

# Cleaning the Cutts Compensator

Probably the hardest thing to clean on the Thompson Sub-Machine Gun (TSMG) is the Cutts Compensator. It seems to just attract all the crud that comes from shooting the 45 ACP through our favorite Sub-Machine Gun. I would like to share my approach to the cleaning task, in hopes that it might be of some help to my fellow Thompson enthusiasts. I tackle the task in three steps: scrapping, scrubbing, and de-plating. Each step leads ever closer to a fully cleaned compensator.

By far the most rewarding for me (both mentally and physically) is the scraping step. I personally get the most satisfaction when I see the most progress! After running several hundred rounds through the TSMG the compensator is really coated with carbon and lead (if you are shooting non-jacketed ammunition like I do). Some of the gunk is loosely attached while some of it is suck on "good and tight". Depending on the type of powder used, lead hardness, and the lubricant put on the bullet, you might be looking at something as bad as fully closed slots on the top of the compensator. Also, if you do not always clean your gun after shooting (I hope no one fits into this category) even the best ammo is going to eventually foul the compensator. My tools of choice are an assortment of dental type hand tools that I have purchased over the years at gun and car shows. Since the fouled areas are generally flat or open curved surfaces, pointed tools are not as important as ones that give a broader sturdy working surface. Pictured are 6 of my favorites. I use the knife blade and spear pointed tools for the slots in the compensator, while the ridged heads with the offset shafts and the cupped or round headed tools are used on the inside curved surfaces.



When using the scraping tools near the outer finished surfaces of the compensator, great care must be exercised not to mar the appearance with errant strokes of the tool. To this end, it is very important to only scrape the slots towards the inside of the compensator body.

Scraping outward will sooner or later end in the tool bouncing off the outer surface and leaving a mark that is next to impossible to fix. I start with the knife blade and press inward along the flats of the slots. Keep the tool as tight as possible against the metal of the compensator when scraping. Big pieces of build-up can be removed in the early stages. This

minimizes the time involved compared to just scraping on the surface of the deposits and not getting under them to pry off the chunks. The point of the knife blade can also be used to get large chunks off in the early going. Remember, always scrape toward the inside of the compensator. Occasionally turn the barrel, muzzle end downward, and tap the compensator lightly with a piece of soft wood to get all the loose debris out (and not into the barrel). Eventually you will want to use compressed air or your favorite cleaning product to flush any particles that may have found their way into the barrel. This flushing, of course, would be accomplished from the breach end of the barrel. I also like to use the spear tipped tool in the slots. It can get stubborn thin deposits off of the flat surfaces, as well as reach into the corners at the ends of the slots.



When the deposits are removed from the slots, it is time to tackle the interior surfaces. You should get the slots cleared first, so you can look through the slots to see what you are doing while cleaning the inside. I start by using the larger multi-ridged tool with the offset handle, and scrape with the long axis of the compensator. I use this tool only for the non-slotted portion of the interior. The cupped end and round end tools can be used to scrape around the inner circumference to complement the work done with the ridged tools.



Additionally, the inner surface of the slotted area may be scraped with these two tools. The chunks are smaller at this point, but there is still significant amounts of deposits that are being removed. Two problem spots on the interior are the front and back lips that roughly line up with the first and last slots. When these lips fill with deposits, they appear to just be curved surfaces. I use the point of the spear or knife blades to pry out larger chunks, while a pointed slender tool (not shown) can finish the corners of the lipped areas



Once the scraping is done to your satisfaction, and that will vary from individual to individual, the interior and the slots should be cleaned in a similar manner to the bore. That is straight forward and I will not dwell this stage of cleaning other than to say that the normal cleaning tools can be used. Whatever solvents, brushes, and swabs you use for the rest of the gun can get this step done as well.

One could stop at this point, and say "Job well done." But you can do better! Even if it looks clean, there is probably more lead in there that could be removed. I have become a believer in the Outer's Foul Out III. This electronic device uses electro-chemical processes to get unseen lead (or copper) out of a barrel (and in this case,

a compensator). The instructions with the tool are clear, but I will hit the high lights here as well as my approaches to its use. The tool centers around a stainless steel rod that is inserted into the barrel. Rubber doughnuts sized for the caliber are slid onto the rod before insertion to isolate it from the surface of the barrel. The breach end of the barrel is plugged with a rubber stopper and the barrel is filled with the appropriate liquid for lead or copper removal. Lead Out for lead and Copper Out for copper. The small Foul Out III device slides onto the rod and is electrically connected to the gun via a small clip. A power source plugs into the wall and connects to the foul Out III. I pad the receiver and mount the gun in a small vise for the operation. There is a cleaning process to make sure that there is no oil or loose material gets in the way of the electrical cleaning. It is recommended that first a degreasing agent followed by alcohol be used for this purpose. I seal the slots in the compensator with black electrical tape, and fill the barrel up to the end of the compensator. This will clean both the barrel and the compensator at the same time. With the setup connected to power, you need to check every 15 minutes to make sure that the lead removed does not start



to short out between the rod and the barrel. I know this seems hard to believe, but the lead can be there without being visible. I remove and clean the rod every 15 minutes if it has much lead on it. The picture shows the lead removed from the inside of the compensator during the third 15 minute cycle. The rod had more than that on it the prior two times that I took it out of the barrel (after 15 and 30 minutes). It is really impressive. You can continue this process until the deposits on the rod are negligible. Status lights on the Foul Out III show when the unit is cleaning, overloaded, or done. After using the Foul Out III, the barrel and compensator need rinsed with water and given a



After using the Foul Out III, the barrel and compensator need rinsed with water and given a

final cleaning with traditional bore cleaning supplies to remove any loosened deposits that still cling to the inner walls. I always finish up by liberally coating the interior of the compensator with a Teflon based lube. It seems to make the job easier next time.

I hope this information is useful to those of you that shoot (or at least have to clean) the TSMG. I wish you good luck and success the next time you take on the task of cleaning your Cutts Compensator.