

Pace Car Decals: Production and Assembly

The popularity of the 1978 Pace Car has yet to wane after thirty years and GM's marketing program to tether the Corvette Pace Car to the Indy 500 race continues to add value to those Limited Editions of 1978. GM Chevrolet rolled out its tenth Corvette Pace Car in May 2008; this marks the most that any one model has paced the race. The latest one was a tribute to the first Indy Corvette Pace Car. But what made that 1978 model wasn't horsepower, torque or cubic inches but rather paint, convenience options, and extensive graphics.

Of course, NCRS had judged graphics (decals and accent stripes) on other models in the past as owners worked to get that LT1 decal correct or labored to get the accent stripe just right on the 1967 power bulge. But the 1978 model introduced unapplied decals in a box carrying a GM part number and stowed in the rear storage compartment for dealer or owner disposition.

This article will document not only Pace Car decals delivered to dealers but will also describe service replacements and explore how aged NOS decals differ from restoration decals. It will also recommend expanding guidance for restorers and judges for the *1978-79 Technical Information Manual & Judging Guide*.

PRODUCTION decals are those that were in the rear storage compartment of 1978 Pace Cars that sport a limited edition VIN serial number. Decals were delivered in a box with part number GM# 476282 (Figure 1) and included several items (see Table 1). NOS (new old stock) decals would have been sold over the counter as



GM# 476283 service replacement door emblem box

SERVICE replacement and packaged individually with a part number on each box. Figure 2 illustrates the box for a door emblem decal that carries GM# 476283. Finally, RESTORATION decals are those reproduced today licensed per GM specifications. The quality is superb and only a Pace Car aficionado is able to differentiate restoration from production.

Original decals, either production or NOS, were made with 3M film paper and had the 3M Scotchcal logo (Figure 3) on the backing paper. While restoration decals use 3M film, they will not have the 3M Scotchcal logo on the backing paper.

So, an owner has choices when restoring a Pace Car and is in need of decals. Online auctions seem plentiful with their offering of production sets and NOS sets. But probably for the same investment, a restoration set may be more prudent depending on the application. If the intent is to adhere decals to the body panels and NCRS points aren't at issue here, than the practical choice is a restoration set from Phoenix Graphics, the most popular source for decals.

The 1978 Corvette was the most decal-laden model in Corvette history, and decals (treated as parts) were incorporated into assembly using the process of RPOs (regular production order) to call them out and used the AIM (assembly instruction manual) to assemble or stow.



GM# 476282 original Pace Car decal box



3M Scotchcal logo on 1978 3M backing paper

mock-up caught on camera by *Vette Vues* in the summer of 1977 show the decal under the cross flags as *1978 Indianapolis Pace Car*. From the summer of 1977 to March 1978, when Pace Car assembly began, it changed to *Indy Pace Car* (per AIM note) and finally was scaled back to simply *Limited Edition*.

With the exception of D88 and DL6, all other Pace Car decals left the factory in a single box placed in the rear storage compartment (Table 1). The box carries GM# 476282. The door emblem consisted of the Official Pace Car designation “62nd Annual Indianapolis 500-Mile Race, May 28, 1978.” It carries part number 476283 with the description “door emblem.” The winged-tire speedway logo decal (GM# 476284) reading *Indianapolis Motor Speedway* is the rear quarter panel decal. An instruction sheet is included in the box guiding the installer on decal installation.

Table 1
Decals: Limited Edition Pace Car

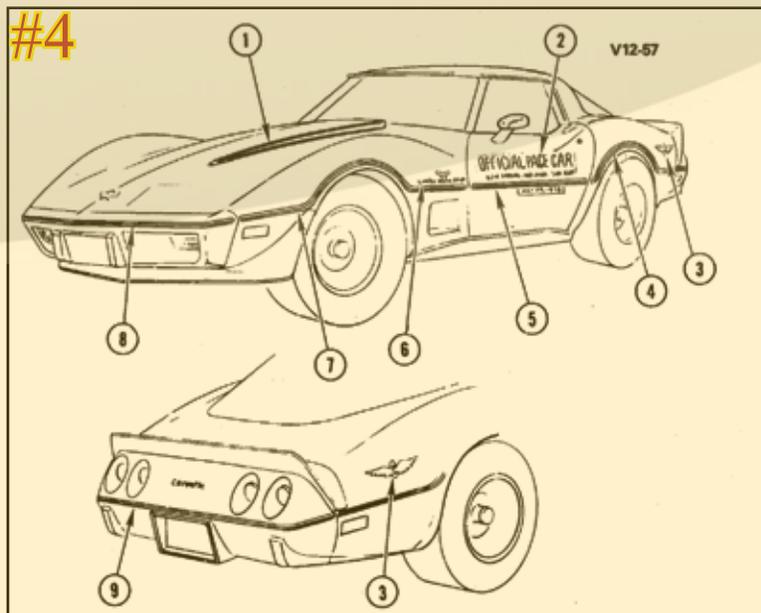
	Part Number	Exterior Location	Description
Factory Application	476281	Front Fender	Limited Edition
Storage Box	476282	Storage Compartment	Decal Box Assembly
	476283	Door	Door Emblem Official Pace Car
	476284	Rear Quarter Panel	Indianapolis Motor Speedway
	476285	n/a	Dealer Preparation Instructions

RPO Z78 was checked off by the dealer when the Pace Car was ordered and once the build sheet was printed, it would list a number of Limited Edition items. RPO Z78 was called *Appearance Package, 25th Anniversary (Limited Edition)*. The subordinate RPOs defined a Pace Car and included RPO D88 for accent stripes, D75 for rear spoiler, D80—front air reflector, DL6—pace car decal, and CC1 (glass T-tops) plus all the convenience options.

The *Limited Edition* decal was attached below the fender cross flags at the factory. The build sheet called out DL6 (pace car decal) for the *Limited Edition* decal with part #476281, and it was applied at the assembly plant per the AIM instruction.

Interestingly enough, photos of the Pace Car

D88 accent stripes (sport stripe) were called out on the build sheet and applied at the factory using the AIM schematic for B2Z and Z78. Pace Car owners fortunate enough to score a build sheet for their Corvettes have studied it an attempt to interpret those RPOs and broadcast codes. RPO D88 calls out the nine individual red/silver accent stripes listed in Table 2. Figure 4 illustrates where those decals were applied.



The red/silver accent stripes were applied to cover the paint seam where the silver paint (47M) met up with the black body paint (19U). The accent stripe starts from the front bumper, rolls down either side, finishing with the rear bumper. No mirror accent decals, license plate or

Table 2 Z78 RPO D88 Accent Stripes		
Quantity	Location	Description
1	Hood rise	Hood accent stripe
1	Front bumper	Front bumper stripe
1	Rear bumper	Rear bumper stripe
2	Front fenders	Front fender stripe
2	Rear quarter panel	Rear quarter panel stripes
2	Door	Door stripes

fender cove decals were on Pace Cars. The Silver Anniversary B2Z paint scheme did include accent stripes for mirrors, rear license plate and fender coves.

Flight Judging

Pace Car graphics are judged in the exterior section of Flight Judging. The *1978-79 Technical Information Manual & Judging Guide* differentiates between those decals applied (accent stripes) and those decals

delivered in the rear storage compartment upon delivery. Referring to the decal box assembly, it also states “A deduction of 10 points should be made if the decals are applied or if decals are missing.” Accent stripes are judged with body paint and scored accordingly for condition and originality.

When the judging guide was first published in 1994, little was known about the delivery box, its type, size or GM number. Decal part numbers or the availability of NOS-

Graphics for a

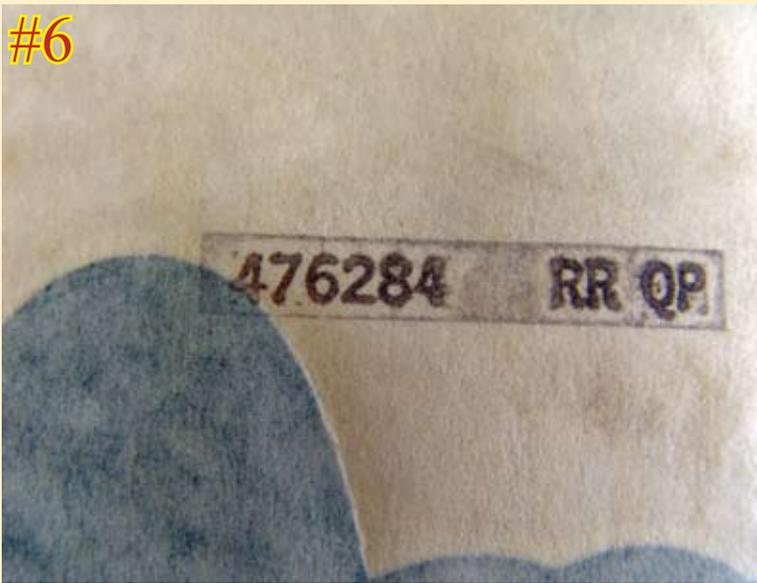
Unlike old car guys, decals deteriorate after several decades. Color will lose its vibrancy and appear to have yellowed. And with age, decals dry out and become brittle while they also lose their ability to adhere. But they do retain their memory—a unique characteristic engineered out of 21st century decal film.

Any Pace Car owner will note the extent to which an original decal will curl up after an attempt to roll it out. Old decals have memory. New films are engineered to virtually have no memory. Look at a NASCAR, NHRA vehicle or even a bus or van covered with decals. Study the body curves and note that the decal snugs those curves. New films have little memory once unrolled from a spool and applied to a surface. This is a desirable characteristic and separates its qualities from either original or NOS decals produced in 1978.

To further understand the performance improvements of films used to make decals, we sought experts in decal and film production. We turned to 3M and Phoenix Graphix to ask how film quality has improved. Brian Kotarski at Phoenix Graphix was very helpful in describing their experience with both old and new decals. Phoenix Graphix produces restoration graphics for several generations of Corvette Pace Cars, muscle cars and other models of America’s top automotive manufacturers. Tom Boxeth, with the 3M Graphics Market Center, was helpful with film technology and how the industry changed over three decades. Graphik Concepts produces the graphics for current generation Pace Cars and has been around since 1977.

3M Scotchcal was used in 1978 (Figure 3) to produce and transfer Pace Car decals and is still used today for automotive graphics. Referred to as vinyls, today’s product is a polyvinyl chloride (PVC) and with plasticizers produces a film that is used for numerous applications beyond automotive uses. Today’s decals are fashioned from 3M’s 2ML high-performance automotive-grade vinyl consisting of several layers and use 3M’s patented ultra-violet (UV) clear coat protectant for an ultimate high gloss.

#6



GM# 476284 stamp on 1978 3M-carrier paper for speedway logo

type boxes was not known as well. As described earlier, the part number for the original box references an assembly and includes those items listed in [Table 1](#). It should

be judged like other components using the judging matrix system for originality with a part number and completeness. Updates for the manual should include further guidance for judges and restorers.

To avoid confusion and provide clarity to both judges and restorers, the narrative portion in the Exterior Section should reference the correct part number on the box as GM 476282 and instruct judges to confirm that two door decals, two winged-tire decals and instruction sheet are present. Originality of decals can be assessed by checking for the 3M Scotchcal logo on the backing paper and on the opposite side (carrier paper), an ink-stamped part number. (Figure 6) Each would represent 20 percent of the total 10-point deduction and in the event an item is missing would guide judges toward a reasonable deduction. For example, if the instruction sheet is missing, than a two-point deduction would be scored on the basis of completeness.

II Generations

The outer layer of clear coat has dramatically improved ultraviolet protection and offers better shine, better reflectivity and greater resistance to automotive solvents. These improvements have become available in the last ten years and were not available when those 1978 decals were punched out. The metallic on the ink layer is brighter due to the use of the clear coat.

Print technology has changed dramatically permitting graphic shops to pop up in nearly every community as competition to traditional signage companies. Today's films used to screen print decals are geared for high-performance applications and therefore offer automotive grade characteristics. The adhesives are dramatically improved and are aggressive in contrast to what was used in the 1970s. Numerous automotive applications result due to the greater reflectivity and longevity, not only for decals but for printed sheets used in advertising as well.

A question often asked of company representatives is the use of new graphics versus old when doing a restoration. Frequent discussions on forum boards are about the use of original decal sets, whether they should be deployed or left as is...rolled up in a box. Old decal sets can be restored given time, expertise and cost. But what's the benefit? If the objective is to plaster the vehicle, than the recommendation is to invest in a new set of decals and take advantage of the performance improvements referenced here. Experts are in agreement that old decals still in the box suffer from brittleness, yellowing and an adhesive that has lost its stick. And we have learned that with time, aged decals will shrink in size.

In summary, today's PVCs used for automotive application are evaluated on the basis of several factors including film performance, adhesive performance, solvent resistance and environmental exposure. What this means for the buyer is greater elasticity, resistance to gasoline and prolonged ultraviolet exposure without deterioration of color quality. Recall those flames you painted on that muscle car back in the 1960s and '70s? The bottom line is that the attention to detail was meticulous, consuming hours and days to perfect. Yet today, visit a graphics shop and within hours, you can roll that same muscle car out of the shop draped in some pretty cool flame tricks.

It seems crazy to set judging standards for boxes, but the 1978-79 judging guide has established a baseline for judging teams. This study offers restorers further guidance when restoring or preparing for Top Flight. For example, examining the GM# 476282 label in **Figure 5**, we see a part number that has been made with stamp and ink pad. In contrast, the GM# 476283 label in **Figure 5** shows the part number produced by a dot matrix printer. In the years following 1978, the dot-matrix label is typical of service replacement parts as computers were integrated into production.



Original box with ink stamp versus dot-matrix printed part number

Figure 7 contrasts the size difference of an original decal box #476282 (5" x 5" x 12.75") compared to #476283 (4" x 4" x 14.375," a door-emblem service replacement). The lower box is the original box larger in height and width but shorter in length than the smaller service placement box. Configuration comes into play when judging box characteristics.

Judges and Team Leaders are all too familiar with the results of inconsistent judging and an owner claiming that it came from the factory this way even though he is the third owner of an obviously original Corvette. The suggested guidance would offer clear guidance and prevent field-judging conflicts where an owner who has an NOS box with GM# 476283 stuffed with a couple of restoration decals can score full points. An owner next door could have a complete original set along with original box and score full credit but leave doubt with the exterior team about the correct configuration.

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When judging 1978 Pace Cars, the topic of decals always generates more discussion among Pace Car enthusiasts than among judges. In Orlando, I teamed up with Brian Fox, a Pace Car aficionado. Other than dealers, how many guys do you know have owned three Pace Cars and Top Flighted two of the three? But what adds to his resume is that Brian's day job flies him across the country and deposits him at Corvette venues where he can find and study the 1978 Pace Car.

We threw a set of original decals up against the decals on the side of a 3,000-mile Pace Car to be judged the following day. After many studies, Brian's observation is that restoration decals appear to be shorter in length, have letter corners more defined with a crisp edge and show more metallic on *May 30, 1978* than an original set of door decals. This obvious difference piqued my interest to find an answer to the question why the difference. We learned that the graphics today are not what they were in 1978 and three basic questions emerged from our discussion:

1. How do thirty-year-old decals age?
2. How are new materials better than those used in the 1970's?
3. Should a restorer use repro decals for application versus originals?

To explore this further, I called Scotchcal maker 3M and Phoenix Graphix to gain some decal insights. See the sidebar *Graphics for All Generations* on the previous page.



Production decal box versus service replacement box

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