

# The '66 Corvette Challenge

## Part 3

### By the Numbers

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In the March/April issue of "*The SIDE PIPE*", I began a series of restoration and modification articles on my '66 Corvette, "*The '66 Corvette Challenge*". In Part 1 I covered the purchase of my '66 Corvette and as much of the history as I could unearth. You can easily reference this article on our chapters' website. I thought I would be farther along by now but life gets in the way.

In Part 2, in the September/October issue of "The *SIDE PIPE*", Diane and I spent last winter in Florida and the summer in Wisconsin where we are building a new lake home and my dream garage, the "Pat Cave". More on these projects later.

In Part 3, I am going to review the date codes and part numbers so you will understand the starting point for my project.

## Trim Tag



Style: B26 66 467

B26 = Built Tuesday,  
October 26<sup>th</sup>, 1965

66 467 = Model year 1966  
Corvette Convertible

Trim: 407BA

407 = Red Vinyl Interior

BA = Base ELC code from the start of production until December 1, 1965. This exception code eliminates the following options: A82 headrest seats, C07 auxiliary hardtop, A31 electric windows and M35 power glide automatic. My car has no headrests, an auxiliary hardtop, manual windows and a wide ratio four speed.

Body: S1316: The 1316<sup>th</sup> 1966 convertible body built in St. Louis

Paint: 972AA: Ermine White (my car was painted Rally Red in the 1990's but there are remnants of Ermine White in many locations throughout the car)

## Engine



*Engine Pad Stamp:* 6104070

6=1966 Corvette, 4070

Production number which  
matches the transmission and  
vehicle VIN.

Engine Code: F0914HT F=Flint  
Assembled, 0914= Sept 14,

1965 (Tuesday) HT=350HP Casting date of September 6, 1965 (Monday). Vehicle build date of October 27, 1965. (32nd working day)

Engine Casting Number: 3858174 Indicates 1966 350HP 327 and 300HP 327 Correct. Used in high horsepower and commercial truck applications. It was used interchangeably with Engine Casting Number 3858180

Engine Casting Date: 165 = September 6, 1965 (Monday) fits with the engine build date

### **Aluminum Intake Manifold**



Intake Casting Number: 3890490  
1966 Corvette 327CI  
350HP with a 9/20/66 casting date, correct for an L79 and this car.

## Right Cylinder Head



Right Head Casting  
Number: 3782461  
327CI 350HP for  
1966 with 2.02 intake  
and 1.60 exhaust  
valves

Date Code: F75 =  
June 7, 1965  
(Monday) Correct

## Left Cylinder Head



Left Head Casting  
Number: 3782461  
327CI 350HP for  
1966 with 2.02 intake  
and 1.60 exhaust  
valves

Date Code F85 =  
June 8, 1965  
(Tuesday) Correct

## Valve Covers



Casting Number:  
3767493 Casting  
Flaw in March of  
1966 so this is **not**  
correct as the car  
was built in  
October 1965

## Alternator

Part Number: 1100693 37A, 350HP 1966

Date Code: 5J29 – 12V Neg = September 29, 1965 Correct for  
this car

## Carburetor

Holley Carburetor: List# 3367= This is the correct list number for a  
1966 327ci 350hp engine.

Date Code: 1590 Correct **replacement** carb for a 350HP 327 built  
June 8<sup>th</sup> the 159 day in 1980.

Part Number: 3884505 – DA

Ink Stamp: 47050

I rebuilt the carburetor in December of 2013 using 68 primary jets, adding a secondary metering block with 76 jets, a new 135-4 diaphragm and a .28 acceleration pump nozzle. I also added a long yellow soft spring to open the secondary's sooner.

## Distributor

Part Number: 1111926 with a date code of 8 J 30 which translates to a 1969 Corvette 390/400 horsepower application built on October 30<sup>th</sup> 1968. It had a B1 vacuum can

## Engine Overview

While many of the stampings and casting numbers are correct for a matching numbers 1966 Corvette with an L-79 engine. I did not buy the car as a matching number car (sub \$40k in 2012). Even though the engine stampings are correct I don't believe this is the *born with* engine. The engine stampings look suspicious to me and the car has a 300HP tachometer, with a redline starting at 5300 RPM and finishing at 5500 RPM.

## Transmission



Tag Number: 3870354:  
300/350/390 HP Wide Ratio  
in 1966 - correct for this car.

Case: 6S104070: Model  
Year 1966, matches engine  
VIN Code - correct for this  
car.

Casting Number: 3865010  
used from 1965 to 1979.

## Transmission Date Code



Passenger Side  
Transmission Stamp is  
P1022 which translates  
to the Muncie Plant with  
build date October 22,  
1965 (Friday). I believe  
this is the original  
transmission

## Rear End



Code: AM 3  
23 65 is a 3:36  
ratio built on  
March 23,  
1965 with  
Positraction.  
The date code  
is 7 months  
before the car  
was built. It is  
doubtful this is  
the original  
rear end.

I had the rear end rebuilt in March 2014 and had a 3.73:1 ratio gear installed and a rebuilt positraction unit.

## Front End

In the fall of 2015, I disassembled the front end of the car and found it needed a refresh. I noticed that the ball joints were not original and I replaced them with new Moog HD ball joints. The passenger side A-arm had an early pre-1966 shaft and on the drivers side it had a late model C2 shaft. I replaced both shafts with new Moog off set (positive camber) A-arms shafts and slotted them 1/8 inch to gain more positive caster. I installed new Moog HD bushings.

I believe the car had been in an accident at some point in its history. It looks like the front of the car was hit and subsequently repaired based on the look of the inner fender fiberglass and the updated front end components.

I also discovered that the front spindles and rotors were not from a C2. They were C3 spindles and rotors with larger bearings and later model heavy duty steering arms using 1/2 inch bolts. The brakes calipers were later 1973 type with matching shields and caliper brackets. I rebuilt or replaced everything with Moog components and SKF bearings including new brake calipers and rotors. I used replaced the brake pad all around with Hawk HPS performance brake pads. In addition, all of the brake lines were replaced with braided steel hoses.

I hope the first three episodes of “The '66 Corvette Challenge” gives you an idea of the history, pedigree and my starting point for my dual purpose project. This Corvette is not perfect but it is a solid, rust-free Corvette with a nice well-worn interior.

In Part 4, I will specifically detail my plan for this car and the progress that Scott Pfuehler and I have made so far. I want it to

be a fun dual purpose Corvette inspired by some of the vintage Corvette race cars I saw at Fabulous Restorations in early 2020.

*Stay Tuned! For Part 4 of "The Corvette Challenge" where the fun begins...I hope.*

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