

Thank You for  
downloading the AR-9  
Super (and Basic) Lower  
V1.2!

See the README for  
generic info and print  
settings.

PLA+ will work for all  
parts. However, Nylon  
would be best for the  
ejector.

You will need:

3/32" x 1" roll pin for  
the mag catch lever.

#24 0.5" wide hose  
clamp. For the buffer  
tower.

(2) 10/32 x 1.25

Screws. For the swivel  
pin plates.

(2) 10/32 3/8" wide hex  
nuts. For the swivel  
pin plates.

Heavy AR-9 buffer mass.

All other parts can be  
taken from a standard  
AR-15 lower build kit.

The AR-15 mag catch and  
mag catch button are  
not used.

The ejector presses  
into place without  
glue. It should be  
finger tight. Sand to  
fit if needed.

AR-15 mag catch spring  
is used with the mag  
catch lever.

PRINT SETTING FOR  
EJECTOR AND MAG CATCH:

Four walls.  
50 gyroid or honeycomb  
infill.  
four or five top and  
bottom layers.  
All other settings  
standard. See README.

Improvements in V1.2:  
Updated mag position.  
Better feeding.  
Stronger mag catch  
lever.  
Improved suport.

Hello!

This is the generic  
Hoffman Tactical README  
text file for lower  
receivers. It contains  
info that you may want  
to know. For info  
specific to the design  
in this ZIP file, read  
the INFO text file.

File Naming Scheme:  
"BL" means "Basic  
Lower".  
"SL" means "Super  
Lower".  
"NS" means "No  
Support".  
"WS" means "With  
Support".

File Types Explained:  
.STL files are ready to  
import into your slicer  
and print. They are a  
mesh file and are hard  
to edit.  
.STEP files are not

compatible with most slicers. They are much easier to edit in CAD than .STL files. .AMF files can be imported into slicers. They separate the built in support from the part body. This allows you to set different line widths for the support. This is an advanced technique useful when printing with a larger nozzle. I highly recommend you use the .STL files unless you need the separate support.

**Print Orientation:**  
See the "Proper Print Orientation" JPEG. The lower should be printed with the bottom of the magazine well flat on the bed. The Swivel Pin Plates should be printed with the inside surface flat on the bed, the holes should be facing up.

**Recommended Print Settings:**  
You are welcome to experiment. However, I recommend the following basic settings. The outside line width is very important to insure the built in support prints successfully. Cura is

an awesome slicer,  
however I believe Prusa  
Slicer (Slic3r) is  
easier to use when  
printing most parts.  
The advanced settings  
available in Cura are  
not needed.

0.20 MM Layer Height.  
Three Walls (Yes, more  
walls are not always  
better ;)

100% Aligned  
Rectilinear Infill.  
Standard Rectilinear  
will work, but is not  
nearly as strong.

0.45 MM Outside  
Perimeter Line Width.  
0.40 MM Top Layer Line  
Width

0.50 MM Line Width  
everywhere else.  
I like to keep print  
speed under 45 MM/s for  
optimal layer bonding.  
But this is not a hard  
rule.

All other settings are  
dependent on filament  
and circumstances. This  
is not the place to  
discuss them.

For the Swivel Pin  
Plates, I would use  
four walls and 50%  
Gyroid or Honeycomb  
infill.

Basic vs. Super Lower:  
The Super Lower is  
designed to fit the  
brass inserts from our

kit. The Basic Lower is designed to use as many standard parts as possible. If you have one of our kits, print the Super Lower. If you think that your fire control pins are too short, you probably printed the Super Lower and have not yet installed the Bushings in their pockets. The Basic Lower will need the pistol grip bolt hole tapped to 1/4-28.

#### Built In Support:

The built in support is designed into the CAD file and replaces the slicer generated support. I highly recommend you use the files with support (WS) unless you have a very good reason to do otherwise.

#### Sourcing Parts:

A standard lower build kit will be needed to complete any lower. Unless otherwise noted, a mil-spec carbine buffer tube must be used. If you do not have a kit, you will need to source the hose clamp and swivel pin plate hardware yourself. The front plate hardware is two 10-32x1.25 bolts and

hex nuts. The size of  
the hose clamp is  
dependent on the lower  
you are printing.

You can find more info  
at [hoffmantactical.com](http://hoffmantactical.com)