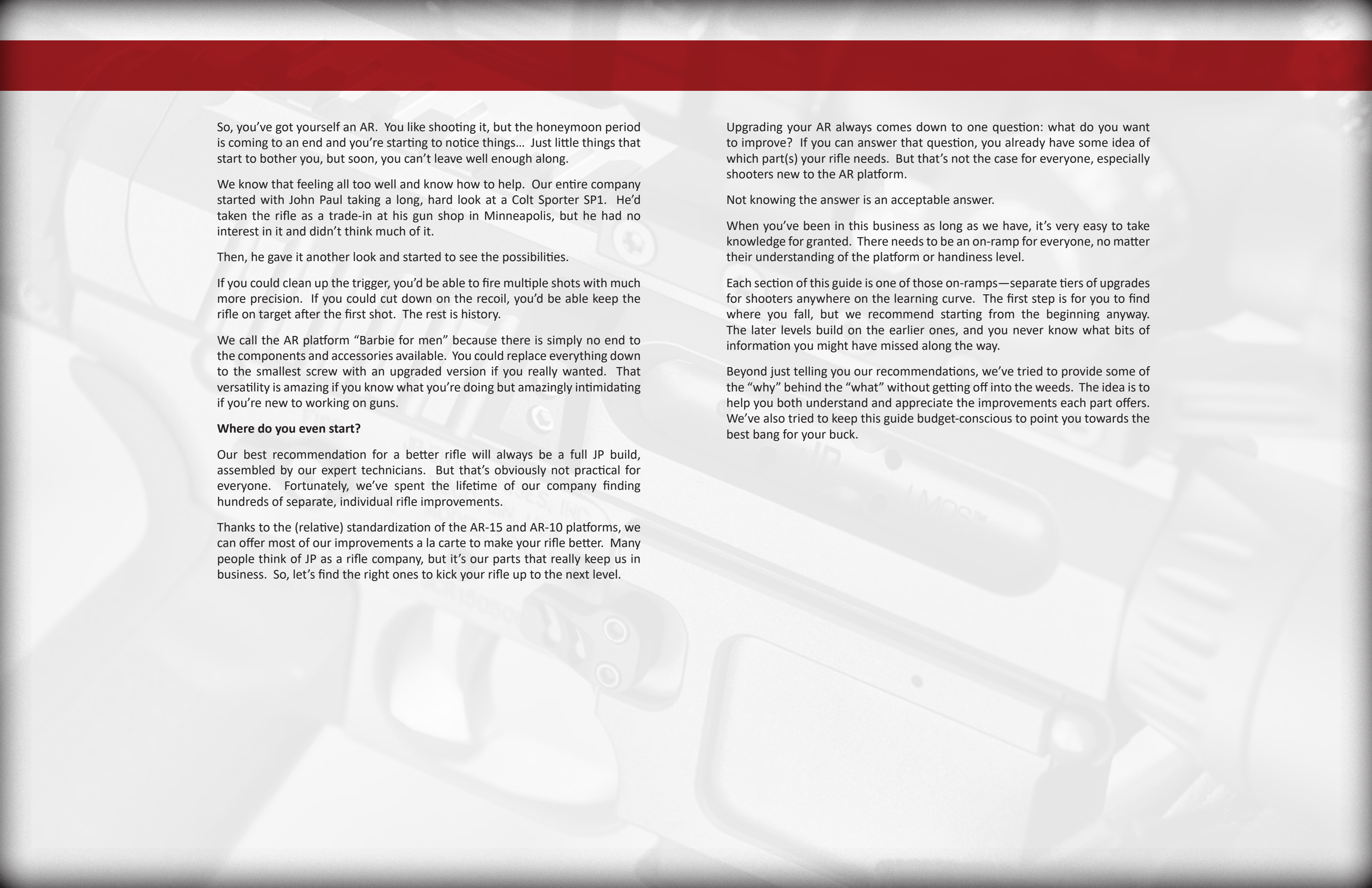




# AR UPGRADE GUIDE





So, you've got yourself an AR. You like shooting it, but the honeymoon period is coming to an end and you're starting to notice things... Just little things that start to bother you, but soon, you can't leave well enough alone.

We know that feeling all too well and know how to help. Our entire company started with John Paul taking a long, hard look at a Colt Sporter SP1. He'd taken the rifle as a trade-in at his gun shop in Minneapolis, but he had no interest in it and didn't think much of it.

Then, he gave it another look and started to see the possibilities.

If you could clean up the trigger, you'd be able to fire multiple shots with much more precision. If you could cut down on the recoil, you'd be able to keep the rifle on target after the first shot. The rest is history.

We call the AR platform "Barbie for men" because there is simply no end to the components and accessories available. You could replace everything down to the smallest screw with an upgraded version if you really wanted. That versatility is amazing if you know what you're doing but amazingly intimidating if you're new to working on guns.

#### **Where do you even start?**

Our best recommendation for a better rifle will always be a full JP build, assembled by our expert technicians. But that's obviously not practical for everyone. Fortunately, we've spent the lifetime of our company finding hundreds of separate, individual rifle improvements.

Thanks to the (relative) standardization of the AR-15 and AR-10 platforms, we can offer most of our improvements a la carte to make your rifle better. Many people think of JP as a rifle company, but it's our parts that really keep us in business. So, let's find the right ones to kick your rifle up to the next level.

Upgrading your AR always comes down to one question: what do you want to improve? If you can answer that question, you already have some idea of which part(s) your rifle needs. But that's not the case for everyone, especially shooters new to the AR platform.

Not knowing the answer is an acceptable answer.

When you've been in this business as long as we have, it's very easy to take knowledge for granted. There needs to be an on-ramp for everyone, no matter their understanding of the platform or handiness level.

Each section of this guide is one of those on-ramps—separate tiers of upgrades for shooters anywhere on the learning curve. The first step is for you to find where you fall, but we recommend starting from the beginning anyway. The later levels build on the earlier ones, and you never know what bits of information you might have missed along the way.

Beyond just telling you our recommendations, we've tried to provide some of the "why" behind the "what" without getting off into the weeds. The idea is to help you both understand and appreciate the improvements each part offers. We've also tried to keep this guide budget-conscious to point you towards the best bang for your buck.



If you’ve bought your first budget AR and just want to do something with it, this is where to start.

By now, you’ve probably spent some time shooting your rifle enough to get to know it. You might also have shot some higher-end rifles and started to notice the differences. You like the idea of doing some tinkering, but you’ve also talked with guys and started looking online...

That rabbit hole is much deeper than you want to go. There’s so much to learn and no end to how much money you can spend for parts you might not even know how to install.

If that’s you, then this package of parts is perfect. These components are all easy to install and total less than \$50. But you’ll be surprised at just how much you’ll notice the improved feel of the rifle with just these simple additions.

*Low risk, high reward.*

TRIGGER

The trigger mechanism is your interface with the rifle. Without a good, controllable trigger, you’ll never tap its potential. The rest of the car doesn’t matter if the steering has too much play and pedals are mushy. For this, we recommend what we’ve loving called for years our “Poor Man’s Trigger Job.”

This starts with a set of our [Precision Trigger Springs](#) and includes some very minor prep to the sear and hammer as described in the instructions. Add to this a regular application of our special sear grease. The end result is a smooth “roll-off” feel at about 5-6 lbs. as opposed to the 2-3 stops over a yard of gravel you likely have now.

BOLT

The standard 3-piece gas rings in your rifle are oversized for reliability because they have gaps that will leak. Since this keeps the rifle functional, it’s two wrongs that (sort of) make a right. But this adds needless friction to the operating system.

Our [Enhanced Gas Rings](#) are a one-piece coil design, precision ground to extremely tight tolerances. These rings maintain a reliable gas seal while eliminating nearly all the friction between the bolt and carrier. The less friction between these parts, the larger the operational window of the system.

In other words, your rifle will be more reliable under a greater range of conditions with a larger selection of ammunition.

BUFFER/SPRING

Stock buffer springs are rough and raspy. While there’s not a major functional difference in upgrading to one of our [Centerless Ground Buffer Springs](#), the felt difference is huge.

We’re compulsive about our rifles feeling silky smooth and silent when you cycle them, not like a spoon on a cheese grater. This spring will make your rifle’s cycling smoother and quieter—a more pleasant shooting experience for just \$20.





This is when you get serious about that off-the-shelf AR of yours.

You enjoy shooting, and you’re partial to your rifle in particular. But you’ve shot it enough to know it’s not all that it could be. You’d really like to see more performance out of it, and you’re willing to invest in a better shooting experience.

That said, you can’t afford to go hog wild. Your budget is limited, as is your know-how. Fortunately, that’s just where these three big upgrades shine.

You can easily take each piece of this package one at a time, making significant improvements at your own pace. The order laid out here works well, but each of these improvements addresses a particular area of performance, which we’ve noted below. If you want to solve a particular problem or focus on a specific area, go by these.

You can easily start at this level, but we do recommend grabbing the [Enhanced Gas Ring](#) and the [Centerless Ground Buffer Spring](#) from the **Basic** kit as well.

***With these parts, any rifle will be on par with the top 10% of ARs on the market.***

TRIGGER

Check the **Basic** kit for more on the problems with your stock trigger. Suffice it to say here that your primary interface with the rifle needs to be good for you to achieve the ***precision*** that will make any upgrades to matter.

We have a range of performance triggers available to provide your rifle the crisp break and short reset we’re known for. As you go up the price ladder from our [Fire Control Kit](#) to the [Fire Control Package](#) and finally to the [JPFC-M Module](#), you’re paying for more convenience and easier installation. But every option will yield a seriously professional trigger that doesn’t hold the rest of the rifle back.

HAND GUARD

Once you’ve solved the trigger issue, accuracy is the next problem to address. The stock hand guards on many base ARs are designs that touch the barrel. This is crippling for ***accuracy***.

Our easy-to-install [MK III](#) or [M-LOK Series Modular Hand Guards](#) are free floating, with an incredibly durable nut design and the least deflection of any system on the market. This keeps your rail-mounted sights holding zero even under extreme conditions. Very comfortable to grip and highly customizable, we have models to fit any rifle.

COMPENSATOR

A good compensator gives you the largest single ***recoil reduction*** benefit at the lowest price. By redirecting the gases discharged from the muzzle, a compensator cuts not only the physical discomfort of the rifle’s recoil but also allows faster target re-acquisition.

We offer a full array of compensators, each with their own virtues. To make it simple, we’d recommend our [Competition Series](#) for a sportier look or our [Tactical Series](#) if that’s your style.

RECEIVER (optional)

A problem that plagues entry level ARs is reduced quality of components. One of the places this shows up must is a sloppy receiver fit. If your upper and lower clack and move in relation to each other, that needs to be fixed.

Our [MicroFit™ Takedown Pins](#) are finely ground to specific sizes to help pick up the slop in your receivers. By locking the rifle into a single, unshakable unit, you can pick up valuable accuracy potential.





You’ve now developed a real rapport with your rifle. You probably work on your rifle like some guys work on their cars.

Odds are, you shoot competitively or do professional training regularly. Or, you might just have a connoisseur’s appreciation for the rifle. Whatever the case, it’s taken thousands of rounds down range for you to now know by feel when your rifle is running right and probably how it’s running wrong.

The upgrades you’re looking for now deal entirely with recoil management to save those fractions of a second to improve your performance as much as possible. Your rifle probably runs well already, so now you’re tweaking for those small performance gains from components and ammo that add up in the end.

Rather than big plug-and-play improvements, some pieces of this package provide finer adjustments. The goal is a rifle that functions reliably in golden zone of operation and cycles like a sewing machine.

These upgrades are best performed in the order presented. You can read more about the mechanics of reducing recoil here.



COMPENSATOR

For more on compensators, make sure to read the Novice section on the subject. By now, your rifle almost surely has a compensator of some kind. The challenge here is to find the best-performing device allowed for your application.

All of our compensators are finely tuned to maximize the effect that their size can offer. The original JP **Recoil Eliminator** is still the all-time best performer, but our **Large Profile** and **Competition Series** perform exceptionally well to cut down your recoil.

GAS SYSTEM

All standard rifles are very over-gassed. But the slamming of the bolt/carrier/buffer components that comes from this is often masked by the recoil impulse. Now that the compensator has eliminated all that, you really feel this hammering.

The solution to this is one of our **Adjustable Gas Systems**.

Tuning the gas system allows you to get to the sweet spot of your action. You want it fast enough to reliably cycle and lock back but without bottoming out hard in the buffer tube. That excess kinetic energy transfers through the stock into your shoulder.

The difference is night and day, both in the overall feel and speed of sight recovery. Added reliability and durability also come from dialing in proper bolt velocity this way.

BOLT CARRIER GROUP

Standard bolt carriers are much heavier than necessary for competition and recreational shooting. That’s more unnecessary weight oscillating back and forth with every shot and more movement in the gun you have to fight. Fortunately, with a good compensator and adjustable gas system in place, you’re really ready to play with the nuances of mass regulation and its benefits.

We make such a wide range of bolt carriers to suit the demands of various applications. Whether for all-out competition or the rigors of a combat duty rifle, there’s a better bolt carrier:

- Competition: **Low Mass Operating System (LMOS™)**
- Duty/Defense: **Full Mass Operating System (FMOS™)**
- SBR/Suppressed: **Variable Mass Operating System (VMOS™)**

BUFFER/SPRING

If your rifle doesn’t have a **Silent Captured Spring**, it’s a must at this point. This spring doesn’t just make the rifle much more pleasant to shoot. The SCS extracts a great deal of friction and feedback from the cycle. Many believe that the SCS is one of the most ingenious improvements to hit the market in decades for this platform. You be the judge.

The **Silent Captured Spring** is also highly tunable for your rifle and ammunition with numerous alternate rate springs and interchangeable masses. Like the **Adjustable Gas Block**, this provides you more input to perfect the overall operation of your rifle.