## **How About a Date?**

## Breakthrough Research Smoothes Rough Road for Gruen Wristwatch Collectors By Mike Barnett and Barry Cooper

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

There is precious little information "out there," unlike many other popular brands such 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 the MONTH, in which a given specimen was manufactured.

Not so for Gruen, being the "orphan child" without a birth certificate because of a rather complicated method of serializing their movements, the records for which 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 (and 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), the number of movement calibers exploded, and the serializing of those movements took on byzantine characteristics that make Egyptian hieroglyphic 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, as the process of dating a given specimen often involves piecing nuggets of information together from far-flung resources. The chance to play the starring role in your own mini version of CSI (a popular crime show on the CBS Television Network in case you've been living in a cave for about the last decade or so) is irresistible to some.

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. All of which has resulted in a greater refinement of the original "Cleves Chart." (And that 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, as 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 is 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, inside of 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 begun 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 Gruen watches – this article will focus 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 case, usually in the format or 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 & Style Number pair. Older models and some round-shaped models may have only a single three-digit number. Swiss and solid gold cases sometimes do not have the numerical pair as well. These watches are not valid candidates for using the Style Number dating method detailed here.

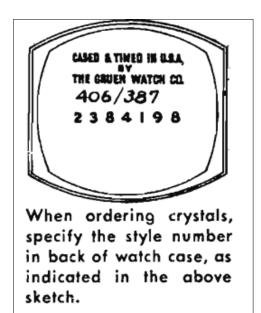


Figure 1 - Gruen Style and Caliber Number Definition from the 1947 Crystal Catalog

Looking closer at the numbers, one of these numbers 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 watch. 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 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 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 to 1956. The result of the research produced the *Style Number Dating Table* (Figure 2) which was created by identifying as many watches for each year. The data from the Style Date 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.

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 utilized 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.

First Style Number of	Year of
Year	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

We cross-checked our dates utilizing 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, currently "in press", 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. Another verification method utilizes 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 utilized in this project including those from the GS, Rocket, and Perfit companies.

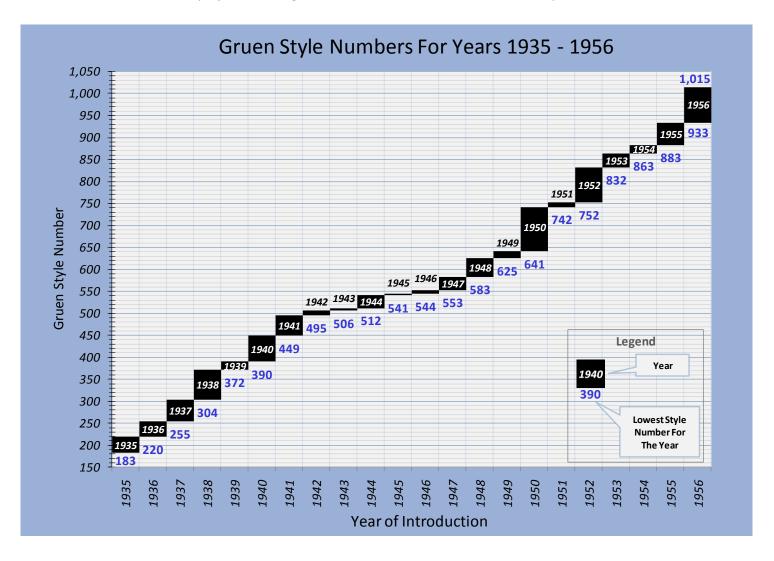


Figure 3- Style Number/Date Chart

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 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 utilized while others marked with 426-725 indicate a caliber 426.



Figure 4 - Gruen "Submarine" model



Figure 5 - Submarine watch model "migration" shown in the case back

To help determine when Style Numbers were reused or when a watch model show evidence of "movement migration", we developed a Style Caliber Table shown in Figure 6 by capturing data from many crystal catalog. 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 Caliber Table, calibers 421 and 426 are shown to the right of Style 725.

The Style Number re-use anomaly can be at least recognized by using the Style Caliber Table. If a watch's Style Number indicate 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 6 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, check the Style Caliber Table to ensure a Style Number re-use hasn't 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 4-digit number. Much like a 3-digit odometer, the number rolls over and started over again as a 3 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 lifespan 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 lady's movements that have the longest lifespan as well as having 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 that are curious enough to seek more information. Be careful though, that curiosity found in some Gruen collectors turn collectors into obsessed researchers.

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. And to Jack Wood, a hard-working Gruen researcher and historian that has consistently given much to the Gruen community. We were able to use his recent work to help validate our findings. And the ever-growing GruenWristwatches.com Forum members for providing motivation and sharing their passion and watches with the Gruen community.

Style	Calibers					
183	311					
184	685					
185	165					
186	353					
190	325					
191	465					
192	325					
193	465					
194	700					
196	165					
197	355					
199	700					
201	676					
202	311					
205	455					
207	355					
210	907					
213	455					
214	675					
215	455					
216	455					
217	485					
218	467					
220	165	167				
221	167	107				
222	165					
223	165					
224	485					
225	325					
226	325					
227	325	355	500			
228	311	330				
229	915	917				
230	915					
231	465					
232	465					
233	465					
234	917					
235	917					
238	300					
239	300					
240	355					
241	355					
242	307					
243	300					
244	485					
246	485	501				
247	123	325				
248	580					
250	917					
251	531					
252	531					
253	531					
254	501					
255	311					
257	501					
258	501					
259	280					
260	311					
261	280					
262	290					
263	465					
264	465					
265	465					
266	165	501				
267	487					
268	697	698				
269	280					
270	280					
		220				
271	311	330		1	1	1

272	350	520				
273	311	400C				
274	270	1000				
275	115	215	216	270	215SS	270SS
276	270					
278	206	217	501			
279	280					
		_		-	-	
280	330					
281	300					
282	300					
283	581	704	704SS			
		704	70433		-	
284	270					
285	270					
286	270					
287	330					
		_		1	+	
288	330					
289	400					
290	500	877	500DD			
291	520					
292	330					
					_	
293	330				-	
294	300					
295	330					
296	275	500	501	500C		
		300	201	3000	+	
297	300				-	
298	400					
299	400	542				
300	416					
					+	
303	271				+	
304	330					
305	400					
308	330					
309	580	581				
		361			-	
310	270					
320	270					
321	270					
322	270					
		704			-	
323	700	704				
324	500	501	500C			
326	270					
334	330					
335	280					
					_	
336	700					
337	700					
338	270					
339	330					
		F00	2550		+	
340	355	500	355C	-	1	
350	270					
351	401	501	501C			
352	401					
353	350				+	
		-			+	
354	520				-	
355	520					
356	330	355	355C			
357	215	270				
		2,3			+	
358	704				-	
359	168					
360	582					
361	270					
362	300					
		-		-	+	
363	280				-	
364	400	400C				
365	406					
366	406	406SS				
		40000			+	
367	167				+	
368	280					
369	355	355C				
370	355	355C	401C			
371	917					
		44.5	504	500	70:	
372	401	410	581	582	704	
373	406					

374	405						
375	300						
376	355	355C					
377	405						
378	210						
379	400	400C					
380	210	211	210SS				
381	410	410C					
382	210						
		4100					
383	410	410C					
384	210	211	216				
385	211	211SS					
386	210	211	430	210SS			
387	211	405	406	426			
388	405	100					
		4116					
389	411	411C					
390	411	411C					
391	406						
392	405						
393	330						
394		40666					
	406	406SS				-	
395	405	405SS					
396	405						
397	211						
398	210						
399	211						
402	405	-					
		-		-	-	-	
403	406						
404	411	411C					
408	410	410C					
409	168	500	501				
411	211						
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413	405						
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415	300	531					
416	531						
417	330	430					
418	270						
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419	400	401					
420	401	401C					
421	211						
422	210	211					
423	210						
424	300						
425	210						
426	210						
427	210	211					
428	211						
429	290					<b>†</b>	
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453	211						
454	430						
455	430						
456	430						
457	430						
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458	405						
459	406						
460	406	406SS					
461	430						
		211		_			
462	210	211					
463	210						
464	405						
465	230	405	420	425			
466	210	211	215	216	266	211SS	216SS
		211	213	210	200	21133	21033
467	431						
468	431						
469	435	436					
470	405						
471	405						
					+	_	
472	431				-		
473	430	435					
474	435						
475	330						
476	330				_		
						-	
477	406						
478	291						
479	290	291					
480	406	425					
				_			
481	411	411C					
482	410	401C					
483	211						
484	210						
485	291						
		_				-	
486	405						
487	410						
488	411						
489	430						
490	435						
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491	350						
492	500	500C					
494	410	410SS					
495	405						
496	410	410SS					
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497	411	411SS					
498	335	422	430	435	440	3351	
499	440						
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502	290						
503	290						
504	290						
505	290						
506	290						
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507	210						
508	211						
509	290	291					
510	290						
511	405						
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512	406					-	
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518	210	211					
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523	405	425					

524	406					
525	210	211	210SS	211SS		
526	400	400C				
527	420	421				
528	420	421				
529	421					
530	335	430	435	3351		
531	210	210SS	.55	3332		
		21033				
532	211					
533	210	211	215	210SS	211SS	
534	420	421	420SS			
535	420	420SS				
537	275	290		-		
538	290					
539	290					
540	290					
541	440					
542	290	335				
		333		-		
543	290					
544	440					
545	210					
546	210					
547		211	216	21000		
	210	711	210	210SS	-	
548	350					
549	290					
550	290					
551	270	290				
552	425SS					
		426				
553	425	426		-		
554	425					
555	420	420SS				
556	440					
557	421					
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558	335	430	3351			
559	210					
561	210	210SS				
562	385					
563	421	430	435			
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564	385	425	420			
565	420	428				
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567	425	426				
568	426	440				
569	210	275	290			
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570	295					
571	385					
572	210					
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585	430	440				
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586	385	-			-	
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593	275	421				
594	275					
595	210					
596	275	420	421			
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617	275					
619	215	275				
620	210					
621	425					
622	210	215	216			
623	430	435				
624	210	211		+	+	
625	370	435				
626	430					
627	3351					
628	275					
629	425					
630	420	651	3351			
631	335					
632	420					
633	421					
634	275	425				
635	335					
636	425	426				
637	335	3351	3551			
638	275					
639	420					
640	475					
		_				
641	440	-				
642	370					
643	370					
644	285					
645	210					
646	285					
647	3351					
648	210	1				
649	430	475	480			
		+/3	400			
650	370	-				
651	3351	1				
652	425	435	3351			
653	421					
654	421					
655	275					
656	210					
657	335	3351				
			216			
658	210	215	216	-		
659	435	3351				
660	415	416				
661	275					
662	370					
663	285					
664	285	423	432	423A		
		+23	734	TZ3A		
665	275	420				
666	275	430		-		
667	275	335				
668	275					

		1			1	1
669	290					
670	210	215	216			
671	275	275				
672	435	3351				
673	210	210SS				
674	430	435	3351			
675	215	216	3331			
			460			
676	370	415	460			
677	415	430				
678	275					
679	421					
680	335	3351	3551			
681	430					
682	415					
683	215					
685	210					
686	210					
688	420	422	460	422SS		
689	335					
690	335	3351				
691	415					
693	210					
694	430				İ	
695	285					-
		1				
696	370					
698	215	215SS				
699	475					
700	335	3351				
701	215					
702	215					
703	335	3351				
704	3351	3331				
		2254				
705	335	3351				
706	370					
707	370	440				
708	275					
709	335	3351				
710	3351					
711	435	3351				
712	435	3332				
713	425					
714	275					
715	335	3351				
716	370					
717	460					
718	415	470	3351			
719	415	430				
720	415	416				
721	216	110				-
	335	2251				-
723		3351				
724	275	10-				
725	421	426				
726	475					
727	215					
728	275					
729	480					
730	215	216				
731	275					
732	415	+				-
733	460					
734	275					
735	275	2751				
736	480					
737	3351					
738	3351					
739	415	480				
740	335	3351				-
741	335	3351				
742	480					
743	275	2751				
744	475	480				

745	275					
746	215					
747	370	430	435			
			435			
748	275	2751				
749	275					
750	370					
751	480					
752	335	3351				
753	370	440				
754	215	216				
755	480					
		2254				
756	335	3351				
757	275					
759	275					
760	370					
	480					
761						
762	335	3351				
764	415					
766	422					
767	462					
768	460	462	-			
769	480					
770	4803					
771	3351					
772	416	422				
		422				
773	370					
774	415					
776	335	3351				
777	335	3351				
		3331				
778	480					
779	360					
780	480					
781	480					
782	275			-		
783	270	275	3351			
784	215					
785	275	285				
786	215					
788	480					
789	415					
790	435					
791	3351					
792	215	415				
		413		-		
793	415					
794	415					
795	416					
797	440					
798	3351	-	-			
799	422					
800	460					
801	3351					
802	335	3351				
		3331				
804	415					
807	3351					
808	422					
809	335	3351				
810	415	416				
		710				
811	216	+-	-	-		
812	215	216				
813	430	435	480			
814	480					
815	415	1				
		2251				
816	335	3351				
820	3351					
821	370					
822	415					
824	415	+				
826	480					
827	415					
828	285					
829	415	416				
323	.13	710	1	1	 1	L

830	275					
832	415					
833	3351					
835	275	2751				
		2/31				
836	415					
837	275					
838	415					
839	215					
840	215					
841	275	2751				
842	275	2751				
843	275	2751				
844	275	2751				
847	275	2751				
850	2751					
852	3351					
853	275	2751				
854	3351	2751				
857	275					
858	275					
860	270	2751				
862	415					
863	415					
864	415					
865	215					
870	275					
873	275					
875	235	2351				
876	435					
877	275					
878	216	415				
879	370	713				
880	480					
881	462	462SS				
882	370					
885	335	3351				
886	480	480SS				
887	480					
888	275	2751				
889		2731				
	275	400				
890	462	480				
891	430	435				
892	215					
893	215					
894	275					
895	335	3351				
897	415	5551				
899	480	2254	2252			
900	335	3351	3353			
901	335	435	3351	3351SS		
903	275	2751				
904	275	2751				
905	275	2751				
907	275	2751				
908	275					
909	275	225				
910	335	3351				
911	235	2351				
912	362					
914	490SS					
917	422	462				
918	480					
		2754				
919	275	2751				
920	2751					
924	215					
925	215	285				

000						
926	275	2753				
930	275					
931	215	462				
939	215					
940	215					
941	215					
942	480					
943	275					
944	275					
945	215	275				
950	215					
951	285					
952	215					
953	215					
961	275					
970	275	2751				
976	217	2/31				
		216				
977	215	216				
978	215	220			-	
979	215	275				
980	275					
981	462	-				
984	275					
986	275					
988	275					
991	215					
997	275					
998	422					
999	435	439				
1002	422					
1003	422	423				
1010	275	2751				
1013	275					
1015	211	215	415			
1017	215					
1019	275					
1020	215					
1025	673					
1027	787					
1027	215	+				
		+				
1035	215					
1042	215	+			-	
1049	215	2752				
1050	275	2753				
1056	215	+				
1061	422	1		-		
1062	422	1				
1064	2753	1				
1070	275					
1076	215	3353				
1079	2753					
1085	673					
1099	215	225				
1116	215					
1156	215					
1158	215					
1176	215					
1199	278					
1231	278					
1231	270		1		1	

Figure 6 - Style Caliber Table