



Search Community 

Home > Forums > Chevelle Mechanical > **Engine** >

Relation between dieseling and timing

[→ Jump to Latest](#)

 21K views  8 replies

D

davlac89  Discussion starter

146 posts · Joined 2012



#1 · May 13, 2015

Hi,

So my car has been dieseling when I shut it off. At first I thought it might have been old gas but I just refuelled it and it still does it. So I read there was a relation between dieseling and timing, but it seems to me that when you shut the car off, no matter whats the timing, there should be no more sparks anyway, so why is there a relation between the two? An explanation would be appreciated!

Thx

1968 Chevelle 396 (bored 402) / 4-spd T-10 / 3.73

 Reply  Like



Sort by Oldest first ▼

C

crazy canuck

1034 posts · Joined 2003



#2 · May 13, 2015

You could try lowering your idle speed and turning out your idle mixture screws 1/4 to 1/2 turn to fatten it up a bit. This has worked for me in the past. I'm sure you will get more indepth answers soon.

 Reply  Like



**jeff swisher**

5919 posts · Joined 2008



#3 · May 14, 2015

Dieseling or run on is the result of the fuel being used auto igniting .

In other words there is enough heat and air in the combustion area to light off the fuel being used.

Lower octane gas will ignite quicker or has a quicker flame speed or more BTU of energy and therefore will cause run on easier than higher octane.

But we also need air mixed with the gasoline to get this to make FUEL.

You do not need spark if the conditions are correct. as you know.

The cure is to kill the gasoline flow or air flow.

In the carburetor world killing the air is easier.

Closing the throttle plates kills air.

Too low of initial timing will make the engine idle low and will make a person raise idle speed by opening the throttle more.

Well opening the throttle more allows that air to get into the engine.

Higher initial timing will allow you to close the throttle more.

Screwing idle mix screws out to have higher idle will also allow you to back off the idle speed with the closing of throttle blades.

Sometimes heat is high enough or conditions are perfect to light off the mix with the smallest opening.

In this case I have installed a solenoid to set idle against.

When you turn off the key power drops out the solenoid and the throttle slams completely shut killing all air and the engine instantly dies.

Confused enough yet..



Reply



Like

**Robins5**

8431 posts · Joined 2005



#4 · May 14, 2015

In 1971 Chevelles, This is how Chevrolet would stop 307 cars from Dieseling. (Dieseling = Fuel in the combustion chamber is ignited by HEAT & COMPRESSION " Without the need of a spark.

71 owners may know this. Under the glove box you will find relays. What do they do? When you shut the 71 -307 Chevelle ignition " OFF " and pull the key out of the column, LISTEN REAL CLOSE, WHY?

You will hear some " CLICKING NOISES " under the glove box,,,,GEE whats that? When the key is out and in your hand. This starts in motion the G.M. 1971 ANTI diesel system

the A/C clutch on the engine, Without the engine having any source of " Ignition power " The A/C compressor is now ENGAGED..... The A/C compressor is now trying to do its job by pumping R-12 Freon. With the compressor ENGAGED and trying to pump freon, This action or " Engine Load " will cause the engine to STOP rotating, And or " Dieseling ".

Another way to stop a car from " Dieseling ", TRUST ME this AINT the right way to do this, I have done it many times in my EARLY years with my one owner LS-5 .M-22. At the same time you shut the key off, DUMP the clutch in High Gear.

To avoid all of the above problems, Also the possibility of DESTROYING your engine, NO not hurting but, DESTROYING your engine. Get your Ducks in the right order.... Fuel - HI-Test or Cheeeeeep Stuff,,Timing,,Compression,,Air Temp,,Humidity,,Factory items missing from engine bay (fan shroud, fan blade?-Etc., Etc.) Water temp.= engine bay heat?.

It is not Mission Impossible,, One or two items may be out of order, Get some help, Find a gearhead.

Good Luck.

Bob

1970 SS LS-5/M-22 El Camino- Org. Owner-AACA 2016-Senior Grand National Winner---MCACN-GOLD-2013
1970 (FRAI ID) SS 468 Station Wagon - Driver

 Reply  Like



jeff swisher

5919 posts • Joined 2008

#5 • May 14, 2015

I never knew about the AC thing.. Pretty sneaky really.

My 78 nova had 245psi cranking pressure and this was checked with the throttle closed!
over 12.0 compression with iron heads 54cc chambers and 270H comp cam 224@.050

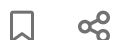
When I turned the key off it did not even act like I turned it off continued to run like normal.
This was with Sinclair 93 octane and back when the 91 and 93 was orange or pink in color.
It would also do it when I ran TEL in it or TEL and other boosters that make your hair fall out.

The solenoid was the only fix other than idling it down to 650 rpm.

And I do not like the low RPM idle.

Again the AC deal is a neat bit of information. Thanks Bob

 Reply  Like



davlac89  Discussion starter

146 posts • Joined 2012

#6 • May 14, 2015

Thx for the answers! So in the end, when the keys off, timing does not play any role in dieseling? My idle is around 800ish, the idle mixture screw is not the screw to change the idle speed?

 Reply  Like



B

bradley67

 1264 posts · Joined 2012

#7 · May 14, 2015

The role timing plays is - by increasing advance spark timing for idle rpm increase you can then close your carb butterflies more which will bring idle rpm back to where it was initially - in effect choking off or giving less air supply which should help lessen run on.

67 SS BBC

4 11's

 Reply  Like



J

jeff swisher

5919 posts · Joined 2008

#8 · May 14, 2015

Idle mixture screws are in the front of the carb or a holley will be in the side of the metering block they do not have any linkage attached nor do they move any linkage.

The screw that is the idle speed screw will move the throttle linkage

 Reply  Like



Z

zeke67

 4636 posts · Joined 2005

#9 · May 14, 2015

Retarded timing will make an engine hotter at idle. Which can create these hotter spots in the combustion chamber that can aid in auto ignition. As cars got into the emission years of the 70's, to handle NOx creation which happens at higher cylinder temperature, timing got retarded. In addition to the AC relay trick, which is elegant, some cars use a solenoid on the throttle that would fully close the throttle blades with the ignition off.

Zeke

 Reply  Like



This is an older thread. you may not receive a response. and could be reviving an old thread. Please consider creating a new

 **B** *I* U ~~S~~  **A** **T**     ...       

 Post Reply

Related Threads

?

?

?

?

?

[Home](#) > [Forums](#) > [Chevelle Mechanical](#) > **[Engine](#)** >

[Home](#) [About Us](#) [Terms of Use](#) [Privacy Policy](#) [Help](#) [Business Directory](#) [Contact Us](#)
| [Grow Your Business](#)

When you purchase through links on our site, we may earn an affiliate commission, which supports our community. The Fora platform includes forum software by XenForo. VerticalScope Inc., 111 Peter Street, Suite 600, Toronto, Ontario, M5V 2H1, Canada

