3DPrintFreedom.com Supplementary Materials



PRODUCT: SMP40 Hardware Kit

VERSION: 1.0

This document details a few notes about parts for the SMP40 Hardware kit, including ways that these kits differ from the published BOM.

Please review each item below for details. Note that items mentioned here are also called out with a * symbol in the BOM.

- At time of writing, some parts may be placed in an "extras" baggie separate from their dedicated parts baggies. As such, if a labeled bag is missing parts, please check for an "extra parts" baggie which may include these missing items.
- **HW1:** the BOM calls for a 14.75" long receiver tube. We have found that this is slightly overlong, and so we cut ours to 14.5". This guarantees the tube will fit inside a complete build. This tube length may not reach to the back of the buffer / grip when fully assembled, but this is not an issue.

We thread one end of our tubes, as well as mill a notch for a barrel index pin. Your barrel may or may not have this index pin. If it does, mount your barrel such that the index pin sits in the notch and cut your receiver tube such that the index notch is at the 12 o' clock position.

If your barrel does not have an index pin, you can ignore the notch and can orient the notch at any angle.

- **HW14:** the BOM calls for a "#6 Window Spring", which is apparently meant to be an Ace Hardware spring. We have found that the included spring, sized slightly differently, works better.
- **HW18:** the BOM calls for a 4mm x 15mm temporary slave pin. We have found that 4mm diameter is slightly oversized for AR FCG components, so we instead include a .155" diameter pin. We have also reduced this to 14mm, to ensure that the pin does not protrude past the surface of the part.
- **HW19:** the BOM calls for 4mm x 25mm pins to mount the trigger and hammer. We have found that 4mm diameter is slightly oversized for AR FCG components, so we instead include a .155" diameter pin. We have also reduced this to 24mm, to ensure that the pin does not protrude past the surface of the part.
- **HW20**: the BOM calls for 4mm x 17mm pins. We have reduced this to 16mm, to ensure that the pin does not protrude past the surface of the part.
- **HW22:** the BOM calls for 4mm x 23mm pins. We have reduced this to 22mm, to ensure that the pin does not protrude past the surface of the part.
- **HW24:** the BOM calls for a 30mm long reinforcement pin. We have increased this to 1.25" (31.75mm), for convenience. This increase should not cause the pin to protrude past the tube.