



How to optimize the timing of your 1965-1969 Chevrolet Corvair ignition

Optimal timing of an internal combustion engine is needed to maximize power, efficiency and engine life. This guide will help make sure that timing is ideal.

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INTRODUCTION

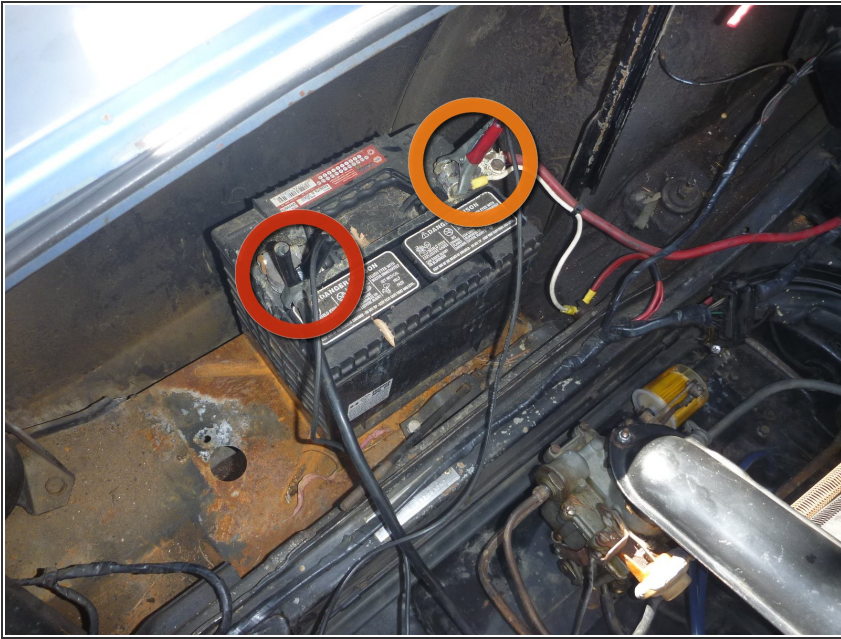
In this guide, we will walk you through how to optimize the timing of your engine ignition. This is critical to ensure the lifetime use of your engine. If this is done improperly, the engine can be damaged to the point of destruction.



TOOLS:

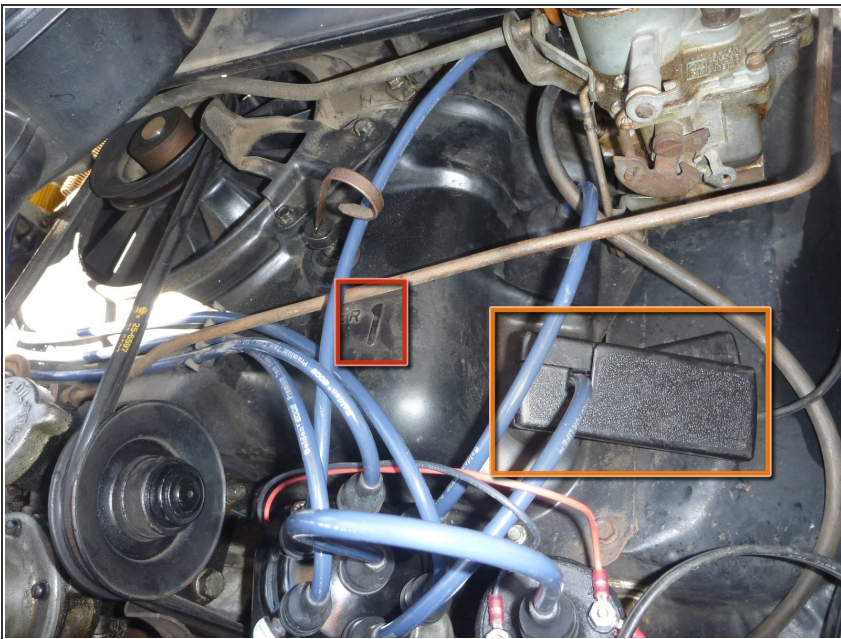
- [9/16" Wrench](#) (1)
 - [Stroboscopic Timing Light](#) (1)
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Step 1 — How to optimize the timing of your 1965-1969 Chevrolet Corvair ignition



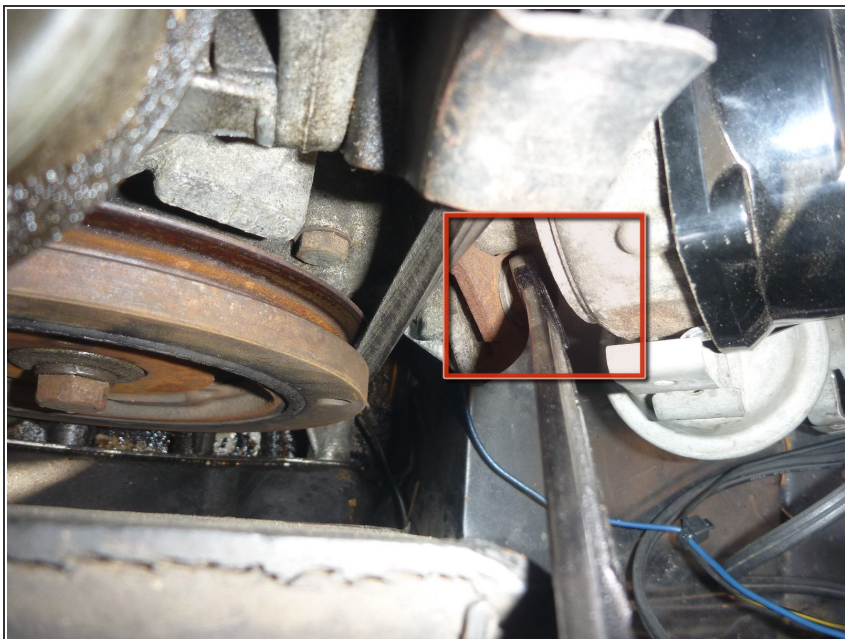
- Attach stroboscopic timing light to the battery
 - Negative (black) lead attaches first
 - Then attach the positive (red) lead

Step 2



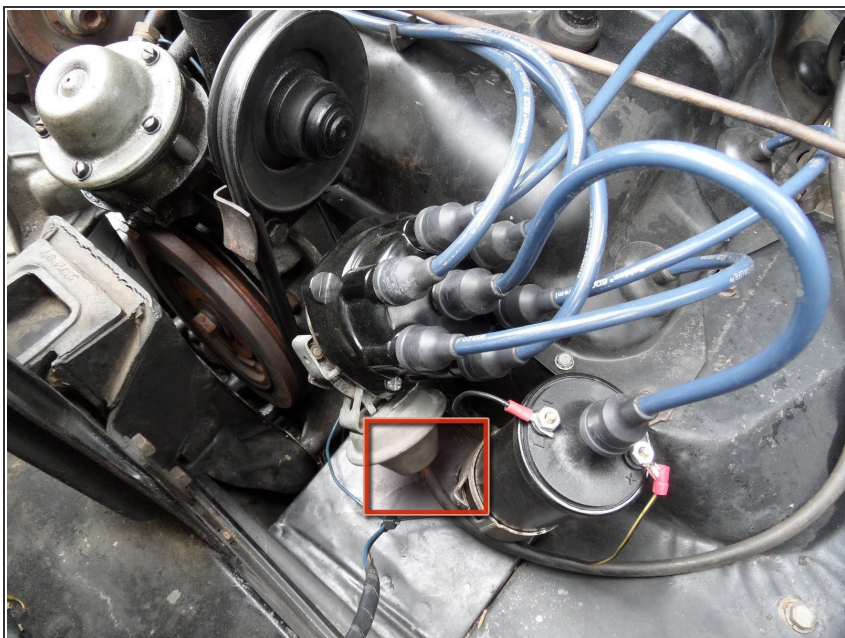
- Attach stroboscopic timing light's current sensor to the wire leading to Cylinder #1
 - You can identify the cylinder by the printed number.
 - The current sensor attaches around the wire leading out of the cylinder.

Step 3



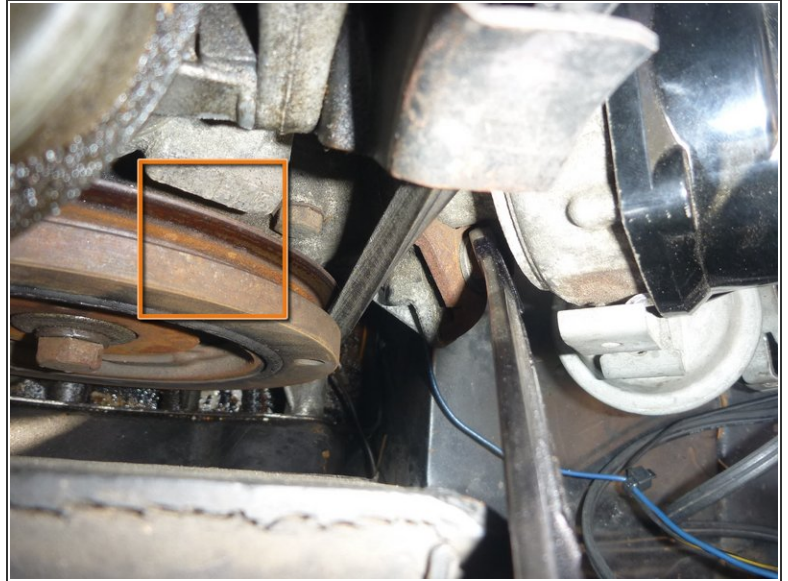
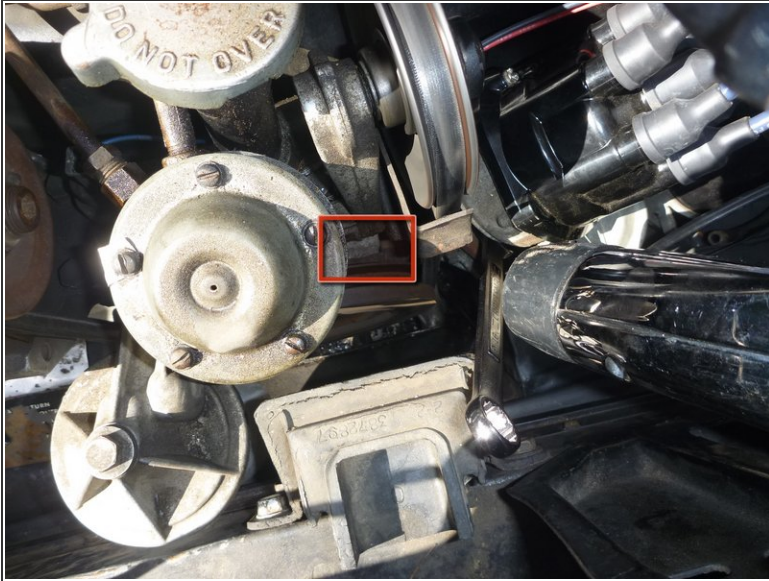
- Using a 9/16 inch wrench, loosen the distributor adjustment bolt and leave the wrench in place

Step 4



- Start the engine
- Remove the vacuum advance hose from the carburetor and plug it
- You are now ready to begin reading the timing

Step 5



- Point the timing light at the timing scale
 - The light will strobe when the cylinder fires and a mark on the crank shaft pulley will become visible.
- The mark will appear next to the timing scale. The mark next to the timing scale indicates where the timing is currently set.
 - There are numbers on the scale, although they may be faded, and your timing value will likely be in between the marked values
 - The scale contains major marks at 0, 8, and 16 with minor marks at 4 and 12 Before Top Dead Center (BTDC)
 - All models will have differing timing values depending on the year and transmission.
 - Our model-year was 1965 which has an ideal timing value of 14 degrees BTDC (in between 12 and 16 marks)
 - For other model-years, consult the list of timing values provided [here](#)

Step 6



- Now that you know what your timing is currently set to, and you have looked up what it should be set at, you are ready to adjust the distributor to correct any differences.
- Grab the distributor and, while watching the timing mark as explained previously, rotate it **slowly** to one side or the other. Continue rotating until the timing mark is in the correct position. Refer to step 4 for how to read the timing mark.
 - ⚠ You must turn very slowly, otherwise you can go outside of the acceptable timing range and severely damage your engine.
- Carefully tighten the 9/16 locking bolt, and remove the wrench, making sure not to accidentally rotate the distributor or contact the spinning pulley and belt.

Your timing is now set correctly! To finish, simply shut off the engine, reconnect the vacuum advance hose, and disconnect the stroboscopic timing light. If you have points, the timing should be checked and set every few thousand miles. Replacing your original points unit with an [electronic ignition](#) has many benefits, such as nearly entirely eliminating the need to re-time your ignition!