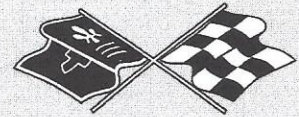


Wheel Weights



by GARY S. BEAUPRÉ

Depending on the judge's interpretation, having incorrect wheel weights on all four road tires and the spare can result in the loss of up to five points during judging. With a little scrounging at the junkyards, one might be able to prevent this loss of points. The question is what weights to look for? Let me say from the outset that the answer to this question almost certainly depends on the year of the car in question. In the course of researching wheel weights for my '66, I've seen a variety of vintage wheel weights, some of which I believe are correct for Corvette, at least the 1963-67 models.

I began researching wheel weights by performing an Internet search for U. S. companies who make wheel weights. Two major ones I found were Bada Division of Hennessey Industries, Inc. and Perfect Equipment Company, LLC. During a phone call to Perfect Equipment Company, I was told that GM used five suppliers for wheel weights during the 1960s: Bada Company, Perfect Equipment Company, Wheel Weights, Inc., Speed-Clip Manufacturing Corporation, and Salmon.

Generally when I'm told information like this, I try to find written documentation or a second source to verify its accuracy. In the case of wheel weights, I have been unable to find any such documentation. After speaking with representatives from Bada and Perfect Equipment, I've concluded that the information is accurate as far as Bada and Perfect Equipment Company being GM suppliers in the 1960s. I have no reason to doubt that the other three companies were also suppliers. I simply have been unable to confirm this by an additional source, in part because to the best of my knowledge, the other three companies are no longer in the wheel weight business or are no longer in business at all.

A commonly seen 1960s vintage wheel weight made by Bada Company can be identified by the MICRO logo. Two typical examples are shown in



Fig. 1 – Bada MICRO series weights dating from the 1960s and 1970s

In Fig. 1, note that the ounce weight designations appear twice, both to the left and right of the MICRO embossing. The one-ounce weight at the bottom of the figure would be correct for mid-year and other Corvettes. The upper 1.25-ounce weight would not be correct: according to the *Assembly Instruction Manual (AIM)*, production weights used on the Corvette assembly line only came in multiples of 0.5 ounces. The 1.25-ounce weight, however, could have been available as a service replacement GM part. Compare these 1960s vintage weights with a more recent Bada Micro series weight shown in Fig. 2.

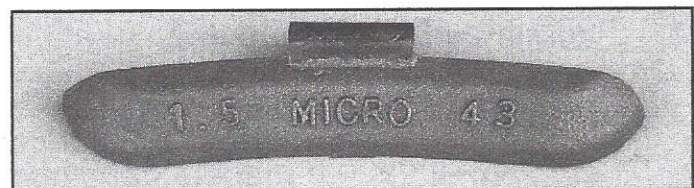


Fig. 2 – Bada MICRO series 1.5-ounce weight has ounce and gram designation. This weight is not correct for 1963-67 cars because the metric designation did not appear until later.

There are several differences between the newer weight (Fig. 2) and the older 1960s/1970s weights (Fig. 1). First of all, the overall shape is different, particularly near the ends. Another obvious difference is the replacement of one of the ounce

designations with its gram equivalent. Since there are 28.35 grams per ounce, 1.5 ounces is approximately equal to 43 grams. Note that the idea of simply grinding off the metric designation to create a '60s vintage weight won't work since, with a couple of exceptions discussed below, the ounce designation should appear twice on each Bada MICRO weight from the '60s and '70s. One exception to the rule that the ounce designation appears twice is the case of the 1960s vintage 0.5-ounce weight shown in Fig. 3.

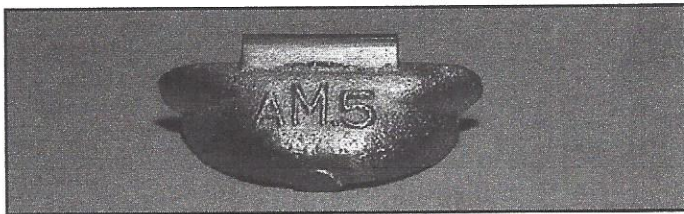


Fig. 3 – Bada MICRO series 0.5 ounce weight

The weight shown in Fig. 3 is also part of the Bada MICRO series, but because of its small size, the embossing has been reduced to AM.5, with the ounce designation appearing only on the right and the MICRO has been reduced to the single letter M. I don't know the meaning of the letter A to the left.

The second exception to the rule that the ounce designation appears twice is shown in what I believe is a '60s vintage weight shown in Fig. 4.



Fig. 4 – Bada MICRO series 1.5 ounce weight with the letter B replacing one of the ounce designations. photo courtesy of Grant Wong

Note the ounce designation to the left of the MICRO embossing has been replaced by the letter B. Also note that the shape of the weight in Fig. 4 is the same as the shape of the weights in Fig. 1. Thus, I believe that this B/MICRO/1.5 weight might also date from the 1960s and may be correct for mid-year cars.

Other weights likely used on pre-1978 Corvettes are shown in Fig. 5. According to the manufacturer, Perfect Equipment Company, these particular weights were made from 1939 to 1978.



Fig. 5 – Perfect Equipment Company weights made from 1939 to 1978

Perfect Equipment weights can be identified by the slanted letter P. As was the case with the Bada MICRO weights, only the 0.5-ounce weight at the bottom and the 1.0-ounce weight at the top would be correct for mid-year Corvettes. The 3/4-ounce weight would not have been available on the assembly line according to the AIM. Note again that the 1.0-ounce weight has the ounce designation appearing twice, while the 3/4 and 0.5 ounce weights have the designation embossed only on the right side (the numeral 5 on the weight at the bottom is barely visible to the right of the arrowhead).

Some other possible '60s vintage wheel weights are shown in Figs. 6-8. I used the qualified "possible" since I have been unable to determine who manufactured these weights to confirm that they date from the 1960s. I do know that they were made by neither Bada nor Perfect Equipment Company. All of the weights shown below have the ounce designation appearing twice. The weights shown in Figs. 6 & 7 also use the decimal notation while the weight shown in Fig. 8 uses fractional notation. I was told by a representative of Bada that the company used decimal notation for all of the MICRO series, except for the 3- and 3 1/2

ounce weights which reportedly used the fractional notation. However, subsequent to this conversation, I have seen a Bada 0.75-ounce weight that uses the decimal notation (Fig. 9), so the accuracy of the statement by the Bada representative about the one quarter-ounce weight using a fractional notation must also be questioned.

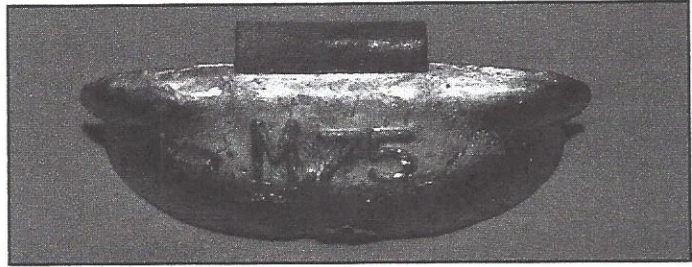


Fig. 9 – a three-quarter ounce weight made by Bada that uses the decimal notation. I believe this weight is part of the Micro series, also shown in Figs. 1 and 3. – weight provided courtesy of Robert Patton

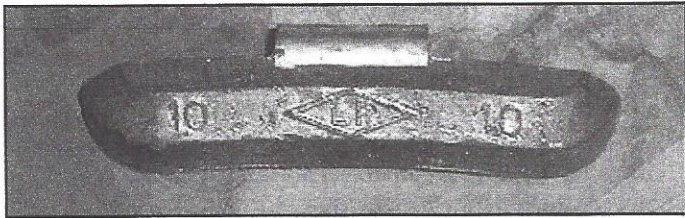


Fig. 6 – a one-ounce weight by an unknown manufacturer with the embossed letters LH inside a diamond border – photo courtesy of Grant Wong

The 1966 Corvette AIM lists the part numbers for wheel weights for steel wheels as follows:

9421502	0.5 oz
9421504	1.0 oz
9421506	1.5 oz
9421508	2.0 oz
9421510	2.5 oz

Additional part numbers existed for service replacement weights. These included some of the x.25 and x.75 size weights and a 3.0-ounce weight. But based on information in the AIM, these sizes were not available on the assembly line. The '66 AIM also notes that if more than five ounces of weights were required to balance any given wheel/tire, then the wheel/tire assembly should be rejected. Thus, the use of more than five ounces of weights on any wheel/tire assembly should be cause for a point deduction, as should be the case for the use of any x.25 and x.75 weights.

Unfortunately, from 1968 onward, the AIMs no longer list part numbers for wheel weights. It is therefore difficult to know when the part numbers changed from the ones listed above. Based on the Chevrolet Parts & Accessories Catalogs for later years, the above numbers may have been valid through 1982, after which all Corvettes came with aluminum wheels, which typically require a differently designed wheel weight. Finally, at the present time, I have been unable to determine a specific year when the metric gram designation was added to wheel weights. A representative from Bada told me that this change occurred sometime in the mid to late 1970s. Hopefully some readers with known original and unused spare



Fig. 7 – a one-ounce weight with the OEM embossing found on an original unused Goldline spare tire on a '66 Corvette, manufacturer unknown – photo courtesy of Peter Martin



Fig. 8 – a one and one-half ounce weight with the embossed number 14 inside an oval border, manufacturer unknown – photo courtesy of Grant Wong

tires for these years will take a look at their spare tires and see if the weights have the gram designation or not. I would very much like to hear from anyone with this information. I should also mention that knock-off wheels used weights different from the ones used with steel wheels. Hopefully, someone with information about weights for knock-off wheels will write a companion article on that topic.

In conclusion, mid-year (and almost certainly later) wheel weights for steel wheels should have the following characteristics:

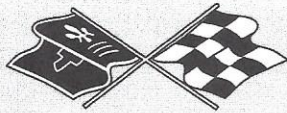
- * On weights embossed with MICRO, OEM, or LH, the ounce designation should appear twice (with exceptions listed next).
- * Exceptions include the 0.5 ounce MICRO and B MICRO weights and the 0.5 ounce Perfect Equipment Company weight.
- * There should be no metric (gram) designation.

- * All weights should be multiples of 0.5 ounces.
- * The total weight per wheel should be 5 ounces or less.

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