

GERMAN SAFETY PENS -MONTBLANC

There is a separate section describing the general repair of safety pens (page 211) but we have included this section because there were more prestigious companies in Germany producing safety pens than anywhere else. Waterman in Italy, USA and France were also very active but it is the range and quality of companies such as Soennecken, Kaweco, Matador, Osmia, Goldfink and in particular Montblanc that was outstanding. Many pen collectors grimace at the impracticality of such eyedroppers but the fact is that if such pens are maintained in good working condition they are just as practical as any barrel reservoir pen. They would not have been so popular if they had been so impractical.

The aim of this section is to demonstrate how to repair these classic German pens correctly by using a Montblanc as our subject and in turn briefly referring to other makers such as Kaweco, Osmia and Soennecken.

The anatomy of a German safety pen



The foundation unit is the barrel which acts as the ink reservoir and the case for the mechanism. All the parts of the pen other than the sealing cap are attached to or within this barrel.

As the components are hidden from view, diagnosing a repair invariably requires dismantling. Most pen faults are related to top seals and spiral defects so taking a safety pen apart is a necessary skill for any repairer.

Although there are design variations, every safety pen has a seal in an enclosed housing (we term this the mid section); this will usually have to be replaced. The first stage involves removing a pin of some description to access the seal - This is our starting point - **ACCESS and REMOVE THE PIN**

Dismantling

If the twist mechanism is working little pre-conditioning of the barrel unit is required such as soaking, ultra sonic or heating, so one can start immediately by separating the parts.

Releasing the mid section

The first step is to remove the mid section to access the seal; with Montblanc pens this involves removing the small retaining pin that secures the shaft of the spiral to the terminal (blind cap) section. There is a 'through-hole' and the pin can be pushed out from either side. Older pens may be difficult, particularly if there is some corrosion but with patience most pins can be removed without damaging the terminal cap or rod.

The pin is pushed out with a short steel pin, filed to be slightly smaller than the retaining pin. It is necessary to support the end of the barrel in a groove while pushing or knocking out the pin. A rubber pad secures the pen

and a wooden grooved support similar to that used for removing Onoto pins is very practical (see internet ref.). If the pin does not move, do not use too much force with a hammer and the pin punch because the shaft will break and probably also the terminal cap. In extreme cases the rod will have to be cut above the spiral from within and a new connecting rod fitted (see internet ref. for this last resort or hand the pen to an expert!). Presuming the pin does come out, the blind cap can be pulled off the shaft and then the middle section



Various makes of German pens all with external metal securing pins including Soennecken, Montblanc and Goldfink



Remove the securing pin by hand; gently tap with a hammer; the final removal involves pressing out and using pliers



With the pin removed carefully ease off the blind cap exposing the mid section with seal housing- pull out the spiral shaft; you are now ready to start restoring! ;

can be unscrewed from the barrel. This may also pull out the drive train with the spiral/propelling/writing unit, so remove this mid section carefully.

Restoring the mid section with a new seal

If the spiral rod has remained in the barrel, withdraw it and detach the propelling unit by withdrawing the hard rubber drive peg or pin (cam follower) which fits into the end of the feed holder shaft. (You need the spiral unit rod to refit a new seal).

You are now ready to work on the mid section with remnants of the old cork seal and the spiral shaft that is to be sealed with a new cork unit.

The mid section and spiral rod

First remove and clean the old cork from the inside of the seal housing with a dental pick, steel wool and tissue. Similarly clean the spiral rod with steel wool and examine both very carefully for minor cracks or chips in the hard rubber. If there is an unevenness in the shaft it has to be sanded down until it is smooth. Both items are now ready for fitting a new cork seal.

Making and fitting a new seal

Take a fresh and unused slab of cork with a length of about 5 to 8 mms and drill a small hole through the middle. Enlarge it by using a round file so that this hole embraces the spiral rod tightly. Push the rod through the hole and start shaving and shaping the exterior so

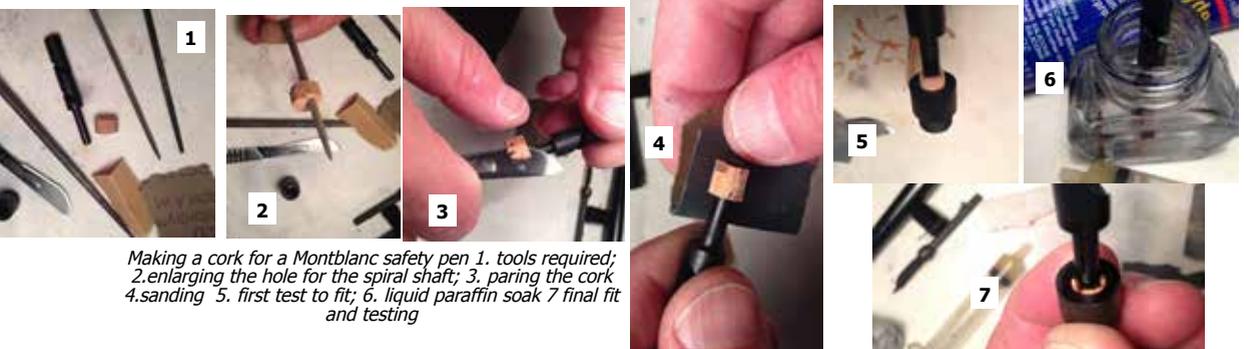
that it goes tightly into the seal housing of the middle section. When one reaches an acceptable size try it by pushing it a little into the mid section and proceed carefully, paring off more cork to get a good fit.

"to fit" = to test, modify, then test, then modify and continue in small steps until it is a perfect fit. If you rush you will ruin your work!

The size of the corks outer diameter differs from pen to pen, so it is best to first measure the inner diameter of the middle section seal housing before cutting. When the cork just goes in the the hole tightly and the rotary motion of the spiral rod is also acceptable, take it out and treat it with a lubricant. Liquid paraffin helps to extend a cork seal life but original corks were treated with a soft wax. These are an excellent luxury but most repairers make their own and soak in paraffin oil. On removal from the soaking, the cork is dried with a soft cloth and silicon grease is applied to the cork inner orifice, the rod and the middle section seal housing.

This next step of fitting the cork securely in the housing is critical because this final fitting must give a perfect seal.

One can either push or pull the seal gently into position with the seal on the end of the spiral rod. The seal should be eased in while slowly turning and gently extracting the rod from the cork seal. With the seal



Making a cork for a Montblanc safety pen 1. tools required; 2.enlarging the hole for the spiral shaft; 3. paring the cork 4.sanding 5. first test to fit; 6. liquid paraffin soak 7 final fit and testing

fully in the housing it can be checked for position; then the rod is fitted to check for tightness and ease of rotation (this seal is only subject to rotation not plunging).

Interim Testing

The cork has to make a very effective seal in order to retain ink so before progressing to complete reassembly, first test the new seal.

First screw the middle section into the barrel with the rod/spiral attached; then try and suck air from the barrel and test how effective it is with your tongue or lip. If it holds your tongue/lip it will be satisfactory (this is similar to the method of testing the suction of a Parker vacuumatic pump). If the test is successful you can progress with the reassembly

Reassembly

After testing remove the middle section from the main barrel. Push the spiral in so that the rod extends as far as it can from the other side of the middle

section. Clean the little brass pin ensuring that both ends are 'square'. The pin must be straight and long enough to reach both sides of the holes of the blind cap. If the old one is not usable, make one out of a paper clip. Before pushing the pin it is advisable to test the connection with a needle or a longer pin. The holes on the blind cap and on the rod are not always perfectly centered, but it is easy to hold the two against the light and adjust into position.

Push the pin into place and adjust so that it looks neat with any short recess equal on each side.

Completion

Attach the feed and nib unit to the spiral: screw the mid section into the barrel applying a little silicon grease; with the pen fully assembled test it for extending and withdrawal before filling for writing tests.

GERMAN SAFETY PENS -OTHERS



Once the seal is exposed the procedure for restoring, any safety pen is exactly the same as the Montblanc. However the design differences of turning knobs, connecting rods and spirals can create uncertainty unless you know what is inside.

Kaweco and **Osmia** adopted a system where the turning shaft is part of the turning knob and there is an internal pin securing it to the spiral. It is just as good a system and has been used also by Whytwarth and Mabie Todd but in our experience it is a much more difficult pin to remove after it has been immersed in ink for possibly over 80 years. The pin has to be removed to access the seals so patience is vital as it can require warming, soaking, drilling and in the end it might require surgery and a replacement shaft. It is practical to rejoin shafts and information is available on line.

Sonnennecken actually has an external pin but after removing it and the turning knob button the top seal is still not accessible. There is a sealing disc holding the cork in place and it has to be removed with a spanning screw driver. The blind cap also has a metal restricting lock on it, which allows only half a turn to fully extend and withdraw the pen; this must be stored safely. With the top hard rubber disc seal removed it is straightforward to make seals and replace as described for Montblancs.

However reassembling the pen demands a careful sequence. When the cork is cut, lubricated and tested, leave it on the rod and push the whole assembly (feed, nib, and spiral with the new cork attached into the barrel tightly. Be careful that the exposed part of the rod will not be seen when the blind cap is attached. Now turn the little screw disc into the barrel and turn it until it stops. Push the blind cap, now with the metal lock inside into the barrel, while pushing the feed from the top with a long bar or a thin screwdriver. This ensures that the rod doesn't move and goes through the hole of the blind cap. Now adjust the turning-knob button until the securing pin holes line up and complete the repair by inserting the securing pin.

Left or right hand threads

Most middle sections unscrew anticlockwise (right hand threads) but exceptions exist such as the early **Matador** safeties. Always test an unknown make gently both ways.

FOR MORE ON SAFETY PENS SEE PAGES 218-221



MATADOR, VARIOS TIPOS



Turbo Matador 922 desarmada
 Cabeza; prendedor; capuchón; barril, plumín; alimentador; sección con bolsa; barra de presión con botón; buje con espiral y perno; tapa; perno de latón; perilla giratoria.

Matador fue establecida en 1895 por Siebert y Lowen en Elberfeld (Ruhr), haciendo plumas de gotero con plumines de otro importados de Nueva York. Desarrollaron, como la mayoría de las compañías alemanas de esa época, introduciendo una gama de plumas de seguridad. Como una compañía significativa, junto con Soennecken, Kaweco

y Montblanc establecieron la Verband Deutscher Fulhalterbariken (Asociación de fabricantes de plumas) en 1924.

Variación de plumas

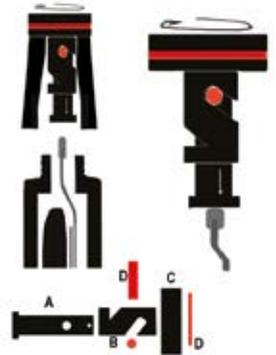
Su gama de plumas incluyó las de palanca (1920) las de botón de presión (fin de los años veinte) y de émbolo (1930) pero su insignia principal fue la Turbo que tenía un sistema único de barra de presión de 'llenado de giro'. Los estilos cambiaron de la era de los de cabeza de capuchón plana de los años veinte a las formas aerodinámicas (Garant, Gnom) y en 1939 tenían 56 modelos en su catálogo. Las plumas fueron muy populares en Francia y exportaban con éxito a Escandinavia, Holanda y Checoslovaquia.. En 1949 introdujeron su último nuevo modelo, la Matador 'Click'.

Reparación

El desarmado de todos los modelos es directo desenroscando y retirando pernos metálicos (siempre hay que tomarse su tiempo para retirar esos pernos de metal).

El llenado de giro

Tal vez el modelo más interesante para los reparadores es el 'llenado de giro' de 1929 porque este novedoso diseño con una unidad espiral transforma un llenado convencional de botón al encerrar su mecanismo de giro. Con ello se evita retirar e incluso perder la tapa ciega. (Es el mismo principio utilizado por Mabie Todd en los años cincuenta , pag. 142). El diseño es muy simple pero la pequeña espiral es frágil y puede romperse fácilmente si la perilla se gira de más – afortunadamente es fácil volver a fabricarlas.



La unidad Turbo de giro
 A buje; B spiral; C perilla; D pernos



Demostrador de Matador de seguridad. Notar el hoyo para el perno.



Desarrollo de la Matador
 De izquierda
 -Turbo Matador 922;
 -Matador Express914;
 -Matador Express 976;
 -Matador Garant 998;
 -Matador Click 221 -

Ilustrando el cambio a una forma aerodinámica.