

Confidential Report

Full-Auto Blueprint!

The Underground Full-Auto Blueprint By Caleb Lee

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One of the dreams of many gun owners is to have a full-automatic assault rifle.

There's something about being able to go rock-and-roll with a gun which is not only fun, but gives one a sense of invulnerability.

In a survival situation, many feel that the ability for automatic fire will give them an edge, whether it is against bad guys attacking their family or government agents trying to put them in concentration camps.

Let's clarify our understanding here a bit, before we go on.

The media has been using the term "assault rifle" to refer to any rifle which is military in appearance, especially the many variants of the AR-15.

However, those really aren't assault rifles. By definition, for a rifle to qualify as an assault rifle, it must have the capability of firing in full-automatic mode.

Full-automatic mode means that you pull the trigger once and the gun keeps firing as long as the trigger is pulled and there is ammo in the magazine. To stop it from firing, you need to remove your finger from the trigger.

Based upon this definition, almost all AR-15s are <u>not</u> assault rifles, because they can't fire in full-automatic mode.

They are semi-automatic rifles. What that means is that each time the trigger is pulled, the gun fires and automatically reloads another round. To fire again, the shooter needs to release the trigger and then pull it again. While that difference may not seem like much, it's actually a huge difference.

Even when I was in the Army, I wasn't much of a fan of full-automatic firing. Pretty much all of my buddies loved, it, but I thought it was a waste of ammunition.

If I was going to have to carry the weight of all that ammunition, I wanted to make sure I hit something with it. In full-automatic fire, you end up drilling a lot of holes in the sky, but not much time hitting the target.

The reason for this is recoil.

The recoil of a gun is simple physics. When the round goes off, the expanding gas pushes equally in all directions. The sides of the barrel prevent the gas from expanding sideways and limiting it to forwards and back. The forward expansion pushes the bullet out of the gun and the backward expansion pushes the rifle into your shoulder, the "kick" that all guns are known for.

That recoil is also what provides the force to cycle the action on a semi-automatic or full-automatic firearm, loading another round and cocking the weapon.

As the recoil of any gun pushes back against the shooter, the shooter's body reacts to it. With the muscles bring tightened and the elbows being locked (for some pistol stances), that causes the backwards force to be redirected, causing the muzzle of the gun to rise.

Herein lies the problem with full-automatic firing and the reason that I was not real fond of it in the Army. No matter how well you aim your first shot, the muzzle of the gun is going to rise on subsequent shots, causing the holes drilled in the sky that I mentioned a moment ago.

In all fairness, I must say that the M-16/AR-15/M-4 in all its variants doesn't have much problem with this, as the recoil is so slight that it is possible to hold the gun on target, even while shooting short bursts on full-auto. However, this is really the only gun I know of that is good in that regard.

There are two things that full-automatic weapons are really good for. The first is for destruction. Of course, that only works with large caliber machine guns, such as the Browning .50 caliber. If you shoot enough shots from a .50 cal into a cinder block wall (or just about anything else), it will pulverize it.

The second is for suppressive fire, which is what most assault rifles are used for in full-auto mode. Suppressive fire isn't really intended to hit the enemy, just to get him to keep his head down and not shoot at you.

Even when firing suppressive fire, soldiers are trained to fire in three round bursts, so that they can conserve ammo and take a moment between each batch of shots to aim.

Legally Buying Fully-Automatic Firearms

Since 1989 it has once again been legal to buy fully-automatic firearms (assault rifles) in the United States.

These are called Class 3 weapons by the Bureau of Alcohol, Tobacco and Firearms (ATF). To own them requires a special license.

There is a considerable amount of red tape associated with getting this license, as well as a \$200 fee, but as long as you don't have a criminal record, you can get one.

This license and fee is a per gun license. If you have several different full-automatic firearms, short-barreled rifles and shotguns, or noise suppressors, you need a separate license, along with the separate fee for each of them.

The same sort of permit is used if you want to convert a semi-automatic firearm to full automatic.

On the AR-15, the only parts that are serial numbered are the lower receiver and the full-automatic sear kit. Purchase of the sear kit is necessary to make an AR-15 able to shoot full automatic. Without it, the only possible way is to make the sear components yourself; however, without the permit, this is illegal.

Of course, applying for this permit automatically ensures that ATF has a record of your automatic weapons ownership.

Your local police department has the right to inspect your home, the secure storage you have for your Class III firearms and verify by serial number that you still have possession of the guns that are registered to you.

Firearms or firearm components purchased with this sort of permit must be purchased from a firearm dealer with a Class III Federal Firearms License (FFL).

The other problem with buying a fully automatic firearm is the cost.

You can pick up a semi-automatic AR-15 from as low as \$700 up to about \$4,000 depending upon the equipment, options and optics.

Few are at either end of that scale, with the majority of them being from \$1,000 to \$2,000.

On the other hand, a full-automatic AR-15 starts at about \$15,000. That puts it out of most people's financial reach, even if they do get the permit to own one.

The "Underground" Option ...

We've already discussed what makes a firearm full automatic.

The law about this is very technical, providing detailed requirements for defining a fully automatic firearm.

To be qualified as such, there much be a mechanism in the gun which allows it to cycle and continue to fire automatically, as long as the trigger is pulled and there is ammo in the gun.

If you had fast enough reflexes, you could simulate full-automatic fire on a semiautomatic firearm by pulling the trigger very quickly.

Unfortunately for us, none of us is that quick on the trigger.

However, a device that made it possible for us to pull the trigger faster, but still did not make the gun operate in full-automatic mode would be legal. There is a device which does this, called a "bump-fire" device.

Bump firing can actually be done with any semi-automatic firearm, without any special modifications or devices. However, most of the methods used for bump firing firearms degrade the accuracy of that firearm to the point of merely being a curiosity and not being useful. Therefore, they are not serious contenders for any tactical use.

On the other hand, some bump fire devices allow fairly descent accuracy to be maintained because the gun can be aimed and controlled like any fully-automatic firearm. Keep in mind though, that the muzzle will tend to rise due to recoil, reducing the accuracy of shooting in this manner. Nevertheless, with an AR-15's low recoil, it is still possible to hit targets fairly accurately when using a bump fire device.

A bump fire device is not considered a conversion to full automatic because it is a shooter assist device, rather than an actual modification to the function of the firearm.

Even though a bump fire device allows firing the weapon almost as fast as if it were manufactured to be fully automatic, it is still not considered a fully-automatic firearm.

ATF regulations allow for these devices at the time of this writing.

This may change in the future, especially with the liberal political push to take away our 2^{nd} Amendment rights to keep and bear arms.

However, until they do take those rights away, or rewrite the regulations to allow for these devices to be classified as a modification to the gun, making it fully-automatic, these devices can be purchased over the counter, without the permit normally required for Class III weapons.

The difference is a technical one.

Some bump fire devices that have been developed did not pass the test to be considered a "shooter assist device."

The difference was active components in the device, usually springs. Those that are acceptable have no active mechanism or component.

What's Available for Bump Fire

Although there are several companies who have attempted to make bump fire devices, they have not all been successful.

Some devices have failed prematurely, while others have been rejected by the ATF.

The best bump fire devices currently on the market are manufactured by Slide Fire. They manufacture bump fire devices for the AR-15, AK-47 and a few other models of firearms.

Since the AR-15 is the most popular rifle in the country, we will concentrate on it.

Slide Fire's bump fire device is a butt stock which replaces the gun's original fixed or adjustable stock and pistol grip. The new stock floats on the rifle, moving forward and back a short distance. This forward and back movement is essential to the bump fire operation.

The stock has an extension which goes alongside the trigger. When your finger presses the trigger, it comes into contact with this extension. That is an important part of the way that Slide Fire's bump fire system works.

Remember, by definition it has to help the shooter to pull the trigger rapidly, not cause the gun to fire in full-automatic mode on its own.

In operation, the Slide Fire stock helps the shooter to pull the trigger at a rate of between 400 to 600 rounds per minute, with practice, when used with an AR-15.

By comparison, the original M-16 rifle, which the AR-15 is based upon, has a rate of fire of 700 to 950 rounds per minute (they vary from unit to unit).

So, an experienced user can't quite shoot as fast in bump fire mode with the Slide Fire, as an American soldier in the Vietnam War, using a stock M-16 rifle.

The way the Slide Fire works is to use the gun's recoil to remove the shooter's finger momentarily from the trigger and then allow it to make contact with the trigger once again.

To the shooter, this feels more like the trigger is vibrating against their finger, rather than the trigger is breaking and making contact.

The shooter must adapt their shooting style to the Slide Fire.

It is necessary for the rifle to move back and forth in the butt stock. Since the device has no springs, the shooter becomes the spring, by the tension they put on the rifle.

The support hand, which is holding the forestock, needs to apply pressure pulling the rifle away from the shooter's shoulder, while the shooting hand (trigger hand) is pulling it back into the shooter's shoulder.

When the trigger is pulled, the recoil of the rifle will push the rifle back into the shooter's shoulder and into the Slide Fire stock at the same time. This will cause the trigger finger to be momentarily removed from the trigger, as it is supported by the extension on the stock.

Once the recoil is expended and has cycled the rifle's action, the outward pull from the support hand will pull the rifle back to the forward extent of its movement in the stock, allowing the trigger finger to make contact with the trigger once again; repeating the cycle.



Photo courtesy of Slide Fire

At any time, the shooter can stop the cycle by removing their finger from the trigger, just as they would with a fully-automatic version of the rifle. With practice, the shooter can easily control the trigger, so that they can accomplish three-round-bursts, just as soldiers are trained to do.

The surprising thing about this system is that it is fairly accurate, although not as accurate as a full-automatic AR-15.

Most bump fire methods are inherently inaccurate, as the focus becomes about making the gun shoot quickly, rather than accuracy. However, the Slide Fire design allows the shooter to maintain descent accuracy, even when ripping through a 30 round clip.

It will easily maintain the same sized shot grouping as a full-automatic version of the rifle will.

Installing the Slide Fire System

Installing the Slide Fire system is extremely easy; it only consists of two parts. Before installation, the stock and pistol grip must be removed from the gun to be modified.

The stock is removed by depressing the adjustment lever and pulling it off the end of the buffer tube. The pistol grip is removed by removal of a socket head cap screw that is hidden inside it.

Be careful when removing the pistol grip to not lose the selector switch detent and spring. These are held in place by the pistol grip.

The kit comes with an interface block that has to be installed where the pistol grip was. This is not the new pistol grip, as the Slide Fire stock has the pistol grip and stock are molded together as one piece. Rather, it is there so that the pistol grip has something to slide over. Installing this piece also holds the aforementioned detent in place.

With the interface block installed, the stock is slipped over the buffer tube and interface block. The selector switch in the stock is turned, locking it onto the stock. This selector switch controls whether the gun will operate in bump fire or normal semi-automatic modes.

Installing the Slide Fire stock on an AK-47 is slightly more complicated than installing it on the AR-15.

The Slide Fire stock is designed differently, having two pieces; an internal one and an external one. The internal part attaches to the stamped receiver on the AK-47, acting as the slide for the stock, like the buffer tube that is on the AR-15.

The top cover and spring need to be removed from the AK-47 in order to be able to remove the stock.

Once these are removed, you gain access to the two screws which hold the stock in place. With the screws removed, the stock slides off. The mounting screw for the pistol grip runs through the base, or is internal, like that on an AR-15. The pistol grip nut, which is a machined T-nut is also removed and retained for later use.

Once the stock and pistol grip are removed, the inner part of the slide fire stock can be mounted to the AK-47. When you remove the inner part of the stock from the outer part, be careful not to lose the castle nuts that are used to attach it to the receiver. The inner piece, called the "tube," is attached to the AK-47 using the stock and pistol grip mounting holes, as well as the T-nut that had been removed.

In some cases, the trunnion on the back of the AK-47 for the stock mount may be rounded, rather than at a sharp 90 degree angle.

If this is the case, the plastic of the inner piece of the Slide Fire stock should be cut or filed to make a perfect fit.

Once the inner portion of the stock is installed to the AK-47, the spring and top cover are reinstalled on the AK-47. To slide the outer, sliding portion of the Slide Fire stock onto the inner portion, the semi-automatic/bump-fire control knob needs to be pulled out and locked in the "out" position.

The outer portion of the stock can then be slid onto the AK-47. Before sliding the stock home, the ears on the front edge of the stock, above the pistol grip, needs to be slid into grooves on the inner portion of the stock.

Making Your Own Bump Fire Stock

The Slide Fire system is somewhat expensive, retailing at over \$350 for the SSAR-15 model.

For those that don't want to spend that kind of money, you can always make your own.

While a homemade one might not look as pretty as the commercially available one, the low cost will make it look better.

Basically, there are three things about the Slide Fire stock, which are different than a standard AR-15/M-4 stock.

- 1. First of all, the stock is free-floating, so that it can slide back and forth.
- 2. Secondly, the stock and the pistol grip are attached together, with the pistol grip not being mounted to the lower receiver.
- 3. Finally, the pistol grip has an extension on it, which engages the trigger finger, to the side of the trigger, holding the finger in place while the rifle moves back and forth from the recoil.

The adjustable stock that came out with the M-4 upgrade to the M-16 has a latch, which locks into a series of indentations on the buffer tube. These detents are in a machined slot, which prevents the stock from accidentally coming off the buffer tube when the adjustment lever is depressed.

For bump-fire mode, we want the latching mechanism to be able to slide in this slot, without engaging the detents.

This can be accomplished in one of several ways. The easiest is to trap the latch in the depressed position, by wrapping a couple of large rubber bands around it.

On some models of stock, the lever for the latch can be made to rotate 90 degrees by some judicious work with a Dremel or other small grinding tool. If all else fails, the latching mechanism can be removed. However, if it is, there is a chance that the stock will fall off, illegally turning the rifle into a pistol.

The stock shown in the diagram can easily be used by putting a wide rubber band around the adjustment lever or by pulling it out and rotating it 90 degrees. However, not all stocks are so cooperative. Some require modification to allow this.

You will need two pistol grips to make the bump fire stock. One pistol grip needs to be cut and ground down to turn it into a small block, which will be used to hold the selector switch retaining pin in place.

This step is important, as without that pin, the selector switch can and will fall out of the gun's lower receiver. Ideally, you want the block you make out of the pistol grip to be as small as possible, while still being possible to mount it and for it to capture the retaining pin.

It is also necessary that the modified pistol grip be able to slide inside the other pistol grip, with enough clearance to move smoothly. At the same time, a lot of clearance could cause the pistol grip to wobble from side to side, reducing accuracy. To accomplish this, the new pistol grip might have to be ground slightly as well.

The modified stock and the pistol grip need to be attached together with a metal strap, in order to make them into one combined unit.

I have seen several ways of doing this, including splitting a 1/2" square tube to fit over the sides of the stock, installing a strap on one side and connecting the bottom of the pistol grip to the bottom of the shoulder stock.

However, the best design I've seen has the pistol grip and stock connected together with a metal strap as shown by the red line in the diagram below:



The strap needs to be made of thick enough metal to hold the pistol grip and stock solidly in relation to each other, even when unsupported by the gun.

If you can't hold it in the air as is, without the two pieces wobbling around in relationship with each other, the strap isn't strong enough. It also needs to be attached with two screws at each end.

Due to the vibration that the stock will receive, it is best to use machine screws into threaded holes, instead of sheet metal screws that have to cut their own threads into the plastic. For added security, attach the screws with Locktite thread locking compound (available from any auto parts store).

The final piece needed for the stock is the tab attached to the pistol grip which holds your trigger finger in place during the recoil cycle. This is represented by the orange tab in the diagram. Please note that this is shown on the left side of the pistol grip, which would be correct for right-handed shooters. For left-handed shooters, the tab should be mounted on the right side of the pistol grip.

Most people don't bother cutting the leading edge of the tab in a curve, as shown in the diagram. They just leave a square end. However, for best results, it should be cut to match the curve of the trigger, so that it feels like it is part of the trigger. Since the trigger guard and trigger are narrower than the pistol grip, the tab should be bent so that the leading edge is as close to the trigger as practical, without banging into the trigger or trigger guard when cycling. Check carefully, as it must be free-floating.

To use your homemade bump fire stock, simply remove the original stock and pistol grip, being careful not to lose the selector switch detent and spring. Replace the original pistol grip with the modified one, capturing the detent below it. Then, slip the modified stock over the buffer tube, latching it into place. It is now ready to rock and roll.

Some Precautions About Using Your Bump Fire Stock ...

Shooting with a bump fire stock is a lot of fun.

There's just something about being able to rip through a magazine of rounds quickly that is satisfying.

At the same time, burning through ammo that quick can get a mite bit expensive.

In the military, they teach soldiers to fire on full-auto using three round bursts. The idea is that while you can't fully control the rise of the muzzle from recoil, the muzzle won't rise real far in three rapid shots. If the first shot is in center mass, the second and even third ones still have a good chance of hitting the target.

The more shots you fire, the more muzzle rise there will be and the greater the chance that you will just be drilling holes in the sky. Trigger control can make your firing much more effective. It can also make your shooting much safer. Since what goes up must come down, you can be sure that any shots that you make which just punch holes in the sky will eventually come down. Unfortunately, you don't know where they will come down. If there is a person there, you could inadvertently shoot them.

Always be sure of your target's background. You are responsible for each and every round you fire, whether aimed or not. The law doesn't see an accidental shooting as an accident; it sees it as criminally negligent manslaughter. So lack of control can have a very steep price. This is why warning shots are illegal in most places.

Bump fire is really something you do for fun, not for home defense. If my home was being attacked by an angry mob, I wouldn't want to use bump fire or even full-automatic fire. I'd want to aim each shot, albeit rapidly. If all I've got is 30 rounds in a magazine, I want 30 bodies stacked up for them, or at least 30 holes in bodies. While shooting on full-automatic might put a lot of lead downrange quickly, it drastically reduces the effectiveness of that lead. Remember, the main purpose of full-automatic fire is suppressive fire.

The other thing you need to be careful of is that your homemade bump fire stock doesn't slide off the end of your gun. Technically, that would make your AR-15 into a pistol. While there are AR-15 pistols, they are built as such.

You can't legally convert an AR-15 rifle into an AR-15 pistol, unless you are a licensed firearms manufacturer.

Were a law enforcement officer to see you with your AR-15 and no stock, there is a good chance he would arrest you.

Finally, bump fire stocks are not legal in all states, although there is no federal law against them.

Before building one, and especially before taking it out to shoot, check your state's laws.

Showing up at your favorite shooting range to rock and roll with your new bump-fire stock may get you booted out of the range and your membership revoked.