



## MR. Y2000

Email questions to: [c5dan@c5registry.com](mailto:c5dan@c5registry.com) with "Mr. Y2000" in subject line

### MR. Y2000, YOU ARE MY LAST HOPE!

**Q:** I have been a member since August 1998 and have owned several Corvettes over the years. I purchased my Torch Red Z06 in January 2003. I drive my Corvette as much as possible, as I live in east Tennessee near the Smokey Mountains. I'm fortunate that I live in an area where one can truly enjoy their Corvette to its fullest potential.

In January 2005, at about 30,000 miles, I started having an INTERMITTENT 'failure to crank' problem. My solution, when this occurs, has been to just hold the key over with the clutch in, and finally after 15-30 seconds (which seems like an eternity) for no apparent reason, it begins to crank and start. It is like the system is on a timer!

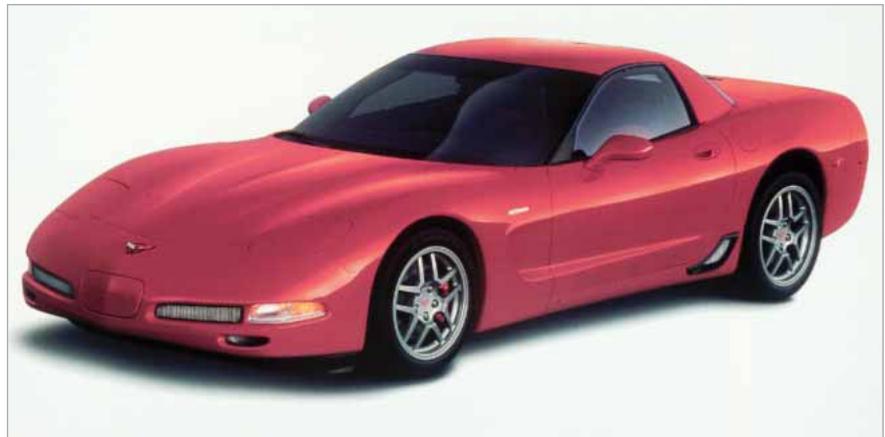
This intermittent situation has gone on since January 2005, for the last three years, and I now have 76,000 miles on my daily driver. As you can imagine, over the years I have contacted GM Customer Service several times, but they only refer me to a Chevy Dealer. The two local Dealers that I have been visiting with understandably say they can only diagnose the problem when it is occurring. In my frustration, I sent a letter to *Corvette Fever* magazine. Amazingly, my letter was published in their February 2007 issue (on page 76) in their *Performance Tips & Techniques* column, but their suggested remedies did not pan out.

I do have the GM Extended

Warranty, but the Dealers are not allowed to do "trial and error" repairs; so needless to say, I am very disappointed. One of my local Dealers told me that they can do ONE repair under the extended warranty to fix this problem, and they said they will do whatever I tell them; but if I guess the wrong fix, it is "too bad, so sad" for me! Even beyond the extended warranty, I just want to know what this darn three year problem really is and finally get it fixed once and for all. I have kept a log of every occurrence

to solving your intermittent starting situation. Please review the following recommendations.

1. We are sure you do not have a theft lock problem or your Z06 would not start after 30 seconds or so. Theft lock requires a three minute wait time between *no key* or *wrong key* input.
2. Clutch pedal switch is ruled out for the same reason as above.
3. Column lock is ruled out because you are not getting any messages on the DIC.
4. It appears the loss of signal is



over the last three years, and for 2007 it has occurred on average once a week. Sooner or later, though, it is not going to start and I will be *big time stuck!*

The Dealers have received NO help from their GM Service Tech contacts.

So, Mr. Y2000, YOU ARE MY LAST HOPE!

**Mr. Y2000:** Our Research Department was intrigued with your concern and was committed

between the Body Control Module and the starter. The BCM checks the clutch switch and the theft and column lock before sending a signal to the ECM to energize the crank relay and engage the starter. The question now becomes *where is the signal lost?* I don't know how mechanically inclined you are, but one sure way to know if the signal is getting to the starter is to run a jumper wire from the starter solenoid to a test

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lamp, or a light bulb, so it can be seen when you are trying to start your Z06. We suggest you find a six foot piece of wire and solder one end to the tip of an automotive bulb (we suggest you use a backup lamp bulb because they are big and bright) and solder another three foot piece of wire to the side case of the same bulb. Attach the long end of the wire to the starter solenoid that is energized when the crank signal is sent. Run the bulb up under the hood so you can see it from inside the vehicle and then run the other end of the wire on the bulb to a good ground. This will enable you to see if the crank signal is being sent to the starter when you first engage the key to the start position. Your results will determine your next course of action.

Are your Z06's battery cable ends possibly corroded? You see, when your vehicle sits for a while, corrosion gets imbedded and blocks most of the current. As you hold the key, the current "fries" the corrosion away and the engine starts. If the positive and negative battery cables have never been replaced, we suggest that you do so. A little safety tip is to disconnect the negative cable first and reconnect the negative cable last.

You could have an internal grid short that is only seen under load. We are assuming that the battery is not the original. If it is, RUN, don't walk, to the store and replace the battery immediately!

There could be interference between the starter and the flywheel. Has

the starter ever been replaced? If the starter starts to engage, but hits the flywheel or gets stuck on the flywheel, it will generate the type of failure you mentioned. Using the light bulb will verify if it is a starter or a BCM / ECM issue. I would leave the bulb and wire hooked up and monitor it until the car fails to start. While you are holding the key, waiting for the engine to turn over, check the bulb. If the bulb is glowing while you are holding the key and the engine is not turning over, then you need a new starter and solenoid. If the bulb is not glowing, then it is upstream and we need to work on a way to identify what module is not responding.

Please advise us of your results.

**Results Reported to Mr. Y2000:**

Thank you for your recommendations. Since January 2005 and for the last 47,000 miles, I have been micro engineering the problem of this no start condition. When I finally engaged your suggestions that I go to the first most logical step, the starter and starter solenoid, I found that the solenoid was intermittent!

As you suggested, over the weekend I rigged a test light to the "S" terminal of the solenoid and another test light to the output post of the starter. The test light showed that I always have power to the solenoid start post in the start position of the key switch; but in the failure mode (engine not turning over), the other test light shows I do not get any output until the engine begins to turn over and start. That is

the 15-30 second delay that has been my problem for the last three years! Also, there is no typical solenoid "click" in between, so I am sure that it is an intermittent solenoid failure, not the starter.

This was just TOO EASY! I guess it seemed a lot smarter to me to look for something more complicated and complex like an electrical snafu that I had been researching for years. If this troubleshooting methodology solution was a suggested solution before, I probably ruled it out as 'unlikely and illogical', but in retrospect, of course, it is totally logical!

I guess the range of symptoms was distracting, and I probably wanted to jump ahead and deal with something I believed was more complicated!

Thanks, I will have the dealer replace the solenoid!

*Editor's Note: The month long discussion above between a long-time member and Mr. Y2000 certainly brings home the point that just because we read on the internet or hear about symptoms or problems that everyone else's C5 or C6 seems to have, it doesn't take long for us to believe that our Corvette is involved within the same scenario. This really brings home the point that your C5 or C6 is certainly NOT always experiencing everything you read or hear about.*