

How about a Date?

Breakthrough Research Smooths Rough Road for Gruen Wristwatch Collectors

By Mike Barnett (NC) and Barry Cooper (FL)

If you've collected Gruen watches for any length of time, you know how difficult it is to determine, at least with any degree of accuracy, just when a specific Gruen model was made.

There is precious little information "out there," unlike many other popular brands, such as Hamilton, Rolex, Omega, Elgin, and others. These and other brands have volumes of material and definitive movement serial number listings that allow for precise dating down to the year and in some instances even in the month in which a given specimen was manufactured.

Not so for Gruen, which had a rather complicated method of serializing its movements, and its movement records have been long lost and most likely destroyed.

Curiously, the process for dating the earliest Gruen wristwatches, from about 1915 to 1935 or so, is probably the easiest because of the limited number of movements that Gruen had available and the resulting relatively small number of specific models. The wonderful *Gruen Guild Book* that the company put out between 1929 and about 1931 (now widely available online) is arguably close to a "Masterbook" of Gruen watches, particularly wristwatches made up to that time period.

But from about the mid-1930s to 1958, when Gruen ceased production of watches at their factory in Cincinnati, OH, the number of movement calibers exploded, and the serializing of those movements took on byzantine characteristics that make Egyptian hieroglyphics look like a kindergarten reading primer by comparison.

For most collectors this is frustrating. But ironically, for some it is a great source of fun and fascination, because the process of dating a given specimen often involves piecing nuggets of information together from far-flung resources.

Yes, there are bits of information scattered here and there. Certainly, the movement dating chart developed by Gruen collector Charlie Cleves, of Bellevue, KY, almost 30 years ago was a good start and pointed many collectors in the general vicinity as far as dating a given specimen. Beginning in the mid-1990s, with the advent of

eBay and other online venues, collectors have been able to piece together additional dating information through the posting of individual vintage advertisements, which has resulted in a greater refinement of the original "Cleves Chart." And this effort continues.

The past two or three years have yielded more tools for collectors to work with, but the results of all these efforts have proven painstaking and piecemeal at best, because information and clues are scattered among a variety of paper publications and online resources, the latter of which must surely put the number of sources into the dozens if you count discussion websites.

There still is no single comprehensive source for dating Gruen watches, especially those produced after the mid-1930s.

That is, until now.

By studying literally thousands of Gruen watches and developing techniques for dating and identifying model names (and recording every detail about each watch), we believe we have reached a significant breakthrough that will help Gruen wristwatch collectors more definitively pinpoint the age of a given specimen.

In ongoing research into Gruen watch-dating techniques, Gruen researchers log everything stamped onto the watch and inside the case and look for a match in vintage advertising. This is the standard labor involved in collecting the basics. It is from raw data such as this that patterns begin to emerge if you collect enough of it. One of the items to record is the pair of numbers stamped into the back of most Gruen watches: the caliber and style number. While studying this data, a pattern emerged. The style numbers consistently increased over time. It's a simple observation, but an important one.

This article and our identification tables and charts below are the result of months of research and testing. We used several methods to date and validate the date of

ILLUSTRATION SOURCE: GRUEN ADVERTISEMENT IN THE SATURDAY EVENING POST, 1946.

Gruen watches. This article focuses on using the style number, a term Gruen coined in the 1947 *Gruen Crystal Catalog*. It must be stressed that the dates we derived using style numbers are approximations, providing the earliest date a watch model was made. It is not meant to date the specific year a watch was manufactured.

As most Gruen collectors know, there is typically a pair of three-digit numbers stamped on the inside back of their watch cases, usually in the format of CCC-SSS or SSS/CCC. The majority of Gruen wristwatches have the caliber and then the style number (CCC-SSS). Figure 1 is from the 1947 *Gruen Crystal Catalog* and defines style numbers.

Some cases do not contain a caliber and style number pair. Older models and some round-shaped models may have only a single three-digit number. Swiss and solid gold cases also sometimes do not have the numerical pair. These watches are not valid candidates for using the style number dating method detailed here.

Looking closer at the numbers, one of these numbers, 406, is the caliber of the movement for that specific watch. By matching the caliber number stamped on the movement with that stamped on the case, collectors can verify that the correct movement is in the case. If you don't feel comfortable removing the back of your watch to read the style number, take it to a skilled watchmaker.

The second three-digit number is the Gruen style number; in the example in Figure 1 it is "387." Gruen stated in their *Crystal Catalog* and 1948 *Material Catalog* that style numbers are paired with specific watch crystals. Generally speaking, the caliber and style number pairs are uniquely assigned to one particular Gruen watch model. However, there are some instances, where the style numbers were used for multiple models. This happened most often during the early Curvex years when many of the Curvexes had a very similar shape. It makes sense that two similar watches would use the same crystal and thus have the same style number. These differing wristwatches are problematic and create situations where the style number's date is earlier than the watch's correct date of availability. How to identify these situations is explained later.

We limited our work to wristwatches created from 1935 through 1956. The result of the research produced the Style Number Dating Table (Figure 2), which was created by identifying as many watches as possible for each year. The data from the Style Dating Table is shown graphically in Figure 3. Perhaps not evident in the table, the graph visually shows which years Gruen made more watch models, or assigned more style numbers, than others.

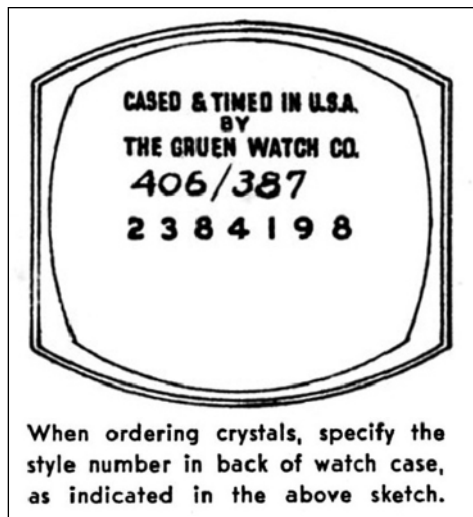


Figure 1. Gruen style and caliber number definition from the 1947 *Crystal Catalog*.

To create the Style Number Dating Table, the goal was to find at least three watches introduced per year. The primary method of identifying a watch's initial date of production or availability was through the use of magazine advertisements. If a watch matched the advertisement illustration, that watch's style number was associated with the year of the advertisement. This technique of identifying watch model names and date of initial availability was also used to create the *Gruen Watch Model Identification Guide - Volume 1*, written by Mike Barnett. (Watch for Volume 2, to be published later this year.)

After several watches were found in a given year and its surrounding years, a range of style numbers could be approximated for that year. These were the data points used to create the table. The style number column indicates the lowest style number of a watch introduced in the associated year.

We cross-checked our dates by using all watch-dating methods available to us. The cross-checking was limited to a subset of watches for which the additional methods were valid. One such method was provided by Gruen historian Jack Wood, an active Gruen Forum member, contributor, and Gruen researcher. His dating method is based on the serial numbers of cases manufactured by the Wadsworth Case Company. He found that for wristwatches that used Wadsworth manufactured cases, the date a specific watch was manufactured is tied directly to the serial number of its case. Jack's method is described in detail in his article, "Dating a Gruen Wristwatch from a Wadsworth Case Serial Number," in the September 2011 *W&C Bulletin*. Another verification method uses the movement's serial number. This, too, is a relatively new technique and is limited to the 405, 410, and 420 caliber families. A full description of dating via movement serial numbers can be found on the website GruenWristwatches.com. Both of these techniques, using Wadsworth case serial numbers and movement serial numbers, pinpoint a watch to its specific date of manufacture but are also approximations.

For years in which no watches could be identified, we relied on watch crystal catalogs. These catalogs show the highest style number in use for the year the catalog was published. Seventeen crystal catalogs were used in this project, including those from the GS, Rocket, and Perfit companies.

There are anomalies to the style number dating method! The Gruen Company was not always consistent in its assignment and use of new style numbers, particularly in the years around World War II. We identified several

First Style Number of Year	Year of Introduction
183	1935
220	1936
255	1937
304	1938
372	1939
390	1940
449	1941
495	1942
506	1943
512	1944
541	1945
544	1946
553	1947
583	1948
625	1949
641	1950
742	1951
752	1952
832	1953
863	1954
883	1955
933	1956
1,015	1957

Figure 2. The Style Date Table.

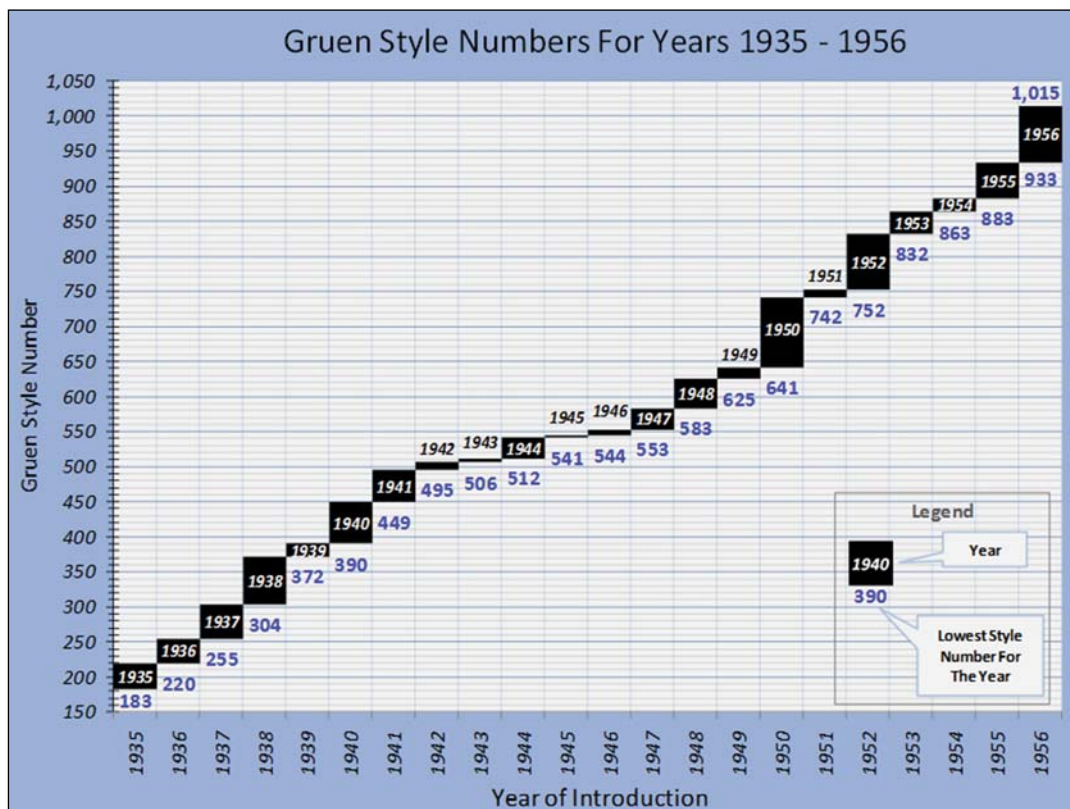


Figure 3. Style Number/Date Chart.



Figure 4. Gruen Submarine model.



426-725

421-725

Figure 5. Submarine watch model "movement migration" indicated on these casebacks by two different movement numbers.

anomalies, but undoubtedly there are others that savvy Gruen collectors will find and share with the community.

We found some style numbers were paired with different movement calibers, but the watch model remained the same. We called this a model "movement migration." Over time Gruen changed the movements in a watch model. They maintained the correct labeling in the case by changing the caliber number while leaving the style number the same. The 1951 "Submarine" model shown

in Figures 4 and 5 is a good example of this migration from one movement to another. Some Submarine models have the identification 421-725, indicating a caliber 421 movement is used, while others marked with 426-725 indicate a caliber 426.

To help determine when style numbers were reused or when a watch model shows evidence of "movement migration," we developed the Style Caliber Table (shown, in part, in Figure 6 on the next page) by capturing data from

Figure 6. Style Caliber Table. Reference the table found at <http://www.gruenwristwatches.com/new-dating-method-2.php> for a continuation of this table to Style No. 1231.

Style	Calibers				Style	Calibers				Style	Calibers			
183	311				272	350	520			374	405			
184	685				273	311	400C			375	300			
185	165				274	270				376	355	355C		
186	353				275	115	215	216	270	215SS	270SS			
190	325				276	270				377	405			
191	465				278	206	217	501		378	210			
192	325				279	280				379	400	400C		
193	465				280	330				380	210	211	210SS	
194	700				281	300				381	410	410C		
196	165				282	300				382	210			
197	355				283	581	704	704SS		383	410	410C		
199	700				284	270				384	210	211	216	
201	676				285	270				385	211	211SS		
202	311				286	270				386	210	211	430	210SS
205	455				287	330				387	211	405	406	426
207	355				288	330				388	405			
210	907				289	400				389	411	411C		
213	455				290	500	877	500DD		390	411	411C		
214	675				291	520				391	406			
215	455				292	330				392	405			
216	455				293	330				393	330			
217	485				294	300				394	406	406SS		
218	467				295	330				395	405	405SS		
220	165	167			296	275	500	501	500C	396	405			
221	167				297	300				397	211			
222	165				298	400				398	210			
223	165				299	400	542			399	211			
224	485				300	416				402	405			
225	325				303	271				403	406			
226	325				304	330				404	411	411C		
227	325	355	500		305	400				408	410	410C		
228	311	330			308	330				409	168	500	501	
229	915	917			309	580	581			411	211			
230	915				310	270				413	405			
231	465				320	270				414	406			
232	465				321	270				415	300	531		
233	465				322	270				416	531			
234	917				323	700	704			417	330	430		
235	917				324	500	501	500C		418	270			
238	300				326	270				419	400	401		
239	300				334	330				420	401	401C		
240	355				335	280				421	211			
241	355				336	700				422	210	211		
242	307				337	700				423	210			
243	300				338	270				424	300			
244	485				339	330				425	210			
246	485	501			340	355	500	355C		426	210			
247	123	325			350	270				427	210	211		
248	580				351	401	501	501C		428	211			
250	917				352	401				429	290			
251	531				353	350				430	290			
252	531				354	520				431	290			
253	531				355	520				432	290			
254	501				356	330	355	355C		433	290	411		
255	311				357	215	270			434	290			
257	501				358	704				435	290			
258	501				359	168				436	290			
259	280				360	582				437	290			
260	311				361	270				438	290			
261	280				362	300				439	290			
262	290				363	280				440	430			
263	465				364	400	400C			441	211			
264	465				365	406				442	411	411C		
265	465				366	406	406SS			443	411	411C		
266	165	501			367	167				444	212			
267	487				368	280				445	211			
268	697	698			369	355	355C			446	405			
269	280				370	355	355C	401C		447	405	406		
270	280				371	917				448	440			
271	311	330			372	401	410	581	582	704				
					373	406				450	440			
										451	405	405SS		

many crystal catalogs. The first column lists each style; the numbers to the right are the movement calibers that are used for that style. Again, looking at the Submarine model we see that it has a Style Number of 725. In the

Style	Calibers		
720	415	416	
721	216		
723	335	3351	
724	275		
725	421	426	
726	475		
727	215		
728	275		
729	480		

Figure 7. Excerpted section of Style Caliber Table (higher-numbered styles than those shown in Figure 6).

excerpted section of the Style Caliber Table shown below, calibers 421 and 426 are shown to the right of Style 725.

The style number reuse anomaly can be at least recognized by using the Style Caliber Table. If a watch's style number indicates a date that is prior to the date the movement itself was introduced, then clearly that style number has been used previously. Take for example the style number 498. Figure 8 shows six different calibers of movements that used that number. One such movement is the caliber 335 that began production in 1948. The style number of 498 indicates the year of introduction for the watch was 1942, but this clearly cannot be the case for watches with caliber 335 movements. When in doubt,

Style	Calibers					
498	335	422	430	435	440	3351

Figure 8. Excerpted section of Style Caliber Table (a higher-numbered style than those shown in Figure 6).

check the Style Caliber Table to ensure a style number reuse has not occurred.

In approximately 1956 the style numbers broke the 999 barrier. While we show 1,015 as the end style number for the year 1956, the style numbers stamped in the cases will not be a four-digit number. Much like a three-digit odometer, the number rolls over and started over again as a three-digit number padded with zeros on the front end. For example, the style number we reference as 1,002 will have a case that is stamped with a style number of 002. That particular watch is stamped with 422-002, or 002-422.

The Style Caliber Table proved to be a distraction while we were doing our research because there is such a wealth of data that can be mined from it. For example, the life span of a movement can be approximated by finding the lowest and highest style numbers associated with that movement caliber. To do this, the caliber to investigate is chosen, its lowest and highest style numbers are found

in the Style Caliber Table, and these style numbers are then looked up in the Style Date Table to determine the dates of the lowest and highest styles. You'll find that it is the ladies' movements that have the longest life span and more style numbers than the men's watches.

We hope that our contribution will help Gruen collectors learn more about their watches and perhaps motivate them to help piece together other missing parts in the Gruen puzzle. Our work provides the date of initial production, which is the first step in solving the many mysteries that await those who are curious enough to seek more information. Be careful though; curiosity found in some Gruen collectors turns collectors into obsessed researchers.

Acknowledgments

Credit should be given to the early Gruen pioneers Roy Ehrhardt, Charles Cleves, and more recently, Bruce Shawkey. Mr. Cleves' work was a springboard from which we could research, providing initial manufacturing dates of Gruen movements. A special thank you is owed to Bruce Shawkey for his riveting introduction outlining the history of Gruen research and encouragement. I thank Jack Wood, a hard-working Gruen researcher and historian who has consistently given much to the Gruen community. We were able to use his recent work to help validate our findings. I also thank the ever-growing GruenWristwatches.com forum members for providing motivation and sharing their passion and watches with the Gruen community.

About the Authors

Mike Barnett is a Gruen enthusiast and historian. He is originally from Kentucky and became an NAWCC member at the age of 15 on the advice of his uncle Fred, who collected antique clocks. That same year he discovered computers, which, as a career, won out over timepieces. After 30 years of doing software development in the Silicon Valley in the voicemail, gambling, and many other industries, he has come full circle back to watches and the South and now makes his home with his wife Shari and a messy watchmaker's bench in North Carolina.

Barry Cooper resides in the Tampa Bay area of Florida. He have been collecting Gruen watches since 2008. At the moment his main period of collecting spans 1925 to 1936. Barry's been performing smaller watch repairs, but the high humidity, a dog, and living in air-conditioning with fans makes for a difficult repair environment. He enjoys not only collecting watches, Gruen and others, but also pieces together many bits of Gruen history. Previously, he was an interior decorator, dealing in the Victorian and Edwardian periods.

A version of this article was previously published in the May 2012 AWCI *Horological Times*.