

HOW TO USE THIS REFERENCE

One of the primary objectives of this reference book is to provide readers with a logical listing of all of the confirmed styles and embossings of North American glass pintype insulators. In order for you to use this reference most effectively, you need to understand the conventions (rules) that were used to develop the listing. These few pages will take a while to digest, but hopefully they will assist you when it is time for you to look up a specific listing.

General Rules of Order

Listings are sequenced by CD Number (the Consolidated Design numbering system developed by Mr. N. R. Woodward to designate style and general use of the insulator), General Embossing Category (Brookfield, Hemingray, Whitall Tatum, etc.), Specific Embossing (detailed below) and finally Drip Points.

Within the "Specific Embossing" category, listings are sequenced based on the location of the embossing. The following priority for embossing location was used in determining the listing sequence: Dome, Front Crown (F-Crown), Front Skirt (F-Skirt), Rear Crown (R-Crown), Rear Skirt (R-Skirt), Base, Other (specified). That means that all listings within a given CD number and general embossing category that have dome embossing will appear before any listing without dome embossing. The same logic applies throughout the listing sequence. If you are hopelessly confused at this point, don't give up. The next section should help you understand the process a little better.

How Do I Find My Insulator?

CD Number

If you know the CD number of your insulator, skip to the paragraph on "General Embossing Category". CD numbers are sequenced based on usage and generally go from small to large, although there are many notable exceptions to the latter rule. In describing uses, a few terms may need clarification. "Wire grooves" are the indentations that normally go all the way around the insulator that permitted the conducting wire to be fastened securely to the insulator. There are both "side" wire grooves and "top" (or saddle) wire grooves. "Petticoat" is a term used to describe the number of skirts an insulator has, including the outside surface of the insulator. This can be determined by looking up through the pinhole of the insulator from the bottom. The

number of "rings" formed by the glass will be the number of petticoats. Don't forget to count the outside skirt. Using these rules, the following chart describes the groupings for the CD numbering chart:

The first grouping of CD's (CD 100 - CD 375) is for insulators with a threaded pinhole which allows the insulator to be secured in place by screwing it on to a similarly-threaded pin. These are referred to as "threaded insulators".

- CD 100 - CD 144:** Side wire groove, single petticoat. (Some of these will have two side wire grooves.)
- CD 145 - CD 184:** Side wire groove, double petticoat
- CD 185 - CD 189:** Pinhole goes all the way through the insulator. (Many of these are referred to as "mine insulators").
- CD 190 - CD 205:** Transposition. (These will all have multiple side wire grooves, may have multiple petticoats, and may consist of two insulators mounted on a single pin.)
- CD 206 - CD 249:** Saddle wire groove, double petticoat.
- CD 250 - CD 279:** Cable, single or double petticoat. (These all have saddle wire grooves and are formed so that the wire appears to sit between two "ears".)
- CD 280 - CD 289:** Side wire groove, triple petticoat.
- CD 290 - CD 309:** Saddle wire groove, triple petticoat.
- CD 310 - CD 314:** Sleeves. (These covered the pins and provided additional electrical resistance for the insulator. They are not "stand alone" insulators.)
- CD 315 - CD 334:** One-piece, large power styles.
- CD 335 - CD 375:** Cemented multipiece, large power styles.

The following CD number series (CD 700 - CD 799) are referred to as "threadless insulators" because they had no internal threading in the pinhole. Various means were used to attach these insulators to the pins.

- CD 700 - CD 700.1:** "Egg", Pin hole goes all the way through the insulator
- CD 701 - CD 718:** "Egg", Pin types
- CD 721 - CD 725:** Pin type, designed to be used with a wood cover { These insulators do not have wire grooves }
- CD 726 - CD 728.8:** Side wire groove signal, Straight skirt

- CD 729 - CD 732.2: Side wire groove signal, Concave skirt
- CD 734 - CD 735.5: Side wire groove "Pilgrim Hat", one wire ridge
- CD 735.6 - CD 739.5: Side wire groove "Pilgrim Hat", two wire ridges
- CD 740 - CD 742.3: Side wire groove "Pilgrim Hat", rounded dome
- CD 743.1 - CD 743.3: Side wire groove "Beehive"
- CD 780 - CD 782: "Bureau Knobs"
- CD 785 - CD 796: Cross top; Slash top; Teapot; Miscellaneous styles

The following CD number series includes non-pintype insulators which are really outside the scope of this book. However, there are a number of insulators that have become inseparable from this aspect of the hobby and are, therefore, included here for completeness.

CD 1000 - CD 1040: Glass block and miscellaneous styles.

If you are unable to find your insulator using these general categories and then reviewing the pictures in the specific CD number series, you may have an insulator that is outside the scope of this book (foreign, lightning rod, nonglass, nonpintype, etc.). At this point, you will probably want to look at some of the other reference books listed in the bibliography at the end of Volume I of this reference to further research your insulator.

General Embossing Category

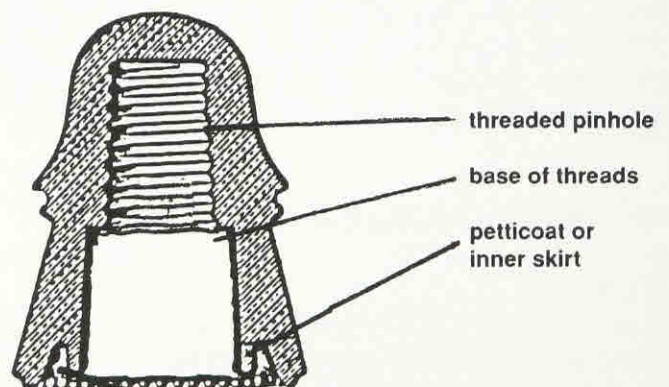
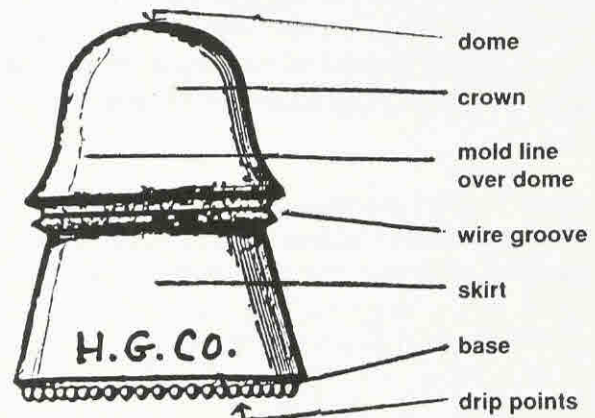
Once you have identified the CD number of your insulator, you want to identify the general embossing category. This generally refers to a name that is embossed on the insulator. It is usually either the company that manufactured the insulator or the company for whom it was made. Look the insulator over and pick out a name. See if you can find it in the bold listings on the page(s) that contains information on your CD. If no names or letter abbreviations appear on the insulator, look through the NO-NAME categories. If you are unable to find a general embossing category that works, you may have either selected the wrong CD number, or you may have an insulator that hasn't been catalogued yet. The latter condition would be very unusual, but not impossible.

Specific Embossing

Once you have identified the CD number and the general embossing category, your problems are almost over, unless you happen to have an insulator with a lot of embossing variations. (CD 126 Brookfield's are my personal favorite when it comes to tough embossings.) Use the accompanying drawing and look at specific locations on the insulator for embossing. Start with the dome. Insulators formed with two-piece molds (referred to as MLOD or "Mold Line Over Dome") cannot be dome-embossed. Therefore, if there is a

seam running through the dome, embossing found near the top of the insulator is considered to be either front crown or rear crown, not dome embossing. If there is no MLOD and there is dome embossing, confine your search to the first few listings that start "Dome". They will all be together.

If there is no dome embossing, look on the front crown. If only one side of the crown has embossing, it is considered to be the front. If there is embossing on the front crown, confine your search to listings that begin "F-Crown" and that have the exact embossing on the front crown that your insulator has. By following this procedure and the sequencing of embossing locations discussed earlier, you should be able to limit your search to 8-10 listings, even on the most complex listings. Be careful though, because when you get close to your embossing, there are some very subtle differences in listings that need to be reviewed to ensure you have selected the right one.



Drip Points

Once you have gotten this far, you may find up to three identical listings, differing only in the last entry which describes the base on the insulator, including the presence or absence of drip points. The following abbreviations have been used to describe various bases:

- SB** - Smooth base
- RDP** - Round drip points

- SDP** - Sharp drip points
FDP - Flat drip points {often found on Maydwell and McLaughlin insulators}
RB - Rounded base {found on some Canadian CD102, CD143, CD162 [Hamilton], and CD162.4 insulators}
CD - Continuous drip {describes a rounded projection that goes all of the way around the base and forms a ledge on the inside and outside of the base; found on some Pennycuick styles and the skirt-embossed CD112 SBT&T}
CB - Corrugated base {found on newer Hemingray and Kimble products}
WDP - Wedge drip points {found on some CD 102 and CD 162.3 Star insulators}
GB - Grooved base {found on some CD 143 Dwight and Great Northwestern insulators}

All listings will contain one of these abbreviations except for base-embossed insulators, which don't require further base description. Hopefully, by this time, you have found your insulator and are in the process of adding a catalog listing to your collection.

No attempt has been made in this reference to identify the number of drip points on an insulator. There is a tremendous variety in the number and size of drip points on any given embossing (CD 160 H.G. CO. is probably the best example). Counting and cataloging drip points has been left to the discretion of the individual collector.

OTHER INFORMATION ABOUT EMBOSSINGS

Below is listed some additional information to help you interpret the symbols that are used on the embossing listings and some other data to understand what rules were used to decide whether an embossing should be listed separately or not.

Brackets () [] { }

Three types of brackets have been used to help clarify the listings:

() - These serve two functions: (1) to describe the location of specific embossing - (F-Skirt); (2) to indicate arc embossing - (Arc).

[] - These are used to describe embossing that cannot be reproduced in the book with precision. For example, [L' in an oval] means that there is an L and it appears in an embossed oval. Anything enclosed in single quotation marks (e.g. 'L') means that it appears exactly as shown on the insulator. All of the other information describes other aspects of the embossing. [Star] means that there is an embossed star on the insulator, not a four-letter word 'Star'.

{ } - These are used to describe unusual features of the embossing - {'N' is backwards}, or unusual features of the insulator itself - {Oakman Style}. This bracket is particularly useful in distinguishing between No-Name styles for a specific CD number. In addition, these brackets have been used to distinguish the embossing on the two parts of the two-piece transposition insulators - {191 Top}.

The Slanted Line -- /

The slanted line should be read - "over". However, it has been used in two different ways. When no blotted-out embossing exists, the various lines of embossing appear sequentially down the insulator. If blotted-out embossing appears in the listing, the blotout may appear directly under some other embossing. The important thing to know is that a blotout appears somewhere on that portion of the surface. CD 121's have been found with "HEMINGRAY" appearing above, below, or directly on top of ["AM.TEL.& TEL. Co." blotted out]. All three are included in the listing:

(F-Skirt) HEMINGRAY/["AM.TEL.& TEL.Co." Blotted out]

The slanted line is also used on base embossed insulators. If no slanted line appears, the base embossing can be read continuously in a "clockwise" direction around the base. The slanted line is used to designate a change in direction of the embossing. Typically, this would indicate that the top half of the base embossing would be read in a "clockwise" direction (a slanted line would appear in the listing here), and the bottom half would be read "counter-clockwise".

Punctuation

Punctuation presented the most difficult problem in deciding what to list as a separate embossing. The presence or absence of punctuation, periods versus commas, location of dashes, etc. can all be a function of the engraver, the age of the mold and/or the quality of the glass. To cite one example, there are 16 possible variations on the embossing "(F-Skirt) AM.TEL.& TEL.Co.", depending on which periods are there. All 16 variations exist. To avoid confusion, all of these possible variations have been included under the one listing shown above. In general, minor punctuation differences have not been included as separate listings. A common, or generic, listing has been included to cover all of the possible variations. Further detailing is left to the specialty collector.

NO., No., NO, No, N^o, N^o,etc.

There are lots of different ways to spell "number", at least as it applies to style numbers on insulators. Some embossings are absolutely consistent. Others have great variety. Seven different ways have been found to say "N^o20" on CD 164 M^cLaughlins. Only two appear in the book, and there would

have only been one, except one particular embossing seemed to always appear with one drip point style so it was included. Again, the most common style was identified, and included to represent all of the possibilities. Once again, the specialty collector has a great opportunity.

[Letter or Number] [Number] [Numbers and Dots]

[Letter or Number] and [Number] generally refer to mold information. The presence or absence of mold information and the exact location of that mold information has been recorded with some care. This information seems to be of interest to collectors and in many cases, separate listings have been included because of differences in mold number locations.

[Numbers and Dots] is almost exclusively a Hemingray and related company marking. It contains mold and date information. Since dots were added to signify additional years of production, [Numbers and Dots] may represent an embossing that, in fact, has no dots because it is the first year of use of the mold. In other words, some liberties may have to be taken in the use of these descriptions.

No Name Categories

No Names have always been a problem because they represent such a large portion of the total insulator population and they have not been grouped in any way to provide easier identification. This reference has used four No Name categories to help assist in identification and to group insulators of interest to specialty collectors. The categories are (1) No Name {U.S. products}, (2) No Name - Dec Pat {Hemingray products with only a date designation}, (3) No Name - Canada, and (4) No Name - Mexico.

In addition, a number of insulators that have blotted out embossing that is legible have been included in the embossing category of the legible embossing. Examples that come to mind are CD 102.3 K.C.G.W. and CD 121 AM.TEL.& TEL.Co. Hopefully, this will not add confusion to the identification process.

Summary

This information has been provided to help you understand the rules that were used to select separate embossing listings for this reference. You may prefer to be either more or less exacting in your own record keeping. At least, you will have a set of rules to follow to help you decide how to do your own cataloging.

COLOR

Color was not an issue (for the most part) when insulators were made, and as a result, we are blessed with a complete spectrum of colors with a seemingly endless variation. The author has tried to reach a compromise solution in describing colors, and the problem has been approached this way. Descriptive adjectives have been used which identify the depth of color going from light to dark as follows: Tint (Blue Tint), Ice (Ice Blue), Light (Light Green), "No Descriptor" (Green), Dark (Dark Green), Royal (Royal Purple), and Blackglass (Olive Blackglass).

Using these descriptors, the color charts in Volume I picture and name 111 colors. This is only about half of the color designations that have been used in the book, but hopefully it will be representative of a large portion of the colors that will be encountered by the collector. Agreement will never be reached on naming colors, but these listings and color photographs will at least provide a point of reference when dealing with fellow collectors and trying to describe colors. If words are spoken like "It looks like the Dark Yellow Green picture in the book only with a little more Amber", the mission will have been accomplished.