

THE 1978 POLYSPARE YELLOW WHEEL

OVER THE YEARS, CHEVROLET DIVISION equipped Corvettes with “one year only” parts—some of which frustrate owners while others are unremarkable except for perhaps one thing. The “school bus” yellow spare wheel for the Polyspare tire, introduced in 1978 falls into the latter category.

To put the new Goodyear Polyspare into the context of the 1970's, the push was on for not only reduced emissions but safety and fuel mileage factors as well. The introduction of a spacesaver tire for “temporary use only” required education of the consumer. The challenge to GM was how to get the consumer's attention and motivate him or her to avoid extended use of a temporary spare? A solution was

simple but also dramatic. Cover the wheel with “school bus” safety yellow paint!

The Goodyear Polyspare was introduced in the 1978 model year. The wheel diameter is 15-inches but the width is only 5-inches (in contrast the standard wheel measured 8-inches wide). The 1978 model year was also the first year for the new “P” metric tires. Chevrolet offered RPO QBS P255/60R15 tires in addition to the standard equipped P225/70R15 tires. The Polyspare is a fabric bias ply construction tire size P195/80D15 blackwall and labeled with “GOODYEAR” and “TEMPORARY USE ONLY” in raised block black letters. Underneath the “TEMPORARY USE



Like other parts and pieces found on the Corvette, the Goodyear Polyspare is also date coded. Here, VIN 9041 with a build date of November 10, 1977 reveals a Polyspare tire with date code of the 43rd week or the week of October 24th.

ONLY" block letters was "MAX. SPEED 50" in raised letters as well.

The Polyspare definitely saved weight. By 1978, the Corvette had become overweight (3,529 pound curb weight) and engineers worried about the girth. Weight required more horsepower to move mass and emission controls had handicapped GM's ability to produce additional horsepower. Weight reduction was the most viable option.

Incorporating the space saver tire had another benefit: It allowed the use of a 24-gallon tank, extending the Corvette's range dramatically (a 41 percent increase over the 1977 model). One has to wonder though, how much weight savings was offset by carrying more fuel? None-the-less, factory sales literature promoted the fact that "space for the larger cell (gas tank) is made available by the use and stowage of a new, lighter weight temporary spare." Sales literature also reveals that indeed, "the wheel (will be) painted a bright color to discourage extended use."

While we can trace the origins of the yellow spare, less clear is the sudden disappearance at the end of March. A story told notes that a GM executive was profiling in a Pace Car, got a flat and had to run the yellow spare. The sight of a 25th Anniversary Pace Car with a yellow wheel did not sit well and after that event, spares were changed to black within weeks.

The NCRS 1978-79 Technical Reference Guide ...

When late model NCRS C3 guides were written, published technical reference guides (early C3) served as the template and certain assumptions were written into the references when information was incomplete. The yellow spare is a case in point. The 1978-79 Technical Manual states, "that only early build Corvettes were equipped with the spare tire wheel." The operative word here is "early" I was determined to define "early"? Field observation revealed that 1978 models through VIN 25122 including Pace Cars were shipped with a yellow spare tire wheel. Could "early" be re-defined as seven months of production or from September well into March? At the time of publication, the research team did not know how far into production yellow wheels were supplied. The question arises what is the "break point" for production in which the factory transitioned from yellow to black? After several years of field observation, I learned the transition period narrowed to a few months in the spring and ironically coincided with the production of the Limited Edition Pace Car

Survey Findings ...

Pace Cars offer a unique opportunity to study the "running change" of spare tire wheel color due to their limited production over a three-month period at the St Louis Corvette Assembly plant. March 1st, Pace Car production began

along side that of regular production units. Approximately 1,700 Pace Cars were built in March and nearly 3,800 built in April with the balance of the 6502 produced in May. Data collection included both field observation and registries such as the 1978 Registry and Pace Car Registry. Owners have squirreled away Pace Cars for over twenty-five years, which has preserved many in rather remarkable original condition, permitting access to some rather low-mileage, original units.

Both regular production 1978 models and 1978 Pace Cars were surveyed over a period of several years. The purpose of the survey is to identify a "break point" of production, the transition from yellow to black wheel installation that parallels both regular production and Pace Car production. Tables 1 and 2 display selected data from the survey. Data collected included wheel color; trim tag date code and VIN.

The latest Pace Car VIN with a yellow spare is 1522 with a build date of March 30th but there are some inconsistencies in the survey data as described below. The earliest production Pace Car with a black wheel is VIN 1671; all others after this VIN number are equipped with a black spare tire wheel.



Characters and numbers to the left of the valve stem hole indicate the wheel manufacturer (Kelsey Hayes) or "K" while the "3" represents the plant that produced the wheel, the "7" represents the year of manufacturer and the "9" indicates the month of production. More information is provided in the text.

Regular production models began September 1977 and continued through the end of March. No units were built in April and regular production resumed May 1, 1978 with VIN 25,442 according to the 5th Edition of The Corvette Birthday Book. The survey showed all regular production units built prior to March 17th (VIN 25122) equipped with a yellow spare. According to the Birthday Book, regular production units were built through March ending with VIN 25280.

The 1978-79 Technical Manual states that “only early” build Corvettes were equipped with the spare tire wheel. Research reveals that 1978 regular production wheel and black during the month of March. So, yellow wheels have been traced well into the month of March where the wheel transitioned to black for both regular production and Pace Car production. Regular production continued in May and to date, no models surveyed after May 1st are equipped with a yellow spare tire wheel.

Of particular interest among those Pace Cars in the survey, is the production sequence or VIN serial number assignment and the trim tag build date. We found that the VIN sequence did not always parallel the build date and the wheel color differs from those units delivered either before or after in the VIN sequence. We can only speculate with

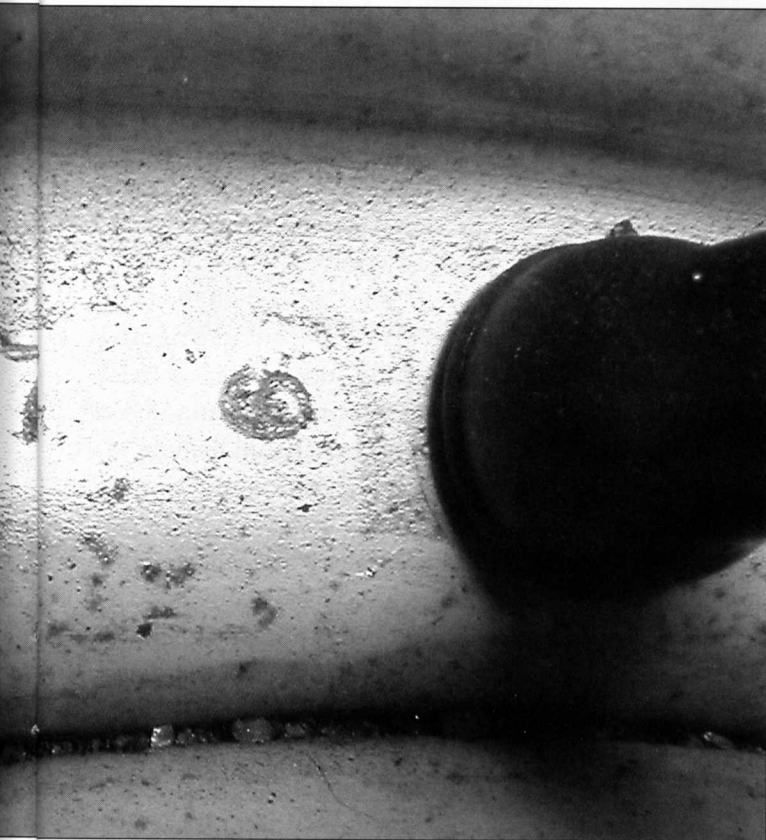
perhaps a couple of plausible explanations. For example, VIN 512 with a build date of 22-Mar-78 reports a black wheel and the build date is only one day from VIN 1236 (23-Mar-78), which also sports a black wheel. According to the Birthday Book, VIN 512 was built March 10th while VIN 1236 was built March 23rd. One explanation is that over time the possibility does exist that yellow wheels were changed to black wheels or even painted. Wheel date codes were not verified among those surveys completed electronically.

Another more likely explanation is that units (bodies) were pulled from regular production due to “major” paint and/or body defects and returned to paint repair, where units sat. Once they got back into production, passing through the trim line and chassis line, the supply of yellow wheels had expired and all that remained were the black wheels. Thus, these units left the factory equipped with a black spare tire wheel assembly.

It’s important to understand the production process, the installation of tags in contrast to the installation of the spare tire. The VIN tag and trim tag were installed between the 1st and 2nd paint booth at the same time by a single factory worker. VIN tags were counted out at the beginning of the day by the supervisor who would hand these over to the clerk, tasked with the duties of assigning the tags. The number of tags was determined by an estimate of the day’s production. The clerk’s station was located between the two paint booths and would have followed body panel assembly, bodywork, putty rub, primer and the first coat of lacquer.

During March of 1978, the clerk was handling two types of VIN tags one for regular production and the special “Limited Edition” VIN series. Trim tags were identical except for the stamping of a second exterior paint. The process of VIN tag and trim tag installation was one of legality, quite systematic and any variation we see today not likely due to the random assignment of tags.

The Polyspare tire and wheel were delivered to the factory as a completed, inflated assembly and stored on a rack. Workers grabbed a spare tire assembly off the rack, matching the broadcast code of “YA” slinging it into the carrier and securing it with bolt and lock assembly. No attention was paid to color. The most likely point of spare tire installation was the pit, where alignment occurred along with underbody bolt tightening or final inspection where accessories and the vehicle was prepared for final delivery. This installation occurred across the factory floor.



POLYSPARE TIRE ASSEMBLY		
VIN	Trim Tag Date Code	Wheel Color
32	1-Mar-78	Yellow
51	1-Mar-78	Yellow
221	20-Mar-78	Yellow
321	21-Mar-78	Yellow
390	21-Mar-78	Yellow
512	22-Mar-78	Black
586	13-Mar-78	Yellow
780	23-Mar-78	Yellow
989	28-Mar-78	Yellow
1236	23-Mar-78	Black
1522	30-Mar-78	Yellow
1593	29-Mar-78	Black
1671	31-Mar-78	Black
1683	31-Mar-78	Black
1945	3-Apr-78	Black
2319	4-Apr-78	Black
2495	6-Apr-78	Black
3016	11-Apr-78	Black

Table 1: 1978 Pace Car Survey*

POLYSPARE TIRE ASSEMBLY		
VIN	Trim Tag Date Code	Wheel Color
9041	10-Nov-77	Yellow
24103	1-Mar-78	Yellow
22944	2-Mar-78	Yellow
23230	6-Mar-78	Yellow
25122	17-Mar-78	Yellow
25924	4-May-78	Black
30090	9-Jun-78	Black

Table 2: 1978 Regular Production Survey

* April 3, 1978 is a Monday and starts a new week for Pace Car production. March 31st is a Friday.



What's Next?

I encourage NCRS members to continue the study of the yellow spare tire wheel and collect data that will add to the body of knowledge presented here. Exceptions to findings discussed here should be carefully documented as NCRS members typically do when assessing determinants of originality. Additional data collected should include VIN number; trim tag date code, wheel color and spare tire wheel date code.

A matching numbers Polyspare tire and wheel will be documented with both a tire and wheel date code that falls within six-months of the build date per the NCRS six-month guideline. When examining a Polyspare black wall tire look for the "GOODYEAR" and "TEMPORARY USE ONLY" in raised block black letters. A "correct" Polyspare may also have a VIN derivative of the last two digits scribbled with grease pencil on the assembly according to the 1978-79 technical reference guide.

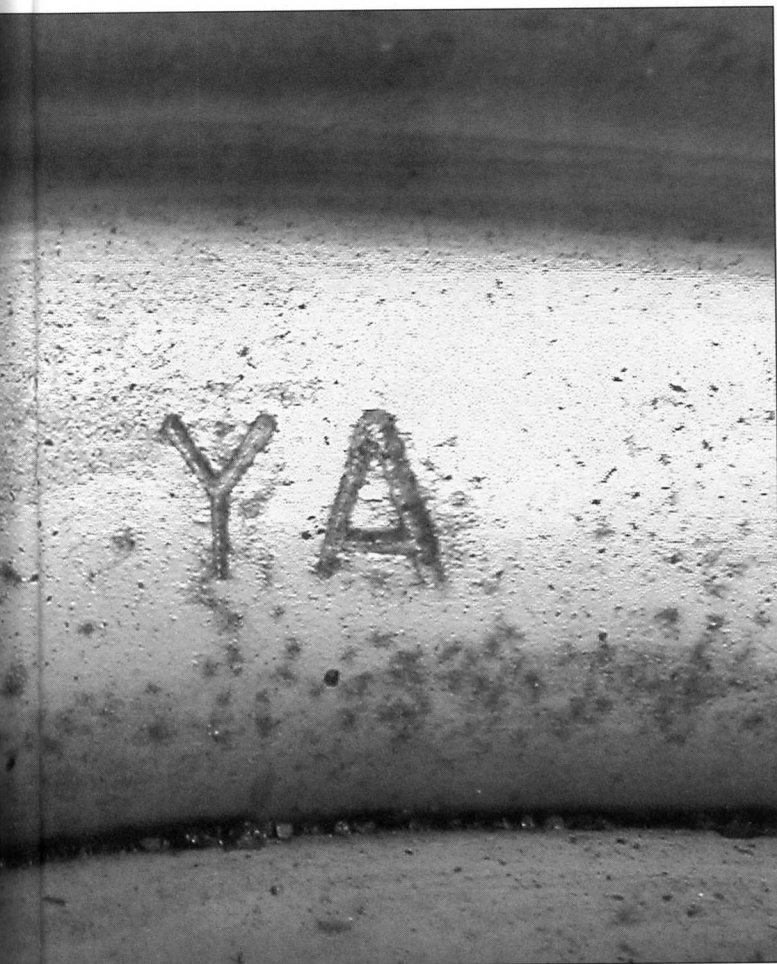


Photo 3: The stamped characters and numbers found to the right of the valve stem hole determine the day of manufacture, broadcast code and indicates this is a spare wheel assembly. See the text for more information.

FIGURE 1
Polyspare Tire Wheel
Date Code & Broadcast Code

K 3 8 4

10 YA

The date code in Figure 1 is typical of the format used on 8-inch Rally Wheels, and also used on Polyspare wheels. The "K" represents manufacturer Kelsey Hayes; the "3" represents the plant that produced the wheel; "8" represents the year of manufacturer; "4" indicates the month of manufacture or April. On the other side of the valve stem hole the day of manufacture is stamped "10" and the "YA" is the Corvette spare wheel 15 x 5-inch broadcast code. All Polyspares from 1978 through 1982 are stamped with the "YA" code and are called out on late-model C3 build sheets. The example above indicates that this wheel was produced April 10, 1978 and is a spare assembly. In 1980, Kelsey Hayes changed to a two-digit code for the year instead of the single digit. So, "9" was used in 1979 production while 80, 81 or 82 used for 1980-82 production. The Polyspare tire

also sports a date code in the form of a two-digit number for the week of production followed by a single digit for year of production.

Production of the Polyspare tire did not have a long lead-time in relation to installation in a Corvette's carrier. For example, VIN 9041 with a build date of November 10, 1977 reveals a Polyspare tire with date code of the 43rd week or October 24th while the wheel date code is September 15th. We see less than a few weeks between tire production and vehicle date code although Polyspare assembly occurred a few days after the vehicle build date. VIN 1671 represents a Pace Car and further illustrates this rather short lead-time by 1970 standards. Its build date is March 31st while the wheel date code is March 20th of 1978. The Polyspare tire date code is MDUH FB0068 or the 6th week of 1978 (mid-February).

In Conclusion ...

The results of this survey reveal new information that affects what is known about the wheel color used during the 1978 Corvette model year. Data continues to be collected so what has been reported is that known as of this writing. 1978 Corvettes with build dates prior to March 1st were equipped with a yellow spare tire wheel while those after April 1st were equipped with a black spare tire wheel regardless of regular production Corvette or Limited Edition Pace Car. Highlights of the survey are as follows:

- March 1978 is the transition month from yellow to black spares.
- The last ten days of March reveal that most Corvettes were equipped with a yellow wheel but some models were equipped with a black wheel.
- Pace Cars with build dates after April 1st are equipped with black spare tires.
- Regular production model with build dates after May 1st are equipped with black wheels.
- The earliest reported Pace Car with a black spare is VIN 1671 and date code G31.
- The latest reported regular production unit with yellow spare is VIN 25122 and code G17.
- The notion that only early 1978 models were equipped with a yellow spare tire must now reflect the fact that all production Corvettes from September through mid-March were equipped a yellow spare. ♦♦