

Ghost Gunner 2 Setup

Your purchase includes a **DD USB drive** containing the software and cutting codes for your Ghost Gunner 2. Insert the **DD USB drive** in your computer's USB port. Copy the Ghost Gunner folder from the DD USB drive and paste it to your desktop. Disconnect the USB drive and store it as a backup. Open the Ghost Gunner folder copied to your desktop from the USB drive.

Windows:

Navigate to Ghost Gunner/Drivers/Arduino/
Click 'install.bat' to install drivers
Run DDCut.exe from the Ghost Gunner folder

MacOS:

Open DDCut MacOSX folder
Install 'DDCutOSX.pkg'
Run DDCut from Apps menu

Plug in the power supply cable and connect your computer to the Ghost Gunner via the USB cable.
In DDCut menu click '**Choose Ghost**', select the device port number from the list, then click 'Open' to connect to the unit.
In the DDCut menu click '**Choose File**' to navigate to **Ghost Gunner\ Cutting Code** and choose the appropriate .dd file for your workpiece.
The program will walk you through every step with instructional text and images.

CUTTING CODES

DD cutting code programs end in a .dd extension. Cutting codes tell DDCut how to move Ghost Gunner's motors to create parts.
Run DD cutting programs through the DDCut interface. Click Choose File and navigate to the Cutting Code folder. Follow the directions on the screen.

A standard cutting code file is included in the main code folder for each type of firearm on the menu.
Chapered versions of standard cutting code files are included in the Additional Cutting Code folder for each type of lower/frame.

AR15 Codes

AR15 Code/ **AR15_pocket+selector+pins.dd**

Mill the trigger well and selector hole and drill the trigger and hammer pin holes on an 80% AR-15 lower receiver.

Additional Ar15 Code/ **AR15_pocket.dd**

Mill the trigger well on an 80% AR-15 lower receiver.

Additional Ar15 Code/ **AR15_selector+pins.dd**

Mill the selector and drill trigger and hammer pin holes on an 80% AR-15 lower. The pocket must already be milled.

Additional Ar15 Code/ **AR15_pins.dd**

Drill trigger holes on an 80% AR-15 lower receiver. The pocket and selector must already be milled.

AR308 Codes

AR308 Code/ **AR308_pocket+selector+pins.dd**

Mill the trigger well and selector hole and drill the trigger and hammer pin holes on an 80% AR-308 lower receiver.

Additional Ar15 Code/ **AR308_pocket.dd**

Mill the trigger well on an 80% AR-308 lower receiver.

Additional AR308 Code/ **AR308_selector+pins.dd**

Complete the selector and trigger holes on an 80% AR-308. Use if you had an error after completing FCG pocket. The pocket must already be milled.

Additional AR308 Code/ **AR308_pins.dd**

Drill the trigger and hammer pin holes. Use if you had an error after completing the main pocket and selector.

AR308 Code for GG1

Additional AR308 Code/ AR308 Code for GG1/ **AR308_GG1-pocket.dd**

Mill the FCG pocket for an 80% AR-308 lower receiver in a retrofitted original Ghost Gunner 1.

Additional AR308 Code/ AR308 Code for GG1/ **AR308_GG1-selector+pins.dd**

Mill the selector and drill trigger and hammer pin holes in a retrofitted GG1.

M1911 Codes

Cutting Code/ M1911 Code/ **M1911_mill+drill.dd**

Mill the rails and barrel seat and drill holes on an 80% M1911 frame.

Additional M1911 Code/ **M1911_mill.dd**

Mill the rails and barrel seat on an 80% M1911 frame.

Additional M1911 Code/ **M1911_drill.dd**

Drill the holes on an 80% M1911 frame.

Additional M1911 Code/ **M1911_mill+drill-nocheck_m100.dd**

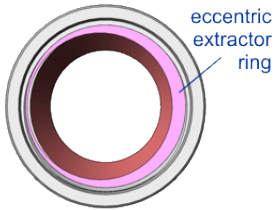
Mill rails and barrel seat, drill holes on an 80% M1911 frame without tolerance check feature. Use if tolerance check feature in standard M1911 code will not allow you to continue after numerous attempts.

Troubleshooting Code folder contains programs useful for diagnosing issues with your machine.

Use the following link to watch an instructional youtube video to learn more about setting up your GG2 to cut an anodized AR-15 lower receiver.

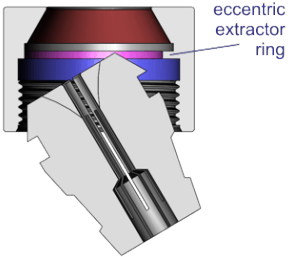
<https://youtu.be/EfluEVUhoZY>

ER nut and collet assembly



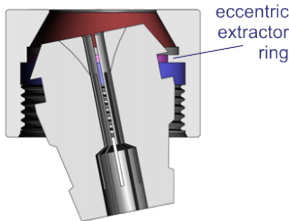
If you look down the threaded portion of the nut, you will notice an eccentric ring at the top of the threads. This is referred to as an extractor ring.

The purpose of this ring is two-fold. First of all, it serves to hold the collet in the nut so that they can be removed and handled as a unit without fear of them falling apart. Second, as the nut is loosened, the ring runs around the groove in the collet and lifts it out of the spindle bore.



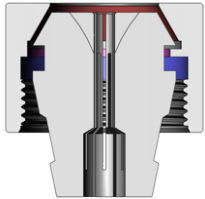
As far as putting the collet and nut together, the trick is to insert the collet so that the annular groove straddles the extractor ring and the tapered top rim of the collet seats properly into the conical cavity of the nut.

This is done by angling the collet up into the nut and pushing it past the extractor ring until the entire top portion of the collet is above the ring.



Now, push on the bottom of the collet until the collet completely enters, and lines up with, the nut.

As the collet moves into proper alignment, you will hear and feel a distinct click, indicating that the top of the collet is safely secured above the extractor ring.



The nut / collet assembly can now be loaded with a tool, screwed onto the spindle.

NOTE

NEVER ACTIVATE (TURN ON) A SPINDLE WITHOUT A TOOL SECURELY FASTENED INSIDE THE COLLET, AND THE NUT PROPERLY TIGHTENED.

FAILURE TO FOLLOW THIS SIMPLE PRECAUTION COULD LEAD TO DAMAGE TO THE SPINDLE, COLLET, NUT, WORKPIECE, AND CNC MACHINE COMPONENTS.

Removing the collet from the nut:

1. Remove the nut / collet from the spindle and remove any bits from the collet bore.
2. Gripping the nut with one hand, tilt the collet over as far as it will go with the other.
3. While maintaining pressure on the collet, twist the nut until you hear / feel a click.
4. The "click" indicates that the top rim of the collet groove has completely snapped out of the extractor ring and the collet can be removed from the nut. Note: with a new nut or collet it might be necessary to also press on the top of the collet with your thumb as you twist the nut to achieve separation.

