the fore-end, the shape of the trigger guard is futuristic.



The *American Rifleman* has used the phrase "Dope Bag" at least since 1921, when Col. Townsend Whelen first titled his column with it. Even then, it had been in use for years, referring to a sack used by target shooters to hold ammunition and accessories on the firing line. "Sight dope" also was a traditional marksman's term for sight adjustment information, while judging wind speed and direction was called "doping the wind."

**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.

## Walther G22 Rifle



Long recognized for world-class military, police and target arms, Carl Walther GmbH, in 2004, made a radical departure from this tradition with the introduction of the G22, a rimfire rifle designed from the ground up solely as a recreational plinker.

The Walther G22 is a semi-automatic rifle in .22 Long Rifle with a modernistic polymer bullpup stock. Available in both black and olive drab, the stock affords an overall length of only 28.4" with the 20" barrel. Its features include an ergonomic pistol grip, recurved serrated trigger guard, textured rubber gripping inserts on the fore-end, and Picatinny-style rails on the carry handle and underside of the fore-end and front sight housing. The

visible metal parts, such as the barrel, bolt and bolt handle, screw heads, and sling attachment bushings on the fore-end and buttstock, are of blued steel.

The G22 can perhaps be thought of as a companion gun for Walther's P22 .22 LR pistol, as both share the same pistol-grip configuration and use the same 10-round magazines. Both right- and left-hand versions are offered, and each may be converted to the other by a Walther armorer. Because the bullpup design places the action and ejection port far back on the buttstock, the rifle is not suitable for ambidextrous use.

The stock terminates in a curved, serrated rubber buttpad about 3/8" thick. Its length of pull can be adjusted over a range of 1.1" using a series of spac-

ers and different-length buttpad screws supplied with the rifle.

The G22's magazine fits into a recess in the underside of the stock, and is released by depressing a curved button inside the stock's thumbhole. A supplementary recess near the stock toe affords storage of a spare magazine.

Directly above the trigger are bilateral serrated levers that are slid forward to put the gun on safe and to the rear to fire. The levers, which are almost flush with the stock surface, are best activated by the trigger finger. When the gun is in the "fire" mode, bright orange indicator tabs protrude from the stock on both sides, and orange dots are visible on the stock. Other safety features include a magazine disconnect, an in-

## WALTHER G22

**MANUFACTURER:** Carl Walther GmbH Sportwaffen, Postfach 2740, D-59717 Arnsberg, Germany, www.carl-walther.de

**IMPORTER:** Smith & Wesson (Dept. AR), 2100 Roosevelt Ave., Springfield, MA 01104; (800) 331-0852; www.smith-wesson.com

**CALIBER:** .22 Long Rifle

**ACTION TYPE:** blowback-operated, semi-automatic, rimfire rifle

**RECEIVER:** aluminum alloy

**BARREL:** 20"

**RIFLING:** eight-groove, 1:16" right-hand twist

**MAGAZINE:** detachable 10-round steel box

**SIGHTS:** post front, interchangeable notch rear; Picatinny rails on carrying handle, front sight housing and fore-end allow mounting of optical/red-dot/laser sights

**TRIGGER PULL:** two-stage; 3 lbs., 2 ozs.

**STOCK:** length of pull, 14 1/8" to 15 1/4"; drop at heel, 1"; drop at comb, 1"

**OVERALL LENGTH:** 28.4" to 29.5"

**WEIGHT:** 5 lbs., 13 ozs.

**ACCESSORIES:** hard plastic case, extra front sight, gun lock key, stock spacer and screws, owner's manual; optional: telescopic sights; red-dot sights; laser sight; sling and sling swivels; ballistic nylon carrying case

**SUGGESTED RETAIL PRICE:** \$420



The G22 can be thoroughly disassembled for cleaning and maintenance, although the procedure is a bit complicated. Although only 28.4" long, its bullpup design incorporates a 20" barrel.

Sighting is accomplished by way of a front post drift-adjustable for windage, and a retractable rear sight housing (r.) with a rotating disk allowing six notch heights. When the bilateral safety levers (above) are slid rearward to fire the gun, a red dot is visible on the side of the gun and orange indicator tabs protrude upward from the stock.



tegral key-operated trigger lock and a cocking indicator visible in the cocking lever window.

Sighting is by way of a 0.1"-wide front post dovetail-mounted in a skel-tonized polymer housing, and a rear notch in a housing that slides vertically in the carrying handle. In the housing is a rotating disk with six numbered notches of different heights. Going from the lowest (No. 1) to the highest (No. 6) notch, each successive step changes point of impact approximately 2" at 50 yds. The notch number is seen in a window in the sight housing. Additional elevation adjustment can be achieved by replacing the 0.225"-high standard front post with the optional 0.2"-

high post supplied with the rifle. Windage changes can be effected by drifting the front sight laterally in its dovetail mount. The sliding rear sight housing not only protects the gun's rear sight, but also allows the mounting of a riflescope on the carry handle's Picatinny-style rail.

Thanks to its bullpup design, the G22 is slightly more complex to disassemble for cleaning and maintenance compared to many other semi-automatic rifles. Only ordinary tools are required, however, and the process is thoroughly explained in the owner's manual.

We mounted a Burris Compact 3-9X scope on the G22 using Tactical Precision Systems rings (available from Brownells,

## SHOOTING RESULTS (50 YDS.)

.22 Long Rifle Cartridge	Vel. @ 15' (f.p.s.)	Energy (ft.-lbs.)	Group Size In Inches		
			Smallest	Largest	Average
CCI Green Tag 40-gr. lead solid	1006 Avg. 12 Sd	90	0.78	1.23	1.02
Federal No. 711 GM 40-gr. lead solid	1105 Avg. 13 Sd	108	0.66	1.02	0.79
Rem. No. 6122 40-gr. lead solid	1116 Avg. 22 Sd	110	0.97	1.32	1.14
Average Extreme Spread					0.99

Measured average velocity for 10 rounds from a 20" barrel. Range temperature: 71° F. Humidity: 44%. Accuracy for five consecutive, 10-shot groups at 50 yds. from a sandbag. Abbreviations: GM (Gold Medal), Sd (standard deviation).

concentrated the gun's mass between the hands, which enabled quick aiming and rapid target-to-target engagement. Sight height in relation to the stock comb was also judged to be very good.

We had only a few complaints about the G22: the trigger was a little spongy because of the bullpup's trigger linkage, and the "carry handle" was too far forward of the rifle's balance point to be truly useful for carrying the gun. Most significantly, the bolt catch lever sometimes failed to disengage and allowed the bolt to go forward on a fresh magazine when the cocking lever was retracted and released. The company is aware of the problem, and Walther has taken steps to rectify it.

It is said that beauty is in the eye of the beholder. Undeniably, there will be those who will find the G22's appearance appealing, and those who may not. However, another axiom also comes to mind: beauty is as beauty does. Given the G22's combination of accuracy, reliability, versatility and just plain fun, there will likely be many who find the gun beautiful indeed. 

# Steyr-Sportwaffen LP50 Air Pistol



The new five-shot .177-cal. LP50 air pistol from Steyr reinforces the company's reputation for accuracy and features many qualities associated with its predecessor, the LP5. A new ISSF rapid-fire air-pistol event and demand from NRA Bullseye pistol shooters led Steyr to develop the new LP50.

The Steyr LP50 is semi-automatic air pistol powered by compressed air. Filling the aluminum magazine is achieved by placing one match .177-cal. pellet in each of the magazine's five holes. The pellets can go in only one way as there is a milled bevel for the pellet's skirt. The magazine is inserted into its well from the left, and it may be inserted or removed only when the pistol is charged.

To charge it, simply cock the action by pushing the left or right charging handle forward until an audible click is heard. At this point the pistol is ready to fire. As each pellet is fired, the magazine slides right to left to bring another loaded chamber in alignment with the bore until all five shots are fired. If the trigger is pulled a sixth time, the action must be cocked before the magazine can be removed.

The LP50 features a functional compensator that provides stability and significantly controls muzzle rise while firing. There is also a rail system on both the left and right sides of the barrel shroud that permits any shooter to add one to four 10-gram weights secured by

a supplied Allen wrench. Without any weights, the LP50 checks in at a well-balanced 2 lbs., 5 ozs.

The fully adjustable standard Morini wooden stock can be swiveled in nearly any direction in relation to the action. Its palm shelf may also be quickly and easily adjusted for elevation. The ability to set a grip in this manner allows the shooter to tune the pistol for a relaxed and natural fit. An M1911-style grip is also available to simulate the feel of a Government Model pistol.

The LP50 comes with two 200-bar compressed air cylinders that gave us approximately 100 shots each before a noticeable drop in velocity. An integral pressure gauge shows when a cylinder is about

## STEYR LP50

**MANUFACTURER:** Steyr Sportwaffen GmbH, Hauptstrasse 40, A-4432 Ernstshofen, Austria, www.steyr-sportwaffen.com

**IMPORTER:** Pilkington Competition Equipment LLC (Dept. AR), P.O. Box 97, No. 2, Little Trees Ramble, Monteagle, TN, 37356, (931) 924-3400; www.pilkguns.com

**CALIBER:** .177  
**ACTION TYPE:** semi-automatic, compressed air, air pistol

**FRAME:** aluminum

**BARREL:** 9½"

**MAGAZINE:** five

**SIGHTS:** adjustable front blade and rear notch

**TRIGGER PULL:** 7 to 21 ozs. adjustable for length, overtravel, slack, pull weight

**OVERALL LENGTH:** 15½"

**WIDTH:** 1½"

**HEIGHT:** 5"

**WEIGHT:** 2 lbs., 5 ozs.

**ACCESSORIES:** M1911 grip, compressed air tank adapter, adjustment tools

**SUGGESTED RETAIL PRICE:** \$1,500

\*Other Options Available: single-shot magazine, dummy magazine



The LP50 is a semi-automatic air pistol with a five-round-capacity magazine. It is powered by compressed air and proved extremely accurate in our tests.

to run dry, and an adapter is supplied with this pistol for filling it from a tank. Recently, Steyr released two new colored air cylinders, blue and yellow, allowing a level of personalization to the airgun.

The rear sight notch is adjustable for width from 0 to 5 mm. The notch's depth can be adjusted from 1.8 to 2.6 mm. Adjustment of the rear sight moves the point of impact by 1.2 mm with each click at a 10-meter target. The sight ra-

dius may be extended via a rear sight rail or by placing the 3.4, 4.5 or 5 mm front sight to one of the countersunk screw holes placed along the top of the barrel shroud, which also accepts various optical sights.

The trigger system can be adjusted to break between 7 to 21 ozs. An optional adjustable trigger system that will break between 21 and 49 ozs. is also available, something that may appeal to Bullseye shooters. Each trigger can be adjusted

## SHOOTING RESULTS (10 METERS)

.177 Caliber Pellet	Vel. @ 15' (f.p.s.)	Energy (ft.-lbs.)	Group Size In Inches		
			Smallest	Largest	Average
Vogel Match Diablo	462 Avg. 6 Sd	3	0.05	0.21	0.13
RWS Dynamit Nobel R10	456 Avg. 3 Sd	2.4	0.12	0.39	0.22
RWS Meisterkugel	451 Avg. 3 Sd	2.4	0.13	0.23	0.18
Average Extreme Spread					0.18

Measured average velocity for 10 rounds from a 9.25" barrel. Range temperature: 68° F. Humidity: 59%. Accuracy for five consecutive, five-shot groups at 10 meters from a sandbag. Abbreviations: Sd (Standard deviation).

for slack, overtravel and pull weight. The trigger shoe may also be adjusted fore and aft along a rail to customize length of pull. The trigger assembly is easily replaced after removing the grip and two

trigger assembly screws.

Our pistol never failed to feed or function. It accepted a variety of pellets and shot each accurately—average groups with one type of pellet measured just 0.13". The best groups at 10 meters came from the Vogel Match Diablo pellets supplied with the gun. Other pellets shot extremely well with an extreme spread measuring 0.18". Velocities were very consistent among all pellets tested, but they were especially consistent with both RWS samples. The extreme spread in velocities from a 10-shot group for the Meisterkugel varied by just 8 f.p.s., while the R10 varied by just 9 f.p.s. The highest velocities came from the Vogel Match Diablo, clocking in on average at 462 f.p.s.

There was little felt recoil, and rapid follow-up shots were easy, thanks in large part to the pistol's balance and its compensator. Accurate shots could easily be had as the lightweight magazine moved smoothly to chamber the next round. Many active bullseye shooters who shot our sample LP50 had the same question about it: "Where do I get one?"

Designed for competition shooting in the new ISSF rapid-fire event or for NRA Bullseye pistol practice, the LP50 comes with both the free-pistol-style wood Morini grip with a target palm shelf and with a one that replicates the feel of an M1911 (r.).



Placement of the front sight may be determined by the shooter (above). There is a rail in the barrel top with countersunk holes for the blade front sight. Power is supplied by a compressed air cylinder under the pistol's barrel (r.).

