

STEALTH ARMS

1911 PHANTOM JIG

Before You Begin

We strongly recommend that you read through these instructions completely and thoroughly before getting started with your build. It is important that you have a strong understanding of every step to ensure that your build is completed to your satisfaction.

We do not recommend painting your frame before cutting it, but if you do, put tape between the frame and the side plates before assembling. This will not affect the function of the jig if the tape is applied evenly.

To order the 1911 Complete Build Kit, visit our website at www.stealtharms.net

Email us with your questions: orders@stealtharms.net

Visit our YouTube page for tutorials: <https://www.youtube.com/c/StealtharmsNet>

PLEASE REMEMBER TO OBSERVE ALL LOCAL, STATE, AND FEDERAL LAWS WHEN PRODUCING A FIREARM FROM 80% FRAMES/LOWER RECEIVERS.

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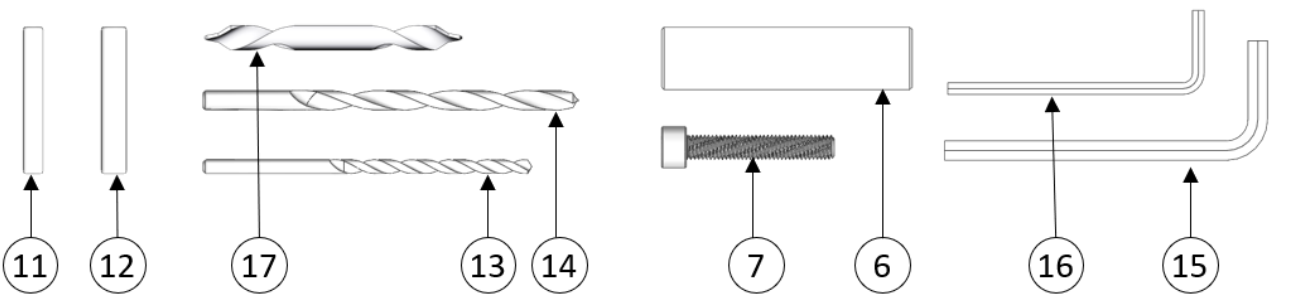
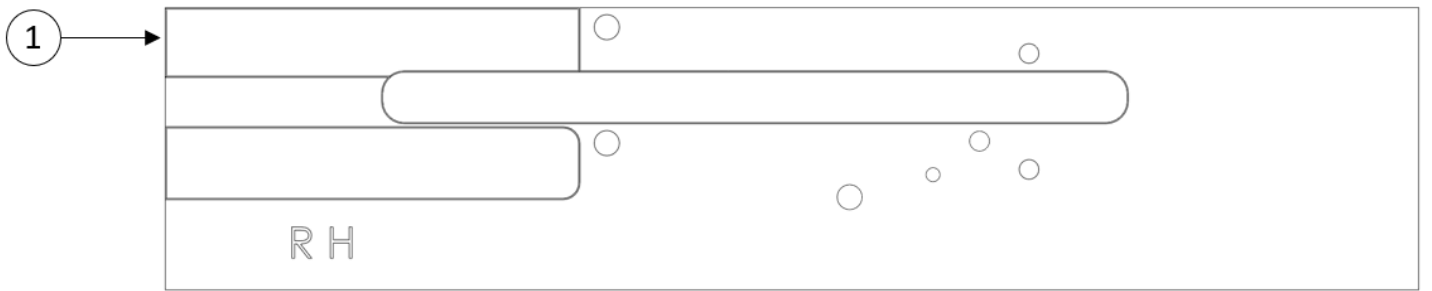
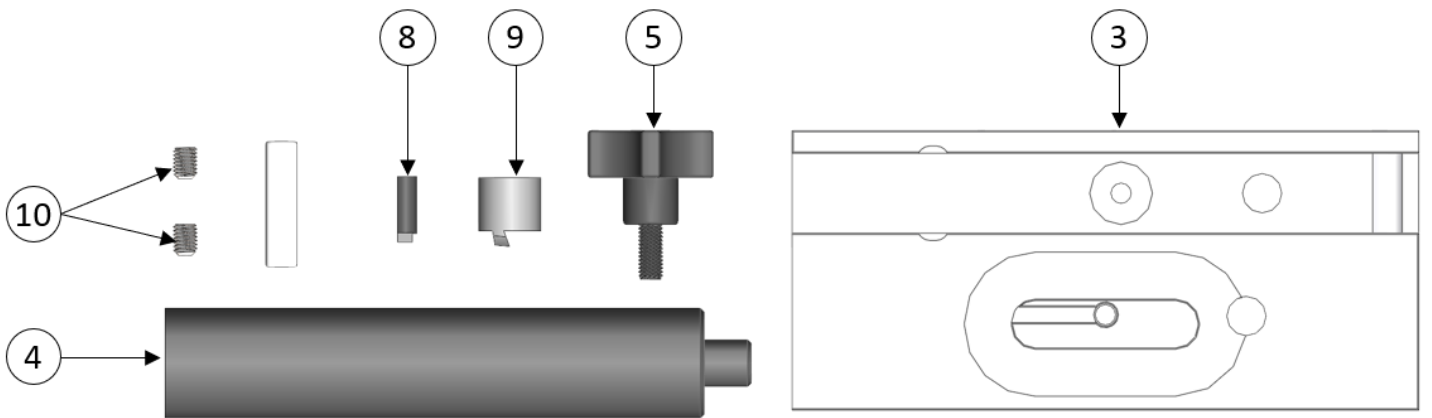
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1911 Phantom Jig Build Kit Contents

#	PART	QTY
1	Right Hand (RH) Side Plate.....	1
2	Left Hand (LH) Side Plate.....	1
3	Phantom® Jig Car.....	1
4	Jig Handle	1
5	Adjusting Knob.....	1
6	Spacer Block.....	1
7	M5 x 0.8 Bolt	1
8	Rail Cutter.....	1
9	Barrel Seat Cutter	1
10	10-32 Set Screw	2
11	Ø.157 dowel pin	1
12	Ø.201 dowel pin	1
13	#34 Drill Bit.....	1
14	4mm Drill Bit	1
15	5/32 Allen Wrench	1
16	3/32 Allen Wrench	1
17	3/16 Center Drill Bit	1

Not Included

- Drill Press
- Work Holding Vise
- Lubricating oil
- Permanent Marker



Assemble the Jig

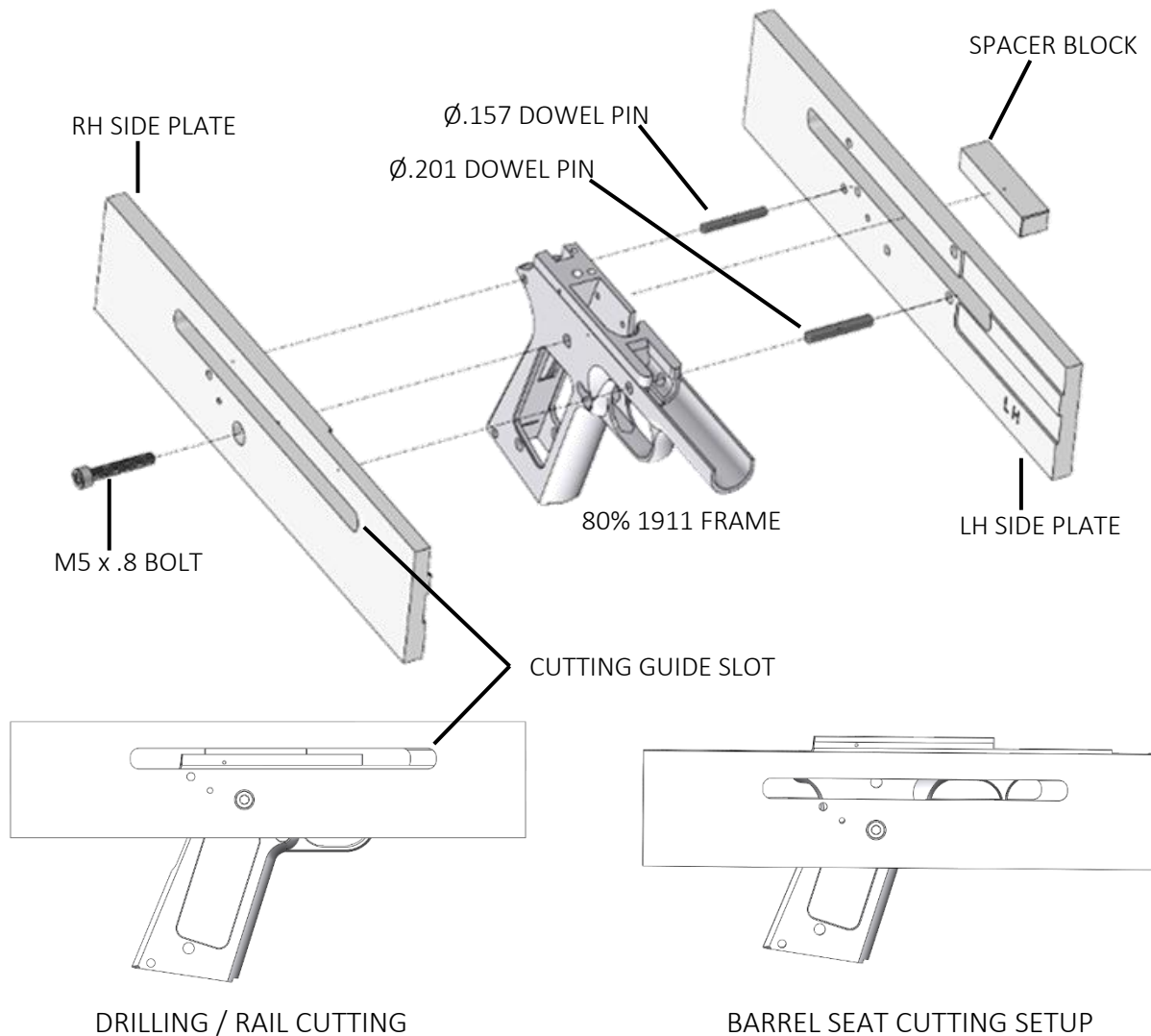
The side plates have two sets of holes – one above and one below the cutting guide slot. The lower two holes are used when cutting the slide rails and drilling the hammer pin and sear pin holes. The upper two holes are used when cutting the barrel seat.

STEP 1 Insert the $\varnothing.157$ dowel pin and the $\varnothing.201$ dowel pin into the corresponding LH Side Plate holes. Slide the frame onto the dowel pins using the grip safety pin hole ($\varnothing.157$) and the slide stop pin hole ($\varnothing.201$).

STEP 2 Align the corresponding holes on the RH side plate and slide it onto the dowel pins, “sandwiching” the frame between the two side plates.

STEP 3 Insert the M5 bolt through the counterbored hole in the RH side plate and thread it into the threaded hole in the LH side plate to secure the frame between the side plates. Tighten the M5 bolt with the 3/32 Allen wrench so that there is no movement between the side plates and frame.

WARNING Do not over-tighten the M5 bolt. The bolt should be snug, but not so tight that it bends the sides of the frame together.



Drill Holes for Hammer Pin & Sear Pin

The sear pin hole and hammer pin hole are crucial to the safe and proper functioning of your completed 1911. Use a drill press, **not a handheld power drill**, to drill the holes. Otherwise, you will be unable to ensure that the holes are drilled straight in the walls of the frame.

WARNING **Only drill through one side of the frame at a time.** If you try to drill both sides of the frame from the same side, your drill may “walk” off and your holes will not be aligned properly.

STEP 1 Make sure the jig is assembled using the holes below the cutting guide slot. Place the jig assembly flat on the worktable of your drill press.

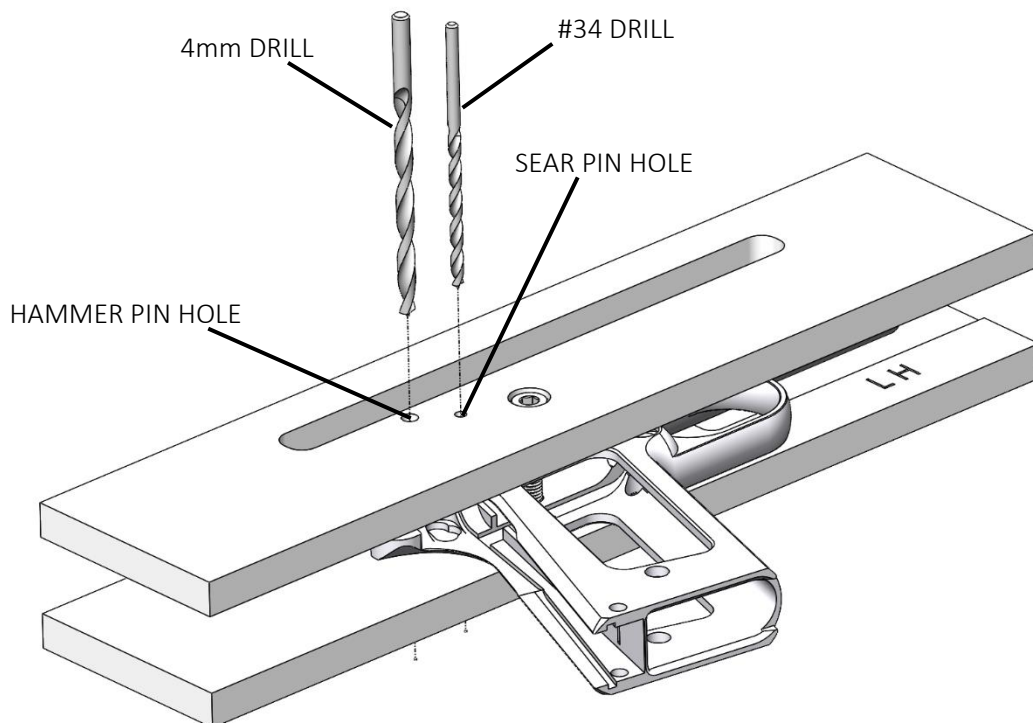
STEP 2 Insert the 4mm drill bit into the drill press chuck and secure it tightly. Turn on the drill press and use the correct guide hole in the side plate to drill the hammer pin hole on one side of the frame.

TIP When beginning to drill, rest the jig loosely on the table. Let the drill “find its home” in the guide hole, then stabilize the jig with your hand. Do not use a work holding vise.

STEP 3 Flip the slide plate/frame assembly over and drill the hammer pin hole on the opposite side of the frame. Drill all the way through this time.

STEP 4 Repeat steps 2 and 3 with the #34 Jobber drill to drill the sear pin hole using the sear pin guide holes in each side plate.

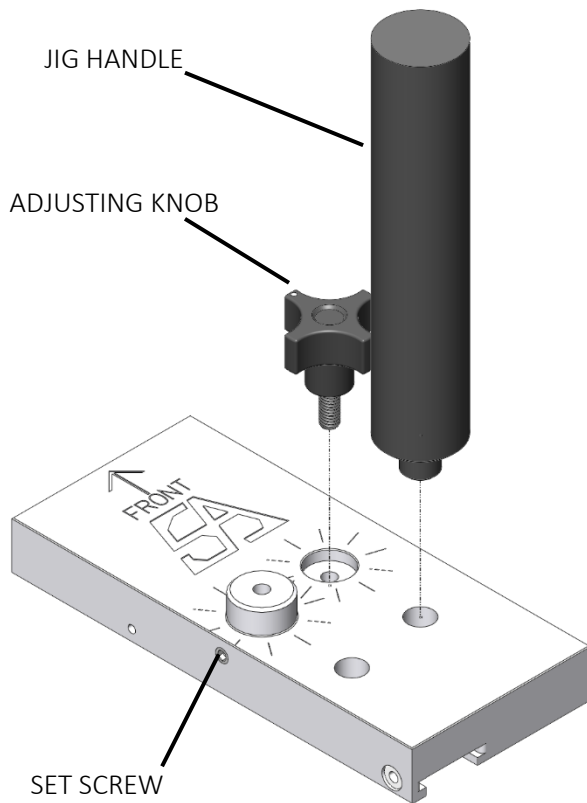
STEP 5 **This step can wait until after the rails are cut.** Remove the frame from the jig. Using the 3/16 drill bit, add a chamfer to the lip of the holes on the left side of the frame. Use your hands to manually torque the drill bit. Do not use a drill. The chamfer should be deep enough to allow the head of the pins to lay flush with the side of the frame.



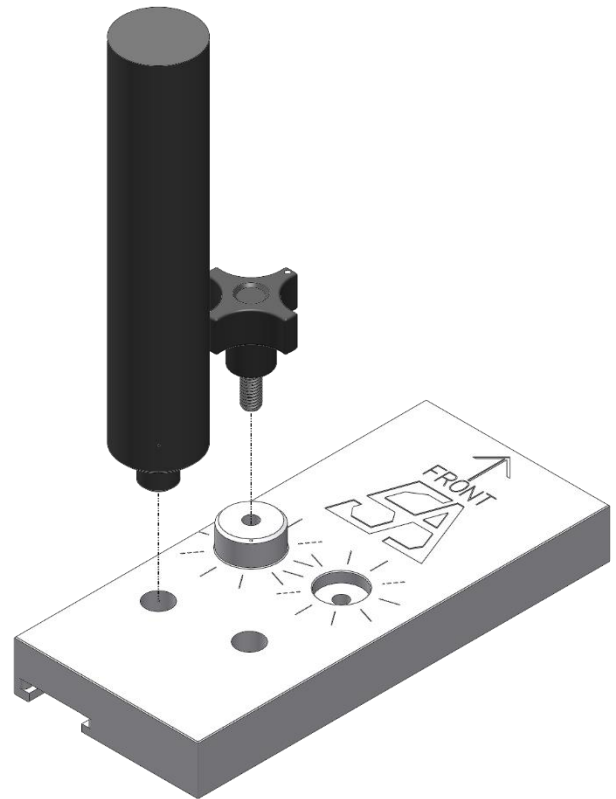
Assemble the Phantom Jig Car

The Phantom jig car comes with the rail cutter and the barrel seat cutter already installed. You will need to assemble the car differently depending on whether you are cutting the slide rails or the barrel seat.

- STEP 1** Attach the adjusting knob to the car by screwing it into one of the holes on the top face of the car. Use the counter-bored hole for rail cutter and the extruded hole for the barrel seat cutter. The adjusting knob is used to control the depth of your cuts.
- STEP 2** Attach the jig handle by threading it into the hole directly behind the adjusting knob.
- STEP 3** Position the cutter so that it is not protruding past the surface of the car. Make sure the cutter is secured tightly and the cutting edge points toward the front of the car.



RAIL CUTTING SETUP

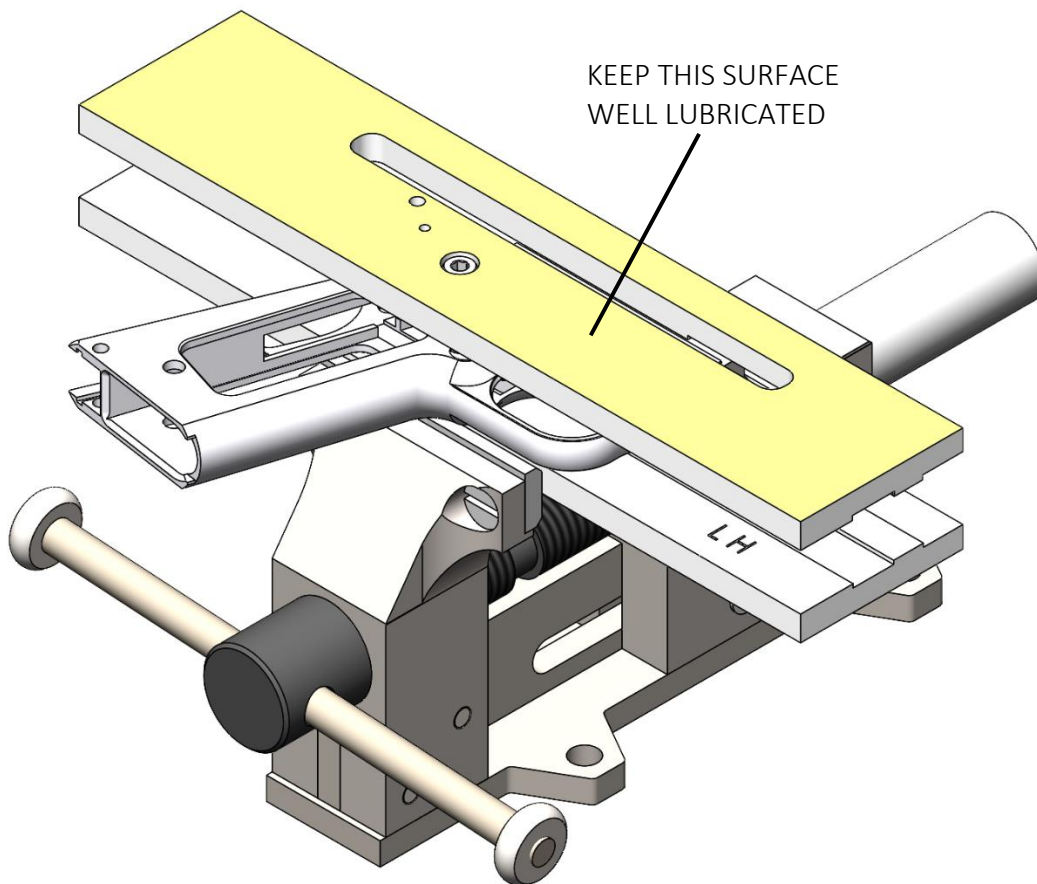


BARREL SEAT CUTTING SETUP

Prepare to Cut the Slide Rails

Before beginning this step, the jig and car need to be assembled for cutting the slide rails. See pages 5 and 7 for details.

- STEP 1** Insert the spacer block into the center of one of the side plate guide slots. The spacer block prevents the guide slot from becoming damaged when the work holding vise is tightened.
- STEP 2** Secure the jig assembly in your work holding vise by clamping onto the side plate that contains the spacer block. Position the assembly so that the grip points to the left.
- STEP 3** Apply lubricating oil to the top side plate and spread it around so that it covers the entire surface. To further reduce friction, apply oil to the surface of the frame and inside the guide slot.
- STEP 4** Position the car on the jig assembly so that the guide boss on the car goes into the side plate guide slot. The sides of the car should be flush with the side plates. Find the starting position of the adjusting knob and mark it with a permanent marker (see next page for more details).

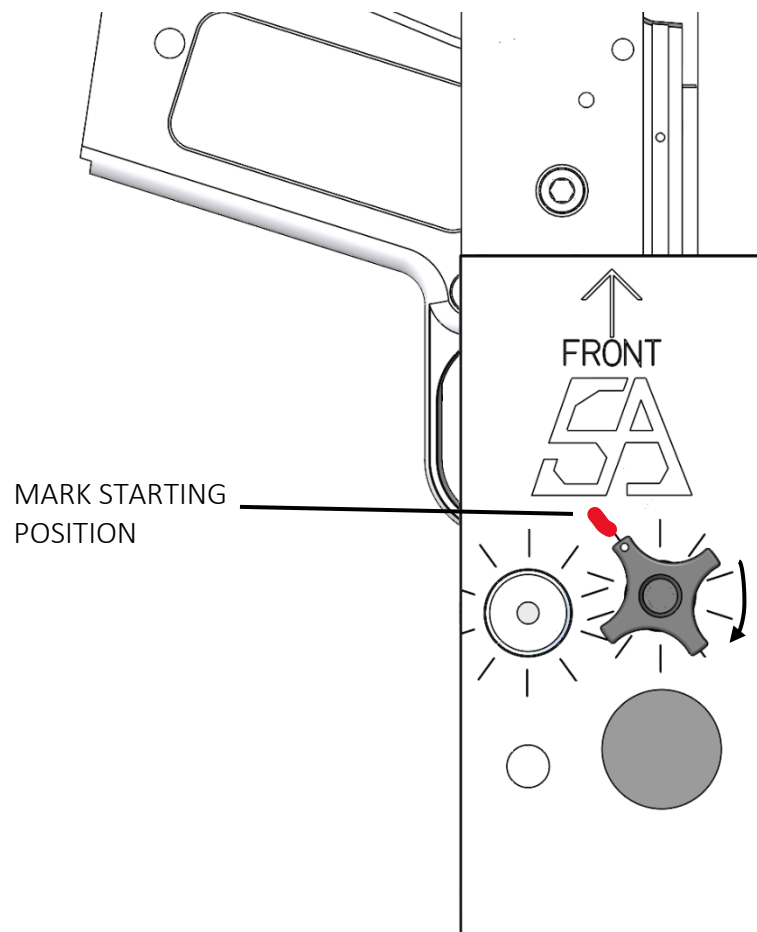


Find the Starting Position

Before making any cuts on the frame, it is necessary to mark the starting position of the adjusting knob to keep track of the cutting depth. There are 10 notches engraved on the car surrounding the adjusting knob. Each one of these notches indicates 1/10 of a revolution.

- STEP 1** Make sure the car is assembled correctly and that the cutter is not protruding past the surface of the car. Position the car on the jig assembly.
- STEP 2** Use the jig handle to push the car along the guide slot while slowly turning the adjusting knob clockwise. Turning the adjusting knob forces the cutter down closer to the frame. Continue until the cutter just begins to scratch the frame. You should notice the car becoming slightly harder to push and a shiny line starting to form on the frame.
- STEP 3** Using a permanent marker, mark where the indicating dot on the adjusting knob is lined up with the notches engraved on the car.

WARNING Do not rush finding the starting position. It will determine the final depth of the cut.



Cut the Slide Rails

WARNING **Make sure the car is in the correct orientation before cutting.** Cutting the rails with the car in the incorrect orientation will ruin the frame. Your setup should look like the diagram on the left.

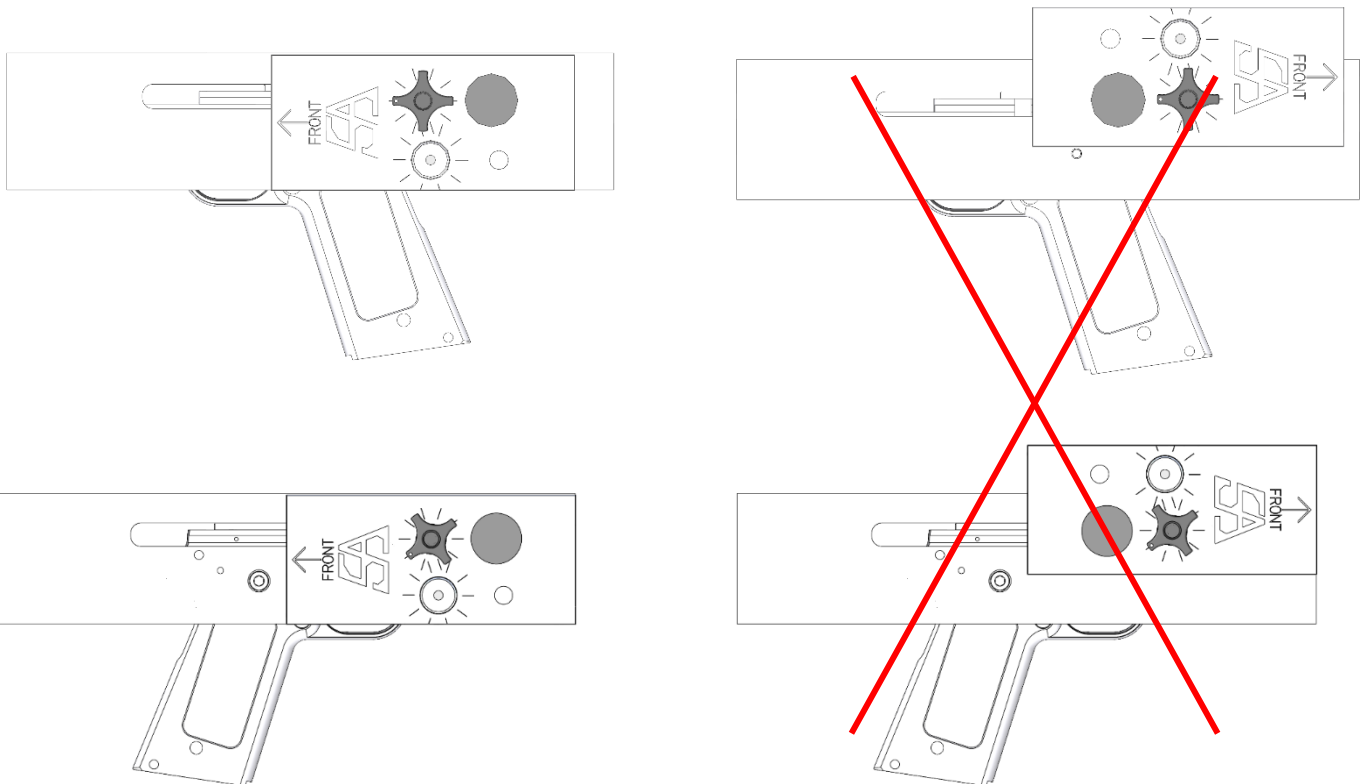
STEP 1 Turn the adjusting knob clockwise one notch and make sure the cutter is snug by tightening the set screw. Begin cutting material by moving the car back and forth along the guide slot. You will need to apply some downward pressure on the forward stroke, but make sure to lift up on the back stroke to avoid dragging the cutter. Continue cutting at the same depth until you can no longer feel resistance or notice chattering.

TIP If you find it too difficult to push the car, try only turning the adjusting knob $\frac{1}{2}$ of the distance to the next notch to take off less material per cut. It may also help to occasionally remove chips from in front of the rail cutter.

STEP 2 Repeat step 1 until you have turned the adjusting knob **19 notches** (1.9 total revolutions) from the starting position to achieve a final depth of **0.061"**. For a smoother cut, start making smaller cuts as you approach the final depth.

STEP 3 Flip the jig assembly and prepare to cut the slide rails on the opposite side of the frame by repeating the steps from page 8. Remember to move the spacer block to the other side plate before securing the frame/side plates in your work holding vise.

STEP 4 Make sure the car fits onto the rails. If you have a 1911 slide on hand, it is a good idea to check if the slide fits. You may need to sand or file the top of the frame for the slide to fit.



CORRECT

INCORRECT

Cut the Barrel Seat

ATTENTION: Cutting the barrel seat is not necessary if the frame is cut for the Clark/Para-style feed ramp. Only 45 caliber Stealth Arms frames need the barrel seat cut.

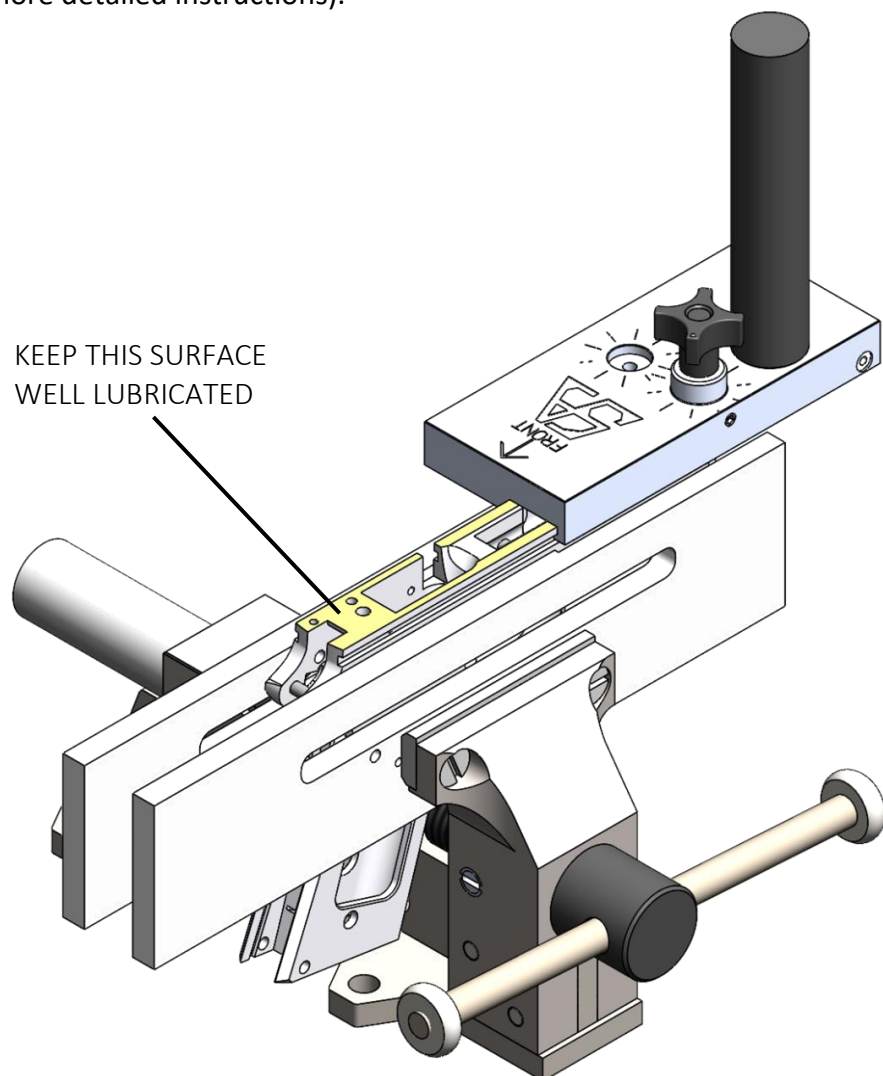
Before beginning this step, the jig and car need to be assembled for cutting the barrel seat. See pages 5 and 7 for details.

STEP 1 Position the frame/side plate assembly in the vise vertically so that the barrel of the frame is pointed toward you.

TIP If you plan on re-using your Phantom jig assembly again in the future, we strongly suggest either using smooth vise jaws or, if your vise jaws have serrated surfaces, using a shop towel as a buffer between the side plates and the vise jaws.

STEP 2 Lubricate the top surface of the frame and the inside the rail guides of the car with lubricating oil.

STEP 3 Position the car onto the frame by sliding the rail guides of the car into the slide rails of the frame. Find the starting position of the adjusting knob and mark it with a permanent marker (see page 9 for more detailed instructions).

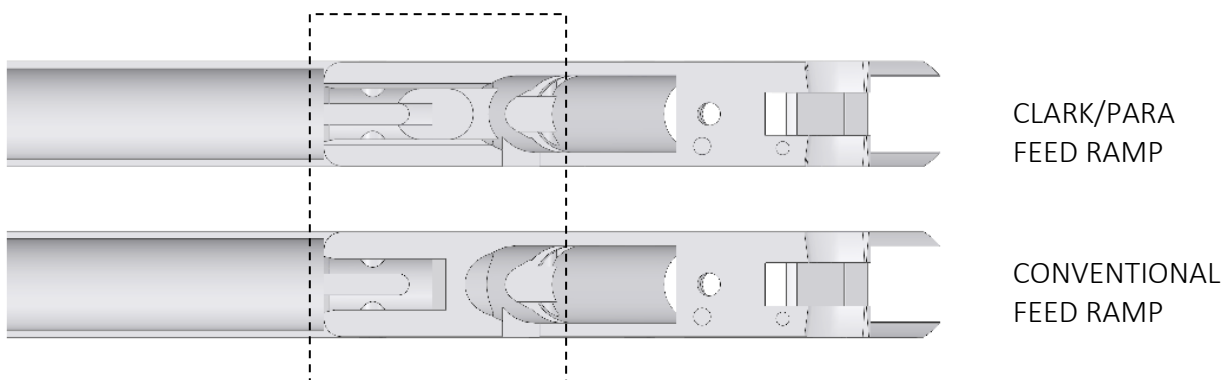
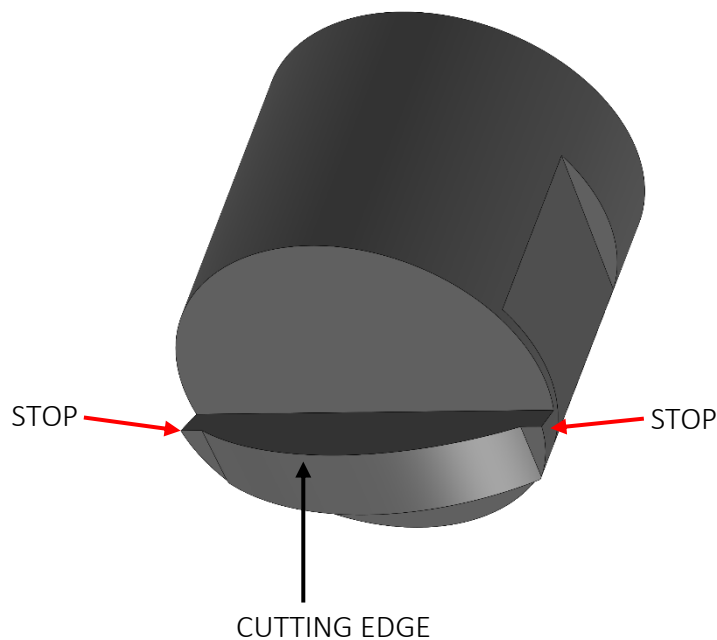


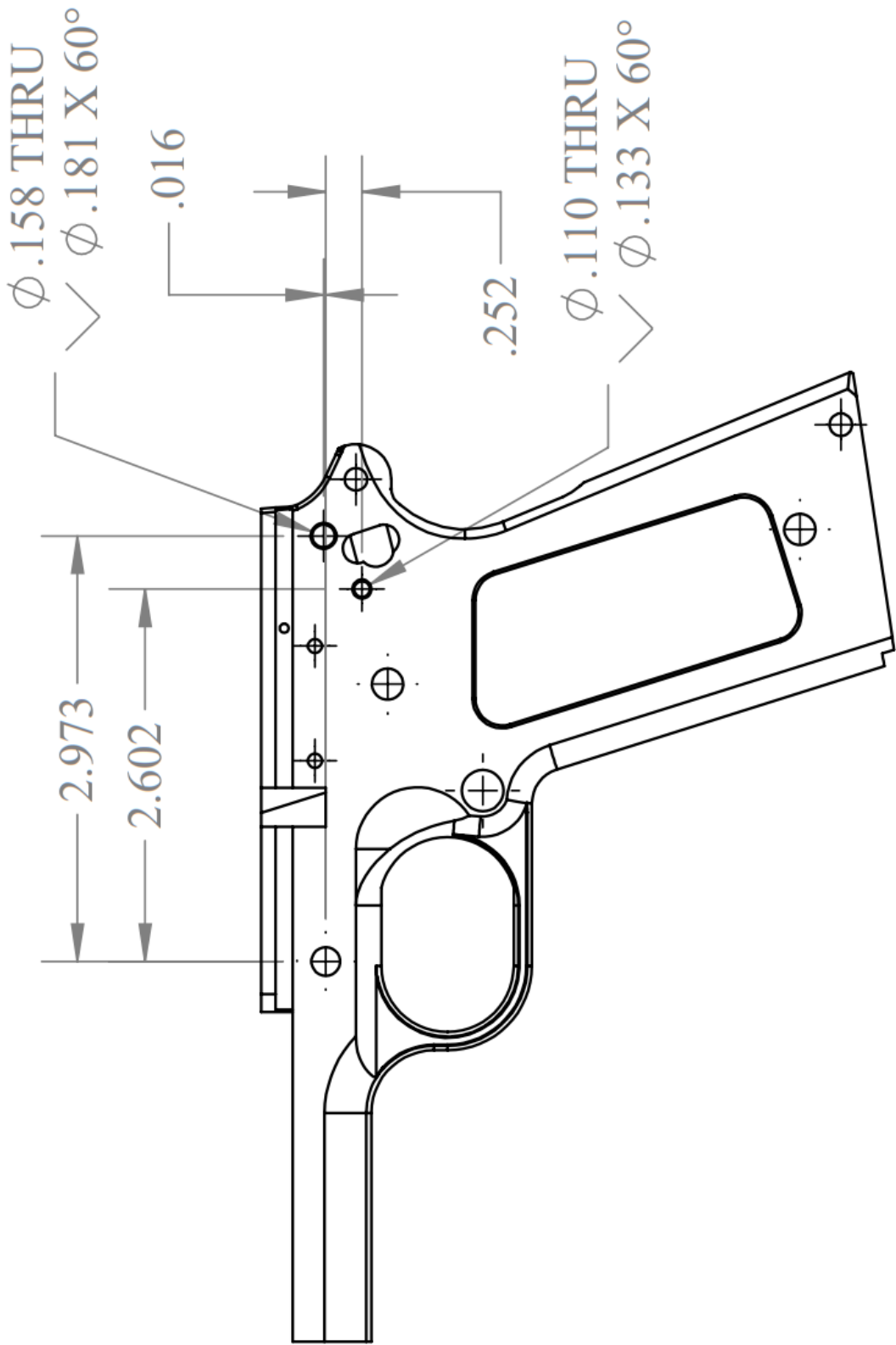
STEP 4 Turn the adjusting knob clockwise one notch and make sure the cutter is snug by tightening the set screw. Begin cutting material by moving the car back and forth along the slide rails. You will need to apply some downward pressure on the forward stroke, but make sure to lift up on the back stroke to avoid dragging the cutter. Continue cutting at the same depth until you can no longer feel resistance or notice chattering.

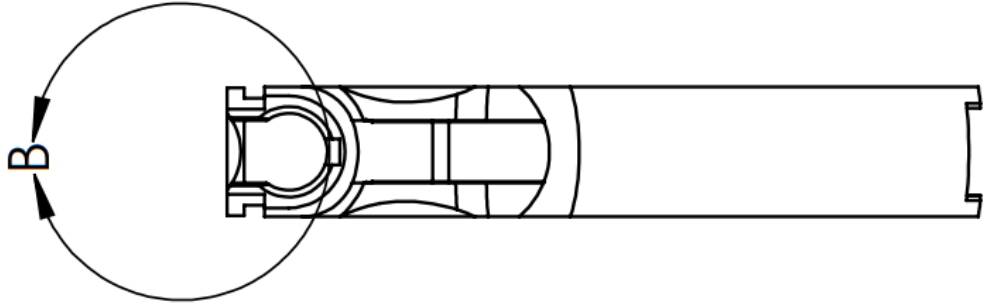
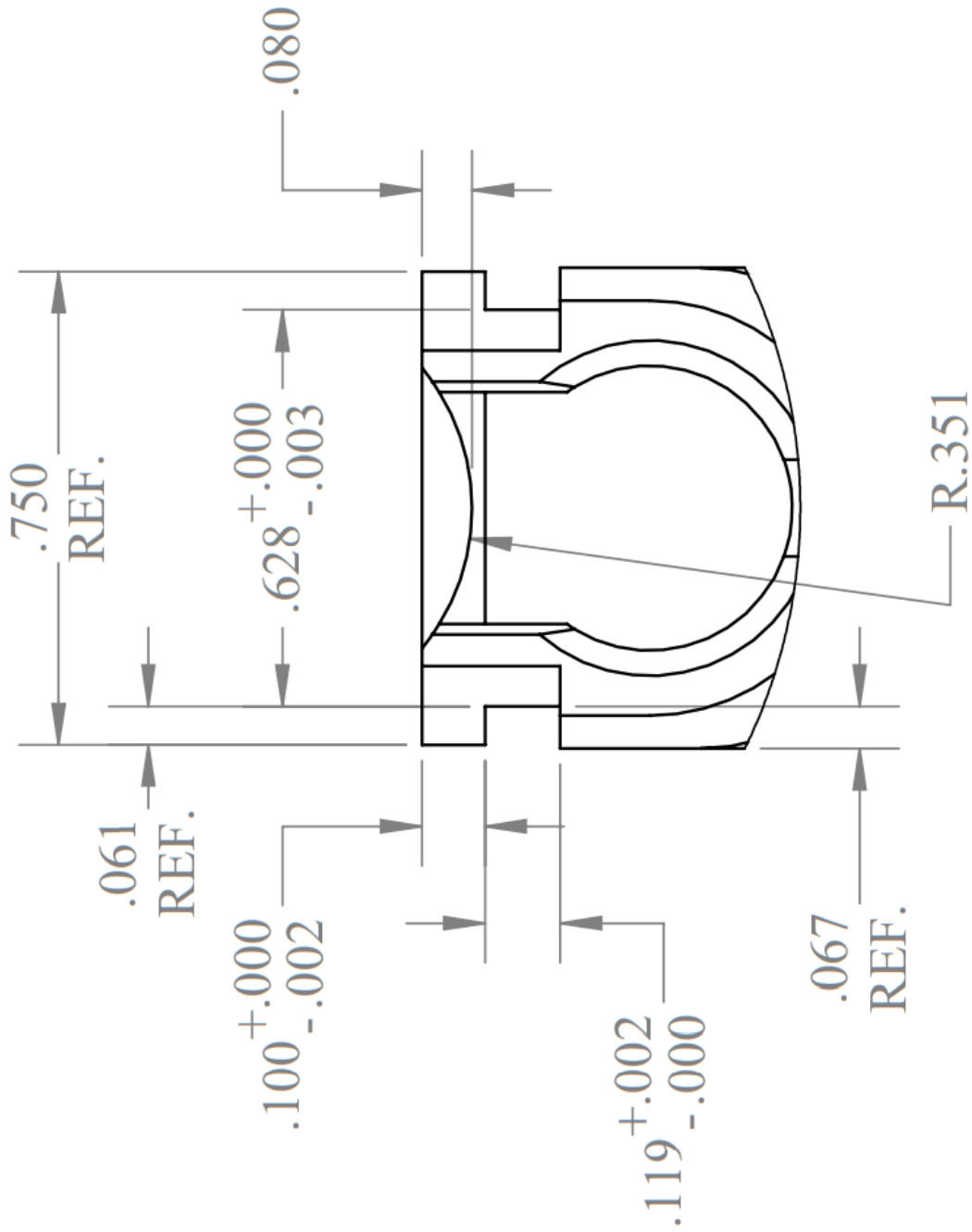
TIP If you find it too difficult to push the car, try only turning the adjusting knob $\frac{1}{2}$ of the distance to the next notch to take off less material per cut. It may also help to occasionally remove chips from in front of the cutter.

STEP 5 Repeat step 4 until you have turned the adjusting knob **24 notches** (2.4 total revolutions) from the starting position to achieve a final depth of **0.077"**. For a smoother cut, start making smaller cuts as you approach the final depth.

WARNING **Do not cut the barrel seat too deep.** The barrel seat cutter features two "ears" on either side of the cutting edge. If you see that you are cutting material with these "ears", then stop cutting. You have gone deep enough.







DETAIL B
SCALE 2:1

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