# How to Build your AR-15 Lower Receiver in 8 Easy Steps!

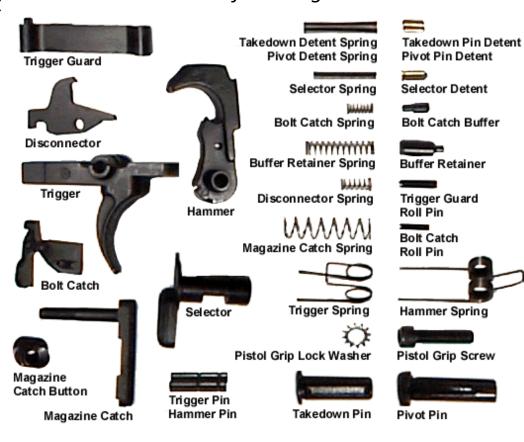
This is a step by step guide on how to build an AR-15 Lower Receiver in 8 easy steps from a stripped receiver and a lower receiver parts kit.

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# **Parts Needed:**

- AR-15 Lower Receiver Parts Kit
- 2. AR-15 Lower
- 3. Buffer Tube Assembly

The AR-15 Lower Receiver Parts Kit consists of the following:



# **Tools Needed:**

- 1. Hammer
- Needle Nose Pliers
- Flathead Screwdriver
- Roll Pin
   Punches in sizes (3/32", 1/8", 5/32")
- 5. Block of Wood
- 6. Box Cutter or Razor





## SPRINGS

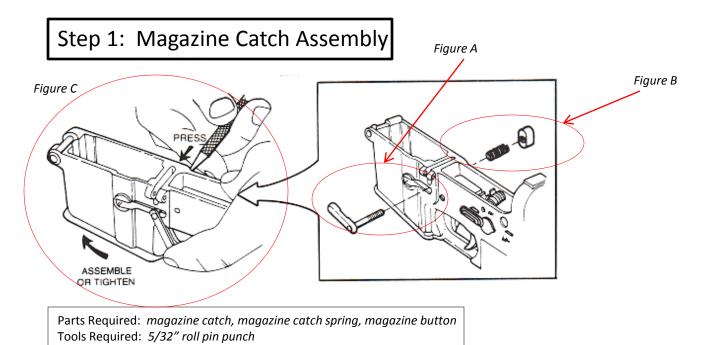
- Bolt Catch Spring easily confused with the disconnector spring; disconnector spring is tapered though.
- Buffer Retainer Spring second largest spring in the kit.
- Disconnector Spring similar to bolt-catch spring, but identifiable because one end is wide than the other.
- Hammer Spring larger of the two similar springs.
- Magazine Catch Spring this is the largest spring in the kit.
- Pivot Detent Spring same as the takedown detent spring, so there are two in a kit.
- Selector Spring similar to the takedown and pivot detent springs, but there will only be one of these.
- Takedown Detent Spring same as the pivot detent spring, so there are two in a kit.
- Trigger Spring the smaller of the two similar springs.

# <u>PINS</u>

- Bolt Catch Buffer
- Bolt Catch Roll Pin smaller of the two roll pins.
- Hammer Pin same as trigger pin; can be inserted from either side.
- Pivot Detent same as takedown detent; both sides usually rounded.
- Pivot Pin larger of the two large pins.
- Selector Detent one end is flat, the other pointed.
- Takedown Detent same as pivot detent; both sides usually rounded.
- Takedown Pin smaller of the two large pins.
- Trigger Guard Roll Pin larger of the two roll pins.
- Trigger Pin same as hammer pin; can be inserted from either side.
   Parts
- Bolt Catch
- Buffer Retainer
- Disconnector
- Hammer will have a J-pin already installed.
- Magazine Catch
- Magazine Catch Button some are plastic, some metal.
- Pistol Grip Lock Washer
- Pistol Grip Screw some are Allen-head, some use a slotted pan-head screw
- Selector
- Trigger
- Trigger Guard some are metal, some plastic. Will already have a detent installed on its front end.







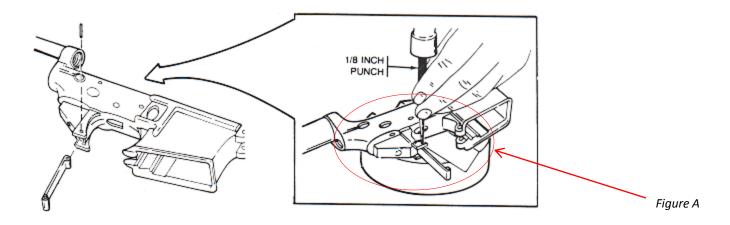
•Insert magazine catch into the wide hole on the left side of the receiver. See Figure A

- •Place the spring over the threaded portion of the magazine catch from the right side of the receiver. See Figure B
- •Screw the button onto the threaded portion of magazine catch 4 or 5 turns.
- •Use a punch to depress the magazine button enough so you can turn the magazine catch clockwise until the threaded end of the catch is flush with the magazine button. See Figure C

- •Insert a magazine and check to make sure the magazine locks into place.
- •Press the magazine release button and ensure that the magazine releases easily.



# Step 2: Trigger Guard Assembly



Parts Required: trigger guard assembly, roll pin Tools Required: 1/8" roll pin punch, hammer

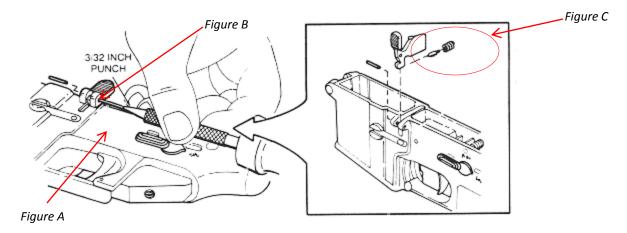
- •Attach front of trigger guard assembly to the receiver using the detent.
- •Support the bottom flange and the trigger guard with a small block of wood.
- •Using the drive pin punch and hammer, drive the roll pin into the receiver and rear of trigger guard. See Figure A

## **Function Check**

•Check that by depressing the detent on the trigger guard you are able to pivot the trigger guard open.



# Step 3: Bolt Catch Assembly



Parts Required: bolt catch, blot catch buffer, bolt catch spring, roll pin

Tools Required: 3/32" roll pin punch, 5/32" punch

- •Apply 2 layers of masking tape to the area of the receiver between the selector switch and the bolt catch. See Figure A
- •Get the roll pin started into the hole of the first hump with a few taps of your punch and hammer. See Figure B
- •Install the spring into the hole on the left side of the receiver.
- •Install the bolt catch plunger on top of the spring. Keeping the round portion of the bolt catch buffer on top. See Figure C
- •Install bolt catch in receiver.
- •Use the 3/32" punch to hold the assembly by placing it through the front hump.
- •Drive the roll pin the rest of the way in. Watch as it forces the 3/32" punch out of the front hump.

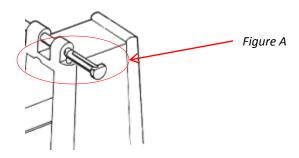
# **Function Check**

•Verify that the bolt catch functions smoothly and is under tension from the spring.





# Step 4: Front Takedown Pin



Parts Required: takedown pin, takedown pin detent, takedown pin detent spring

Tools Required: 3/32" drive pin punch

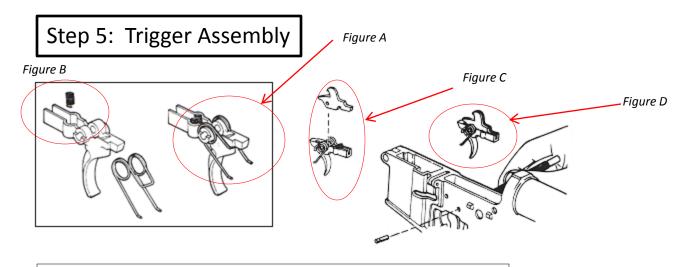
•Insert spring and detent into the small hole in the receiver.

- •Compress spring and detent with the blade of a box cutter knife or use a razor blade.
- •Slide takedown pin into hole. See Figure A

# **Function Check**

•Verify that the takedown pin detent prevents the takedown pin from coming all the way out of the receiver.





Parts Required: trigger, trigger pin, trigger spring, disconnector, disconnector spring

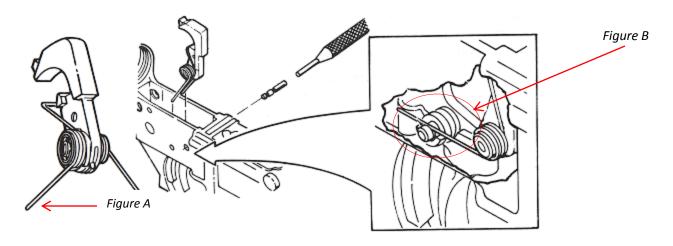
Tools Required: 5/32" drive pin punch

- •Place trigger spring onto the trigger with ends of the trigger spring facing forward and under the trigger. See Figure A
- •Install disconnector spring with the wider portion of spring down towards trigger and push it in. See Figure B
- •Position disconnector on top of trigger. See Figure C
- •Insert the trigger assembly into the receiver, keep trigger spring feet facing forward. See Figure D
- •Insert trigger retaining pin through receiver, trigger and disconnector.

- •Make sure the trigger pivots smoothly when depressed.
- •Verify that the disconnector pivots as well.



# Step 6: Hammer Assembly



Parts Required: hammer, hammer spring, hammer retaining pin

Tools Required: 5/32" drive pin punch

- •Place hammer spring onto hammer, keep ends of the hammer spring facing away from the hammer strike face. See Figure A
- •Insert the hammer into the receiver with spring feet pointing rearward away from hammer strike face.
- •Use 5/32" punch to retain the hammer in place as you insert the hammer retaining pin into the hole in the receiver.
- •Ends of the hammer spring will rest on top of the trigger pin, with one end in the groove on the trigger pin. See Figure B

- •Test and verify that the hammer locks to the rear when pushed back.
- •Test and verify that the hammer falls when the trigger is pressed.



# Step 7: Selector & Pistol Grip Assembly Figure C

Parts Required: safety selector, selector detent, selector detent spring, pistol grip, pistol grip screw, lock washer

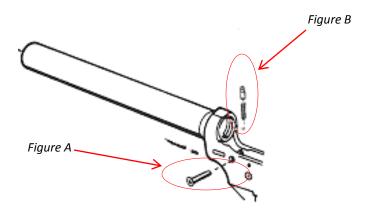
Tools Required: flathead screwdriver

- •With hammer cocked back, insert the safety selector from the left side of the receiver. Keep selector in the "safe" position. See Figure A
- •Insert detent with the pointed end towards the selector and the spring into hole on bottom of the receiver in the area where the pistol grip is installed. See Figure B
- •Compress the selector detent spring with the pistol grip.
- •Insert the lock washer and pistol grip screw inside the pistol grip. Tighten firmly to the receiver. See Figure C

- •Test and verify that the selector is able to move from "safe" to "fire". Listen for it to click into place.
- •With the hammer cocked back and the selector on "safe", attempt to pull the trigger. Hammer should not fall.
- •With the hammer cocked back and the selector on "fire", pull the trigger. Hammer should fall.



# Step 8: Buffer Tube Assembly



Parts Required: back plate, castle nut, takedown pin, takedown pin spring, takedown pin detent, buffer extension, retainer, retainer spring, buffer, buffer spring Tools Required: flathead screwdriver, razor blade or box cutter knife

- •Insert takedown pin on right side of the receiver. See Figure A
- •Insert retainer spring and retainer into hole in lower. See Figure B
- •Paint grooves of receiver with automotive grease.
- •Screw castle nut all the way onto the buffer tube.
- •Place back plate onto the buffer, keep indentation facing the receiver.
- •Screw buffer tube into the receiver, until threads touch the retainer just enough to hold the retainer in place.
- •Insert the takedown pin detent with point facing the takedown pin into the small hole on the backside of the receiver and then insert the takedown pin spring behind it. Use a razor blade of box cutter knife to keep pressure on the detent and spring. Then move the back plate in place and finish tightening the castle nut to hold everything in place.
- •Insert buffer and buffer spring into the buffer tube.

# **Function Check**

•Test and verify that the takedown pin operates properly.



