WHAT TO DO WHEN YOUR AUTOPOINT OR REALITE "FERRULE" SPLITS

Many Autopoint and Realite mechanical pencils have a round metal "ferrule" at the very top of the barrel, which holds the eraser in place, holds the extra leads in the "lead reservoir", and may also hold a pocket clip in place. That metal ferrule looks like this, on the right side of an Autopoint model 6 or model 106 "Utility Pencil" (they're both slim size pencils; the difference is just the lead diameter).

Apparently Autopoint used a powerful mechanical press to push those metal ferrules into place, and during the course of doing so frequently created a longitudinal weakness or an actual longitudinal split in the metal ferrule. Over time the metal ferrule actually split, or split further, and simply lost the ability to hold the eraser in place. Of course, when the eraser falls out so do all of the leads in the lead reservoir. Many such "neutered" mechanical pencils were simply discarded (or had the metal ferrule pushed back into place and then were sold on eBay).

I'd like to suggest a simple way to restore such a pencil's "utility", by fixing the problem without special tools and with commonly available materials. I call it the "BIC fix".

First you need to find a suitable Bic ballpoint pen to serve as a parts donor. Though there are many Bic ballpoint pens out there, I've found one model to work easily and well. Below is a picture of that particular model of the Bic ballpoint pen.

Note particularly the curved red plastic writing tip and the red angled plastic pocket clip. The proper model Bic ballpoint pen will also have a really tiny imprint of the "Bic Schoolboy" on the face of the short, angled section of the pocket clip, which looks something like this:

To strip the extraneous parts from the Bic ballpoint pen, just pull out the writing tip and the combination push button and pocket clip (the two red colored parts on the sample ballpoint pen above). They are held in place simply by friction, and the use of a rubber "jar lid opener" makes the task much easier. Also remove the ballpoint cartridge and its spring from inside the barrel. What then remains is a hollow plastic "tube" just over 4" long, with an inside diameter of about .265" (example below).

Below is a "wounded" Autopoint pencil, which has lost its metal ferrule. The main inset area - all the way around the very top of the barrel - is where the ferrule was mounted on the top of the pencil. There is also a narrow but deeper inset/groove, visible at the top edge of the main inset, which was used to hold the pocket clip in place. (I'll disregard the pocket clip which was previously on this pencil, to make things a bit easier to explain – in fact, I used this completed pencil as a "desk only" after fixing it.)

The next step is to mount the hollow plastic "tube" on to the "main inset" or "reduced diameter section" at the very top of the pencil. If you're right-handed, take the pencil in your left hand and the "tube" in your right hand, and essentially force the open end of the plastic "tube" on to the "reduced diameter section" at the top of the pencil (read the notes below to make this task as easy as possible, and view the large helpful picture on the next page).

Note 1: The hollow plastic "tube" is over 4" long. Use that length as leverage, to force the open end of the "tube" onto the top of the pencil (see large picture below). The "tube" will not break – work it back and forth, up and down, side to side, until it slides into place. A careful application of heat (like a hair dryer) to the end of the "tube" before attempting to mount it on the pencil may make this step somewhat easier.

Note 2: If the pencil has a pocket clip which has to be held in place by the hollow plastic "tube", then first put the pocket clip back in its place and hold it there with your left thumb (there's a special inset or carved out section where the clip belongs) before trying to force the "tube" on to the pencil. Then put the leading edge of the "tube" down and over the inserted pocket clip, and start trying to force the "opening of the plastic tube" into place at the opposite side of the top of the pencil. Use the leverage provided by the approximately 4" length of plastic "tube" to your advantage. The large picture below shows how to initially position the "tube" at the top of the pencil, at an angle over the top of the pocket clip, so the pocket clip stays in place while you try to force the other side of the "tube" into place. It works best if you rock the plastic "tube" back and forth, while holding one side of it against the side with the pocket clip.

Note 3: If your Autopoint or Realite pencil is the type which has the pocket clip held in place separately, by a “hex head bolt”, then the whole procedure of installing the plastic “tube” on to the top of the pencil barrel is a LOT easier!

Note 4: The diameter of the pencil where the “tube” is to be mounted is about .285”, while the inside diameter of the “tube” is about .265” – so the “tube stretch” required for mounting is very small, but the “tube” is pretty tough. Again, a little heat on the end of the plastic “tube” may well make things go much easier.

Once you have the entire 4” of plastic “tube” in place at the top of the pencil, it is merely necessary to cut the plastic “tube” to length. To do so, I just roll the pencil with the attached “tube” on a flat surface, and use a really sharp knife to cut off the unused length of the plastic “tube”. NOTE BEFORE YOU CUT: I suggest that the correct length of the plastic “tube” to remain on top of the pencil is 1)the depth of the “reduced diameter section” at the top of the pencil, plus 2)half of the length of the eraser to be fitted. That puts the bottom of the eraser tight against the end of the lead storage reservoir, so the leads don’t jiggle up and down while you’re writing, and lets a sufficient amount of the eraser to stick out for easy erasing. I use Pentel PDE-1 (white “plastic”) erasers, which are about 17mm long, so when the “reduced diameter section” at the top of the pencil is about 7mm high, and the eraser is 17mm in length, I roll the pencil across the table and cut the plastic “tube” (which stays on the top of the pencil while the “tube” is being cut) to 7mm plus ½ of 17mm, or about 15.5mm in overall length. Obviously if your first cut of the “tube” is a little long, it is really easy to take a small slice off the end, to trim the “tube” to its final length. And last, if you have access to a small tubing cutter like those used by plumbers, that tool can make the tubing cut a whole lot more easy and accurately.

If you've followed the instructions faithfully, the completed installation of plastic "tubing" on an Autopoint model 6 with a pocket clip should look like this:

Interestingly, once you've mounted a hollow plastic "tube" on the top end of a pencil - to replace a ferrule that's split or missing - by following these instructions, the plastic "tube" pretty much retains its shape, and can later be removed and replaced with far less fuss than that experienced with the original installation. Just use the blade of a dull knife between the top of the pencil barrel and the bottom of the plastic "tube", and work the blade around the circumference of the "tube", twisting the blade back and forth, to force the plastic "tube" away from the top of the pencil barrel.

Also, if the pencil doesn't have a pocket clip, either because it never did or because the pocket clip is rusted, broken or missing – do not despair. I routinely replace the broken ferrule with a "plastic" one, per the instructions above, then use the resulting "pencil with no pocket clip" on my desk or throw it in my briefcase!

Here's a quick picture of a group of repaired and now happy campers!