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Or

A QUICK-CHANGE BARREL GUN YOU CAN ACTUALLY GET BARRELS FOR.

ву David M. Fortier

HYDRA OCB-D



ACCORDING TO GREEK MYTHOLOGY,

there was an entrance to the Underworld beneath the waters of the lake of Lerna in the Argolid. However, if an adventure should take you there you'd find it guarded by a fearsome many-headed chthonic water beast called the Lernaean Hydra ($\Lambda \epsilon \rho v \alpha i \alpha ~ \Upsilon \delta \rho \alpha$). Facing the Hydra in mortal combat was enough to make even the most valiant warrior soil his armor. Even if you were a man of courage and smote one of its many loathsome heads, you'd find two more grow in its place. This multitude of regenerating, poison-belching heads was simply too much for anyone but the Son of Zeus to prevail against. Or so the story goes.

While the Hydra of Greek mythology had many heads, today's Hydra is a beast of many calibers. Produced by MG Industries, the Hydra is a very interesting design that raises the modular concept a notch above the expected. It accomplishes this by not only easily switching between barrels, but also magazine wells. In a matter of moments a rifleman can swap out barrels, changing to a different length in the same or even a different caliber. The magazine well is also easily changed to accommodate a caliber better fed from an entirely different magazine design. Better still, no tools are required.

I first learned of MGI's Hydra a number of years ago through my friend Jeff Zimba of Small Arms With the handguard is removed (four ne screws) you can see the two locking pieces operated by ng the two rotating levers. These securely lock the barrel into place.



Review. At the time, I resided in Mid-Coast Maine, Jeff was in the Northern part of the state and MGI's home at the time was Bangor. Jeff facilitated a first look at this very interesting design. I can remember being impressed by the concept, but I did not feel that production techniques were fully mature. Fast-forward to today, and the rifle I have sitting in front of me looks like a well-

made production piece. For those of you unfamiliar with this interesting rifle design, let's first take a quick look at the company that developed it. MG Industries was founded by a veteran of the U.S. Special Forces named Mack Gwinn Jr. Gwinn spent part of his youth as a member of a Special Forces Recon Team in the jungles of Vietnam. His service in Southeast Asia would have a profound effect on his view of firearms and their design. After he left Special Forces, he founded Gwinn Firearms, which evolved into Bushmaster Firearms in the early 1970s. He eventually sold this company and worked on a number of projects for other companies. His work includes designing the .50-caliber Quick



While the Hydra of Greek mythology, seen here locked in mortal combat with Heracles, had many heads, today's Hydra from MGI is a beast of many calibers.

Change Barrel for Fabrique Nationale, high-capacity 75- and 90-round magazines for MWG Company and the Counter Poise system with Jim Sullivan. Eventually, he developed the Hydra carbine. Today MG Industries is run by his son, Mack Gwinn III. Like his father, Mack Gwinn III served in a U.S. Special Forces unit and has a practical knowledge of fighting rifles.

My time with the MGI Hydra QCB-D seen on these pages began with a phone call from our editor. He asked if I'd be interested in reviewing a Hydra, seeing as I'm originally from Mid-Coast Maine and was familiar with the company. I agreed, and he shipped me a rifle he'd received for testing. Out of the box, MGI's Hydra QCB-D looked quite good. I received a standard 5.56x45mm model with a 16-inch Government profile barrel. This features a 1:9-inch twist, is not chrome-lined and is topped with a standard A2 flash suppressor. A traditional Stoner carbine-length gas system is uti-

<image>

extension I found a standard

weight buffer. Everything looked

nicely machined and finished,

but in a way, it actually looked

rather...boring. At first glance it

just appeared to be a plain-Jane

When we talk about modular

rifles with quick-change barrel

systems, the first two that come

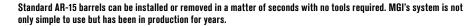
to mind are FN's SCAR and Bush-

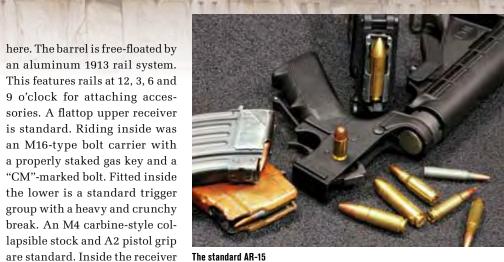
master's ACR. Both of these are

modern, sexy and eye-catching.

Unfortunately, neither FN nor

AR carbine.





magazine well will

accept a variety

But it can also be

swapped to allow

AK-47, AK-74, M3

other magazines to

Grease Gun and

be utilized

of cartridges.

they've been out how long? Stop and think about that. There's not even smoke on the horizon.

MGI's Hydra may look like vanilla at first glance, but there's a lot more to the lope under the hood than a fouled plug. This design offers quick and easy barrel swaps, no tools required. To accomplish this, remove the magazine and verify the rifle is unloaded, and lock the bolt to the rear. Next, unsnap a U-shaped spring steel retainer located beneath the handguard. Then slide the rectangular keeper forward, exposing two levers. Rotate these two levers 90 degrees away from the barrel. You can now pull the barrel assembly out of the receiver. Installing a barrel is merely the reverse. With the bolt locked back, it only took me six seconds to remove a barrel and 13 seconds to install one. So yes, it's very quick and simple. Plus the Hydra accepts standard AR barrels. No proprietary parts required. Any standard AR barrel will drop right in.

While the quick-change barrel feature is slick, the interchangeable magazine wells will make you go hmm. A close examination of the lower receiver will reveal it's not a standard piece. Unlike a standard receiver, the MGI's lower receiver is a twopiece assembly. This consists of

HYDRA QCB-D

the rear receiver group, which is serialized, and the magazine well, which dovetails into it. Like the barrel, the magazine well is quickly and easily swapped out. To accomplish this make sure the rifle is unloaded and separate the lower receiver from the upper. Next depress the triggerguard detent and rotate it down. Then depress the magazine release and slide the magazine well up and off the lower receiver. A different magazine well can now be easily slid onto the lower and locked into place.

What do these two features offer? Basically, they allow you to switch quickly from one length of barrel to another and one caliber to another. With a standard 5.56x45mm bolt-carrier assembly and mag well installed you can swap different-length barrels in seconds. Plus you can also swap from 5.56x45mm to any caliber that utilizes a standard 5.56x45mmbolt, such as 6x45mm, .300 AAC and .300 Whisper. By changing both the barrel and bolt, a variety of additional cartridges can be utilized. These include 5.45x39mm, 6.5x38mm Grendel, 6.8x43mm SPC, 7.62x39mm, .450 Bushmaster, .458 SOCOM and .50 Beowulf.

Many have desired to feed their 5.45x39mm and 7.62x39mm rifles using standard Com Bloc Kalashnikov magazines. There are a number of reasons to want to do this. Chiefly, the Com Bloc-pattern magazines are very robust and reliable. In the case of the 7.62x39mm cartridge, while standard AR-pattern magazines are available in this caliber, reliability is hit or miss with them. Plus, many people who are interested in these calibers already own Kalashnikov rifles and thus a quantity of magazines. MGI solves this problem by offer-

the rear receiver group, which
is serialized, and the magazine
well, which dovetails into it. Like
the barrel, the magazine well is
quickly and easily swapped out.ing dedicated magazine wells
for both 5.45x39mm AK74 and
7.62x39mm AK47 type maga-
zines. Magazines are released
by a simple push button, just
like with standard AR mags.

MGI also offers a mag well that accepts .45 ACP M3 Grease To remove the Gun magazines. Combined with magazine well you their bolt carrier assembly and need to unsnap the barrel, it allows conversion to .45 trigger guard then depress the maga-ACP. MGI also offers magazine zine release and lift wells that accept Glock pistol the magazine well magazines in .45 ACP and 10mm. straight up and off the receiver. And for you 9x19mm fans, they offer a dedicated mag well for

Colt-style 9mm subgun mags. So there are many options available. What are the pros and cons of such a system? On the plus side you can easily swap barrels and calibers using one basic rifle. You don't need complete upper receiver assemblies, like with a standard AR. Plus it utilizes standard AR barrels. Not only can you swap barrels, but you can swap operating systems as well. That's right, you can install a piston assembly if you so choose. So you can easily set up the rifle exactly the way you need it. Plus, the carbine can be disassembled into a relatively small package. By removing the barrel from the upper, then popping the upper off the lower, you end up with three relatively short pieces. These will store neatly in a space you would not expect a 16-inch carbine to fit into. Then there is the ability to

magazines in different calibers. The cons? Keep in mind that as you swap barrels you will need to rezero. The best solution would be to have an optic on a QD mount already zeroed for each barrel. Manufacturing tolerances need to be strictly held, or issues would appear. When not actually mounted in the rifle, the unsupported gas tube is sticking out of

utilize a wide array of existing



the barrel. Care should be taken to ensure the gas tube does not get bent. When switching from one caliber to another you need to verify that you have the correct bolt and barrel installed before simply dropping the hammer. Additional mag wells are not cheap at \$275 a piece either.

Interested to see how MGI's Hvdra QCB-D would perform, I gave it a thorough examination. Here I noticed the pistol grip was slightly loose, as was the castle nut. I tightened both of these and mounted an optic. MGI was founded by a Special Forces vet who served in Vietnam, so I selected a Hi-Lux/Leatherwood ART M-1000 scope to check accuracy. The ART M-1000 is a descendent of the famous Vietnam vintage Auto Rangefinding Telescope (ART) developed by Captain Jim Leatherwood and fielded on the U.S. Army's M21

SPECIFICATIONS MG Industries, Inc. Hydra QCB-D Action rotating bolt via direct gas		
CALIBER	5.56x45mm	
BARREL	16 inch Gov profile	
RIFLING	6 groove 1-9 inch twist	
OVERALL LENGTH	35.7 inches w/stock fully extended	
TRIGGER	Standard single-stage	
FEED	Detachable box magazines	
FRONT SIGHT	A2 post	
REAR SIGHT	None, Mil Std 1913 rail	
WEIGHT	6.9 pounds w/out mag	
FINISH	Parkerized	
PRICE	\$1,250	

sniper rifle. A 3-9X variable, it was intended to be extremely quick and easy to effectively employ out to 900 yards. To use you aimed at a man-size target and adjusted the magnification until two ranging brackets on the crosshair reticle subtended the target. Then you merely compensated for windage/lead and fired. The scope not only ranged the target, it also automatically compensated for the bullet's drop out to 900 yards. It accomplished this by a cam system attached to the magnification ring. As the magnification was increased/decreased, the rear of the scope body was cammed up/down to match the trajectory of the cartridge. U.S. Army Staff Sergeant Adelbert Waldron, the top-scoring sniper in Vietnam, wielded an ART-topped XM21,

racking up 109 kills. Hi-Lux's 2.5-10x44mm M-1000 ART consists of a fairly conventional scope fitted with a specialized integrated cam system and mount. Hi-Lux fits this model with its No-Math Mil-Dot reticle, located in the second focal plane. In addition to the standard Mil-Dots, this reticle also features ranging brackets on the vertical and horizontal stadia. These allow a rifleman to easily bracket 36-, 18- and 9-inch-tall/wide targets from 250 to 1,000 meters. The Mil reticle (set on 10X) can also be utilized for ranging and ballistic compensation. The M-1000 ART can be utilized the same as a conventional scope, or it can range and automatically compensate for the distance to the target. Price is a reasonable \$459.

I selected four loads for testing and began by firing four fiveshot groups with each load at 100 yards. This was done from a benchrest to check accuracy. Per-



MGI's Hydra QCB-D is light, quick to the shoulder and fast handling. It performed well in a variety of drills.



With the bolt locked back and the barrel retaining levers rotated 90 degrees, slide the barrel into the receiver making sure the gas tube lines up properly.

formance from the bench was actually quite good. Despite a rather heavy and crunchy trigger pull, Black Hills 60-grain VMax load averaged 1.1 inches at 2,779 fps. Federal's 69-grain Gold Medal Match load also shot very well and averaged 1.4 inches at 2,520 fps. American Eagle's 62-grain FMJ load averaged a respectable 2.7 inches at 2,738 fps. Back of the pack was Wolf Performance Ammunition's 75-grain steel case load, which averaged 31/2 inches at 2,630 fps. Perhaps Wolf's 75-grain load was not to this particular 1:9-inch-twist barrel's liking.

is a quick-change barrel system, I proceeded to test this. Using Federal's 69-grain Gold Medal Match load, I fired an additional four five-shot groups. However, I removed and reinstalled the barrel between each shot. My tightest five shot group came in just over an inch, and my average was 1.4 inches. Crunching numbers, I was a bit surprised to see no difference in group size

Seeing as the heart of the Hydra

when firing five-shot strings or when removing and reinstalling the barrel between each shot. I cannot comment on how the system holds up under heavy and/or long-term use. But initial testing looks quite acceptable.

Next I switched to shooting on steel from 200 to 530 yards. This was done both in the Hi-Lux's Auto/Range Mode and by using the Auto/Range Mode and then disconnecting the range ring and increasing the magnification. Ammunition utilized during this portion of testing was Federal's 69-grain Gold Medal Match load. Firing from the prone position, MGI's carbine made quick work of my steel targets and provided rapid hits. However, I noted I had the most difficulty bracketing targets in the 300- to 400-yard range, due to the low magnification of 3X to 4X. Past this ranging became easier as magnification increased. Hi-Lux's Auto/Range Mode is intended to provide quick hits on a man-size target, and it did. Hits might not be exactly to point of aim, but they were there. It was also fairly simple to bracket a target and then disengage the range ring

Removing the barrel and reinstalling between every shot didn't change group size. This 100-yard group was fired using Federal's 69-grain Gold Medal Match.

ACCURACY RESULTS

Load	Velocity (fps)	100 yards (in.)
Black Hills 60-grain VMAX	2,779	1.1
American Eagle 62-grain FMJ	2,738	2.7
Federal 69-grain Match	2,520	1.4
Wolf 75-grain HP	2,630	3.5

Notes: Groups are an average of four 5 shot groups fired from a rest at 100 yards. Velocity readings measured 12 feet from the muzzle at an ambient temperature of 50 degrees F 1030 feet above Sea Level with an Dehler 35P.

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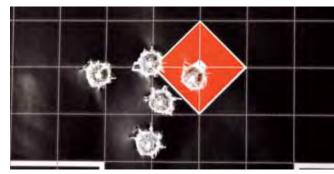
and quickly zoom up in magnification. To get the most out of the ART system, I highly recommend taking the time to fine tune the cam to your specific load. This requires a bit of work but is well worth the effort.

Swapping to an Aimpoint T-1 red dot sight, I next ran the Hydra QCB-D through a variety of drills inside 50 yards. Here it again performed well, and no issues were encountered. It simply ticked along nicely. Last, I ran a drill that started with the Hydra disassembled in a Blackhawk messenger bag. The components were reassembled, the carbine loaded and a number of targets engaged. If I did things smoothly, I found that the Hydra could be accessed and reassembled fairly quickly. I could do it in less than 15 seconds.

I have to say that the Hydra QCB-D managed to perk my interest. Here's a design with all the strengths of the AR but with a quick-change-barrel feature. Not only that, but any standard AR barrel will drop right in. So you can get whatever you want for a barrel, right now. No waiting years for some bureaucracy to decide whether to offer the proprietary barrel you want. A surprising amount of calibers will fit in the standard AR mag well. But if you need more, the Hydra will oblige. While I didn't have a chance to test any other magazine wells, the design appears straightforward enough. What killed interest in the Hydra for many in the past was simply price. However, MGI has worked hard to improve production techniques and bring this down. Today the suggested retail on the Hydra QCB-D is a reasonable \$1,250. Compare that with any other quick-change-barrel system on the market. Do you need an AR with the ability to swap barrels and mag wells? That's up to you to decide. But if such a beast appeals to you, this is one to consider. AR-15



Snap the upper onto the lower receiver as you would a standard AR-15.



SOURCES:

MG INDUSTRIES 207-817-3280 www.mgi-military.com

BLACK HILLS AMMUNITION 605-348-5150 www.black-hills.com

FEDERAL CARTRIDGE COMPANY 800-831-0850 www.federalpremium.com

Hi-LUX OPTICS 888-445-8912 www.hi-luxoptics.com

WOLF PERFORMANCE AMMUNICTION 888-757-9653 www.wolfammo.com Practical accuracy was very good as this 100-yard group fired using Black Hills' 60-grain Vmax load demonstrates.

MGI's Hydra QCB-D, seen here with an ART M-1000, is an interesting, and reasonably priced, evolution of the AR-15 which adds the ability to quickly change barrels and magazine wells.