



*Quality and Value  
Through Engineering*



OEM "Tuning Fork" Design

**Versus the  
Signet Filament Clamp  
Design**

The OEM Tuning Fork designs rely on the spring tension of the Moly to hold the filament. Moly is not a springy material and has a tendency to take a heat set. Because the Tuning Fork loses tension as the heat cycles it doesn't maintain a good electrical connection to the filament. In addition, spreading the part to insert a filament can spring or even split the expensive OEM Filament Clamp.

If you use a tool to tighten or remove the tantalum screw in the Signet design do not exceed 4.8 to 6.0 inch pounds (60 to 70 cNm). Should the threads bind a little alcohol or acetone will normally relieve it.

Axcelis – Eaton-Nova ION SOURCE  
GSD ELS

**Signet Enhanced Filament  
Clamp for GSD ELS Implanters**



Enhanced Fil. Clamp with Ta screw PN 40-8788

This Signet design uses a Tantalum Filament Screw that provides easy filament installation and better electrical continuity. The Tantalum thermal expansion during operation actually causes the connection to the filament to tighten insuring a positive electrical connection. This concept eliminates the "Tuning Fork" method of clamping and replaces it with a positive screw clamping method. Included in the 40-8788 assembly are:

| Signet PN | OEM PN | Qty | Description                           |
|-----------|--------|-----|---------------------------------------|
| 73-8025   | N/A    | 1   | 8-32 X 1/4 SHC Screw, Ta              |
| 03-1W00   | N/A    | 2   | #10-32 Flat Washer                    |
| 03-1731W  | N/A    | 2   | 10-32x5/16 BH WS2 Coated              |
| 34-8788   | N/A    | 1   | Enhanced ELS Filament Clamp no screws |

Signet's improved filament post design also eliminates the need to replace the entire filament post. When maintenance is required on the improved Signet Filament Post, all that normally needs to be replaced is the Ta screw (PN 73-0825), a substantial savings. This concept has been used for years with great success in our Signet filament clamps available for most brands and models of implanters and is now available for GSD Implanters.



**Signet Part 44-3531**

Signet also offers a direct replacement for the OEM filament clamp part number 17335310, the Signet part number is 44-3531. Our version of the "Tuning Fork" design takes into consideration the grain direction and laminar structure of the Molybdenum to minimize the inherent weaknesses of the design.

Ref. = Design Alteration of OEM Part