

Classic Sonic Screwdriver Instruction Manual
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READ THIS BEFORE ASSEMBLING YOUR KIT

Halo Assembly - This is arguably the hardest and most complex part of the build

1. Upper Section (General Preparation):

Halo Ring: [*]

- I painted this with Rustoleum Colonial Red, for both Pertwee and Baker versions. The Davison versions used a gloss red, so I switched from Colonial Red to a simpler gloss red paint. If you are making a Davison or a Baker, I recommend masking the interior of the ring before painting. The Pertwee halo is still accurate even if it is painted on both the inside and the outside.

Magnet Assembly: [Baker and Davison]

- For this, I made sure all of the paint was stripped from the vintage eclipse magnet, and then used glue to attach the custom machined washer to the magnet. DO NOT GLUE THE WASHER TO THE SIDE WITH THE PRONGS. When the magnet and the washer is glued together, you can choose to paint it, or get rid of the seam line from the join. I would like to note that the seam line is accurate, as it has been seen in several screencaps. For painting the assembly, I used a simple matte black with the tips of the magnet prongs masked off. For a Davison build, I painted the whole thing gloss red without masking the prongs.



^ Unpainted Extended bullet, and Extended bullets painted in the baker style. It is ok if there is a visible seam line between the two parts, as that was present on the original prop.

Brass Screw Fixture: [Baker and Davison]

- If you bought a Baker sonic, I recommend painting the top of the screw colonial red, or whatever paint you chose to use for the halo. If it is a Davison sonic, I recommend leaving it plain. Both of these are considered accurate, and have been noted in several screencaps. If you bought a Baker or Davison sonic, the screw will have come with a fancy nut. Save this if you choose to unscrew the brass screw in order to paint it, or something else.



Aluminium Halo Bullet: [*]

- Leave the aforementioned fancy nut came with the screw and the two small pins that with this particular part. You would have received this fancy nut if you ordered a Baker or Davison kit, so don't worry if you have a Pertwee kit and don't have the screw or the nut. Test fit the two pins into two of the holes in the Aluminum Bullet. When you have test fitted those parts, glue the two pins into two holes on the Bullet. Make sure that the pins do not protrude into the hollow center of the aluminum bullet. A correct assembly should look like this.

At this stage, the only recommendation that I have is to polish the bullet if you can, as it looks very nice when it has that pristine shine. After polishing the part, you should put some red paint on the tips of the pins. The red paint should match that which you are using on the brass ring.

Neck Bullet [*]

- Paint this piece matte black. The bottom may be left unpainted, as any paint on that area will simply rub off.



2. Middle Section (General Preparation):

- *For reference, the middle section that I refer to is the section that has the activation ring. It is the part which the Doctor pulls down on to activate the sonic screwdriver.*
- Extension Spacer Add-on (Baker and Davison ONLY):
- If you bought a Baker or Davison screwdriver kit, find yourself the middle grip, and the two aluminum spacers. Pick the one which is the taller, and has a larger hole through the center. Test fit it into the cavity at the top of the grip. Remove it, and be aware that it should be a loose fit. Put glue into the surface at the base of the cavity, and then secure the washer in place. The image at the left shows the cavity without the washer installed. The image at the right shows the grip with the washer properly installed.

Control Rings (Those horizontal grooves):

- *Fun Fact: These parts have always been painted black during any time that this screwdriver has been seen on screen.*
- To paint these grooves black, I used a gloss black brush-on paint, and gently wiped away the excess. After it dried, I then made sure the finish was to my liking. If it had any imperfections, I would strip it down with acetone and repaint it.

Painting the White Activation Ring (Optional):

- *Fun Fact: Most replicas don't include the detail of this White Activation Ring. It is present on all iterations of this prop, although it is covered by a piece of chrome tape in many screencaps. The design of this sonic kit allows for the builder to omit the white ring or replicate it.*
- I used blue painter's tape to mask off the entire upper grip except for the activation ring, which is the part of the grip that is the thickest of all of the sections. With a spare dowel, I was able to hold the grip in place while also rotating it. This allowed me to get an even coat of white spray paint on the activation section. After the ring dried, I would remove all of the masking tape and check the piece for any imperfections.

Chrome Taping the White Activation Ring (Optional):

- *Fun Fact: The chrome material on the activation ring of the sonic became more and more worn off as the series progressed. In the end, the Davison version of the sonic ended up being completely white.*
- Cut a piece of chrome foil tape to the correct size as the activation ring. Place it on, and smooth out any bubbles if present.

Smooth Grip Activation [MUST READ]

- With the very first prototype I made, I realized that when assembled, a loud screeching noise could be heard whenever the sonic was activated. This was the sound of the aluminium parts scratching against each other. I have since eliminated this problem, and in order to do so, I have pre-applied some chrome tape to a section of the grip below the control grooves. This chrome tape acts as a sort of buffer, and allows a smooth activation while also preventing a disturbing noise. DO NOT REMOVE THIS [Unless you mean to replace it with something better]

Extra Details: [Pertwee]

- You may paint the long sleeve with a gloss yellow, and add the helical piece of black tape to the yellow section in order to create the "barber pole" effect. I used a 1/16" thick piece of black electrical tape to do the job.

3. Bottom Section (General Preparation):

Metal Polish: (Optional)

- If you have a Baker or Davison sonic, you need not do anything to the bottom of your sonic. If you'd like, you can polish it to bring up the level of shine until it is to your liking. For those with Pertwee sonics, polishing the metal is also optional, but I recommend that it be done before applying the electrical tape. Doing it this way makes life easier.

4. Halo & Center rod Assembly:

- Lay out any Halo related parts, the black bullet, and the center rod.
- Test fit all pieces before assembling.
- Glue the "Fancy Nut" into the Halo bullet.



^ A bunch of Halo Bullet assemblies with the "Fancy Nut" correctly glued in. This is not required if you are building a Pertwee sonic.

- Place the extension pin inside the hollow center rod. The rod may need to be slightly sanded to remove any burrs which might stop the extension pin from entering the cavity.
- Place glue on the upper section of the tube which would then be covered by the black bullet.
- Fit the extension pin through the black bullet without removing the extension pin from the hollow tube. Do not push the extension pin into the black bullet now that it is glued. It will be a pain to get back out.
- Place the Halo bullet inside the Halo ring. Make sure that the pins are in the holes. After test fitting, glue the pins in the holes.

- If you have a Baker sonic, you can find a small washer to put on the extension pin. Test fit it with the Halo, then test fit the extension pin into the last hole on the Halo bullet.



^This image shows the washer in place. This washer is an M1.6, and is the correct size for a Baker sonic.

- Remove the pin, then glue it into the remaining hole on the Halo bullet.
- When the halo assembly is secure, place the magnet assembly on top of the section with the “Fancy Nut”, then screw it in using the brass screw.

5. Assembling the Screwdriver

- Place the upper grip on the Central Rod/ Halo Assembly.
- Place the spring right below the upper grip.
- Now place the set into the handle, and make sure that the tip of the central rod goes into the hole at the base of the pommel handle.
- Screw in the retention screw that is included on the handle.

Your sonic should be completed! If it isn't, feel free to check the instructions for any steps that you may have skipped over on accident. If there are any questions that you have, feel free to contact me via TheRPF.