



Rockford Model T Ford Club Newsletter



February 2024

MEMBERS WORKING FOR YOU:

President	Wayne Orrison
Vice President	Steve Kindell
Secretary	Deb Werner
Treasurer	Jay Larson
President Emeritus	Aaron Crandall
Directors	Bill Werner
	Craig Sheridan
	Duane Bunton
	Dave Lantz
Newsletter Editor	Kurt Duesterhoeft
Little Hershey	
Swap Meet	Dave Lantz
Sunshine Persons	Duane & Cathy Bunton



PURPOSE OF THE CLUB

The purpose of this chapter is to promote the interests of the public in the preservation and restoration of antique autos, particularly the Model T Fords, their accessories, lore, and literature.

AT A GLANCE – CALENDAR OF UPCOMING CLUB EVENTS

<u>Date</u>	<u>Time</u>	<u>Event</u>	<u>Location</u>
Saturday February 17	11:30 a.m.	Model A Club Soup Luncheon (See page 4)	Central Christian Church 6595 Guilford Rd. Rockford
Wednesday March 6	7 p.m.	Monthly Meeting	United Lutheran Church 3630 N. Rockton Ave.
Sunday April 28	Noon	Annual Banquet	Thunder Bay Grille

Note: There will be no meeting in February. Our regular monthly meetings will resume starting Wednesday, March 6th.

Those celebrating this month:

Birthdays

Dean Wanfalt	2/24
Kathy Larson	2/26





The Prez Sez (Monthly Musings and Random Ramblings)

Happy New Year everyone. I sure hope everyone enjoyed some aspects of the Holiday Season, whether that being that Santa was good to you or that you had some great family time over the holidays and that 2023 ended well for you. I'm sure looking for a super 2024 and all the fun we will have touring and participating in events.

What will it take to make our Club's 2024 great? That's easy, just your enthusiasm and participation.

Below is the 2024 EVENTS/TOUR CALENDAR and I am asking that you check out and to sign up to Chair and/or Co-Chair an Event or Tour. Never done that; no problem - it's easy. Several of us have done these things and we will be glad to help you. If you have suggestions as to something to add to the calendar, please let me know ASAP so we can get it out there. This calendar includes many of the "standard tours and events" we've enjoyed these last few years, but it also includes some we have lost or stopped doing as well.

So, read through the list and decide which one or ones you want to be involved with and let me know as soon as you can which events you want to chair or help with so we can get a jump on 2024. Remember, you don't have to be the chair person or co-chair person; you can just help out, which is a good way to get to know the particulars of that event or tour. If you don't know what the tour or event is, just call and I will give you the low down. Also remember, you can be reimbursed for reasonable initial expenses incurred setting up a tour or event, so don't let spending a little gas money stop you from volunteering to lay out or help lay out a tour or set up an event.

I hope we can have our first event ready to go by the March Newsletter. I'm looking forward to hearing from you.

Have a great day.

Wayne

2024 PROPOSED CALENDAR OF EVENTS BY MONTH

Date	Event	Time	Location	Chair/Host
January	no Meeting/Events			
February	no Meeting/Events			
March 6 th	Meeting	7:00 p.m.	United Methodist Church 3630 N Rockton Rd	Craig Sheridan
March 23 rd	Chili Cook-Off	4:00 p.m.	United Methodist Church 3630 N Rockton Rd	Craig Sheridan Wayne Orrison
April 3 rd	Meeting	7:00 p.m.	United Methodist Church 3630 N Rockton Rd	Craig Sheridan
April 21 st	Dust Off Tour	TBD	TBD	TBD
April 28 th	Annual Banquet	TBD	Thunder Bay Grille, Rockford	Sheryl Stier
May 1 st	Meeting	7:00 p.m.	United Methodist Church 3630 N Rockton Rd	Craig Sheridan
May 4 th	Cars & Coffee Car Show	TBD	Katie's Cup, Rockford	Dave Lantz
May 16 th	Little Hershey Setup	TBD	Boone County Fairgrounds	Dave Lantz

May 18 th	Little Hershey Swap Meet/Car Cruise-In	TBD	Boone County Fairgrounds	All hands!
May 27 th	Rockford Memorial Day Parade	TBD	Downtown Rockford	Steve Kindell
June 2 nd	Model A Day	TBD	Clinton, WI	Dean Wanfalt
June 5 th	Meeting	7:00 p.m.	Dickson Restoration 2571 Park Ave, Beloit, WI	Tim Dickson
June 23 rd	Progressive Tour	TBD	TBD	Wayne Orrison
July 4 th	Independence Day Parade	TBD	Kirkland, IL	TBD
July 13 th – 20 th	MTFCI International Tour		Cadillac, Michigan	
July 28 th	Landmark Tour	TBD	TBD	Wayne Orrison
August 3 rd	Tipsy History	1 - 7 p.m.	Midway Village Museum, Rockford	Kurt Duesterhoeft
August 7 th	Meeting	7:00 p.m.	United Methodist Church 3630 N Rockton Rd	Craig Sheridan
August 10 th	Sycamore Steam Show	TBD	Sycamore, IL	Tim Wanfalt
August 25 th	Surprise Tour	TBD	TBD	All
September 2 nd	President's Tour	TBD	TBD	Wayne Orrison
September 4 th	Meeting (Brat Night)	6:00 p.m.	13678 Sundance Tr, Rockton, IL	Wayne Orrison
September 15 th	Beloit Autorama Car Show	TBD	Preservation Park, Beloit, WI	TBD
TBD	Overnight Tour	TBD	TBD	Joe Maurer
October 2 nd	Meeting	7:00 p.m.	United Methodist Church 3630 N Rockton Rd	Craig Sheridan
TBD	Fall Tour	TBD	TBD	Gene Clifton
November 6 th	Meeting	7:00 p.m.	United Methodist Church 3630 N Rockton Rd	Craig Sheridan
December 7 th	Club Christmas Party and meeting	noon	United Methodist Church 3630 N Rockton Rd	Sheryl Stier
January 1, 2025	New Year's Day Tour	TBD	TBD	TBD

Save the Date

Our **annual banquet** for 2024 will be a buffet brunch at Thunder Bay Grille in Rockford on **Sunday, April 28th**. You won't want to miss it!





Soup's on with the Model A club!

In the spirit of camaraderie and a shared interest in old Fords, the Rock-ford A's Model A club is inviting us to their annual soup luncheon on Saturday February 17th at Central Christian Church, 6595 Guilford Road (just west of Midway Village Museum). The Model A club will provide a variety of delicious homemade soups for the tasting. They will also supply plastic tableware and bowls (or bring your own). The soup lunch is a very popular and well-attended event. Last year nearly 100 people attended. It is family-friendly and everyone is welcome (spouses/kids/grandkids). This is a wonderful opportunity to rekindle past friendships or make some new ones. Plan to arrive at 11:30 a.m. Bring a

dessert to pass and your own beverage. This event is a great way to beat the winter doldrums and enjoy some hot soup and warm fellowship.

If you plan to attend, please let [Kurt Duesterhoef](mailto:kurt.duesterhoef@rockfordmodelaclub.com) (815/874-5102) know so we can get an approximate headcount.

Calling all Cooks!

We are planning a future "Cooker" tour. Unlike most tours where we go somewhere to eat, on this tour we bring the eats along and cook as we drive using manifold cookers, just like they did back in the day. If you have a manifold cooker, start digging through those recipes to see what suits your fancy. Here's some more recipes to whet your appetite, courtesy of the Casual T's club:

Nutty Chicken

- 4-6 skinless, boneless chicken breasts
- 1 pkg. Lipton onion soup mix
- 1 can jellied cranberry sauce
- 1 small jar pine nuts

Fill in bottom of cooker with crumbled foil. Put double layer of foil in cooker and spray with Pam.

Place onion soup mix in bottom of foil. Place chicken on top of onion soup mix.

Cover top of chicken with slices of cranberry sauce and the pine nuts.

Wrap the top of the chicken with foil, tightly.

Bake for 1 1/2 hours or 45 miles.

Greasy Fan Belt Goulash

- 1lb. ground chuck
- 1 pkg. frozen Mexi-corn
- 1 pkg. frozen potatoes O'Brien
- 1 jar mild salsa

Combine ingredients in a zip lock bag. Squish until mixed.

Line the cooker with aluminum foil and squeeze in the contents of the bag.

Cover with top & drive 50 miles.



The Winter Swap!

Winter Parts Swap



Hosted by the Illinois Region MARC

All Makes and Models are welcome

Clean out your garage and attic

Admission \$5 Plenty of free parking

Friendly Ford in Roselle Illinois

333 E. Irving Park Road

Sunday March 17th, 2024

8 AM til 1 PM

For Swap Spaces

Contact: Nick Clancy

PH: 224-500-1720

nick.clancy@yahoo.com

Coffee and Donuts

Lunch will

be available

For Swap Spaces

Contact: Gene Levin

PH: 847-754-7224

ezi3517@comcast.net

Do you need
parts for your
project?

FRIENDLY


Do you need to
sell that stuff in
your garage?



**To all Vendors - We are offering selling spaces at no charge to you!
Please call Nick or Gene for a reservation so we know you are coming! Thank YOU!**

**For more info call Ken Ehrenhofer 630-697-3906
spaces are 10x10 - bring tables and chairs**

The Evolution of the Automotive Ignition System from the Model T to Modern Times (and back again?)

By Kurt Duesterhoeft

Over the last 100+ years the automotive ignition system has seen numerous basic incarnations. But the end goal has always remained the same – develop a high voltage across the spark plug electrode causing an arc to jump the gap, igniting the fuel/air mixture in the cylinder. The voltage needed to fire a spark plug is substantial – many thousands of volts. The ignition system’s job is to convert a low voltage from a battery (or magneto in the case of early cars such as the Model T) to the very high voltage needed by the spark plugs. Every ignition system consists of a low voltage side and a high voltage side. Understanding which side the components reside on tells us a lot about how the system works.

We’ll start with the Model T ignition system shown in Figure 1. The timer is a rotary, mechanical switch driven by the camshaft. As the internal roller or brush makes contact with each of the four segments in the timer cover, an electrical

connection is made to one of the four coils. The timer, as the name suggests, is responsible for the timing of the system. Driven by the camshaft and adjusted with the spark control lever, the timer determines which coil to fire and when. The coils take the low voltage from the battery or magneto and boost it up to thousands of volts via the opening and closing of the points. The points, condenser, and primary winding of the coil are all on the low voltage side, as is the timer itself. The secondary winding in the coil as well as the spark plugs and plug wires are all on the high voltage side.

The Model T ignition was also multi-spark. That is, the spark plug would repeatedly fire as long as the timer was making contact and there was sufficient voltage available from the battery or magneto. When operating from a 6 Volt battery, the spark plug would fire about 200 – 250 times per second, or once every 4 to 5 milliseconds. When

operating from magneto, the spark plug would fire four times per combustion cycle. The higher the rpm, the quicker the plug fired. At 500 rpm, successive firings were about 7.5 milliseconds apart. At 2000 rpm, successive firings were less than 1.9 milliseconds apart. All Model Ts used this system with only minor tweaks from 1909 to 1927.

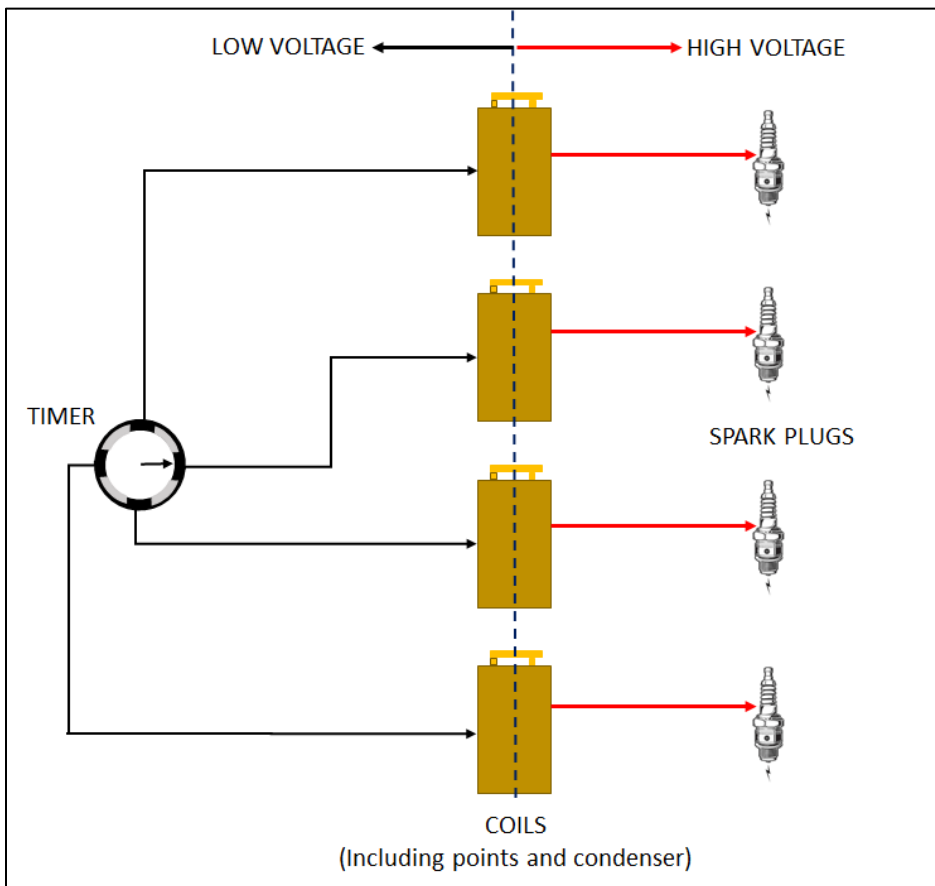


Figure 1 Model T Ignition System

In 1912 John Kettering developed the Breaker Point Ignition system shown in Figure 2. When the Model A came along in 1928, Ford adopted this system which would be used across the industry for the next 40 plus years. Eventually vacuum or centrifugal advance would replace the manual spark adjustment lever, but electrically the system would remain the same until the 1970's. In this system, rather than having dedicated points, condenser, and coil for each cylinder like the

Model T, there is only one coil, one condenser, and one set of points that are now "shared" by all the cylinders. This was accomplished by moving the rotary switch from the low voltage side to the high voltage side and changing its name. Rather than calling it a timer, it was now referred to as a distributor because it distributed the high voltage to each of the spark plugs in turn. The timer cover became the distributor cap and the brush or roller became the rotor.

In this system the points are driven mechanically by the camshaft and they fire for each of the cylinders instead of just one. This system gave the Model A some advantages as well as disadvantages compared to the Model T. Now there was

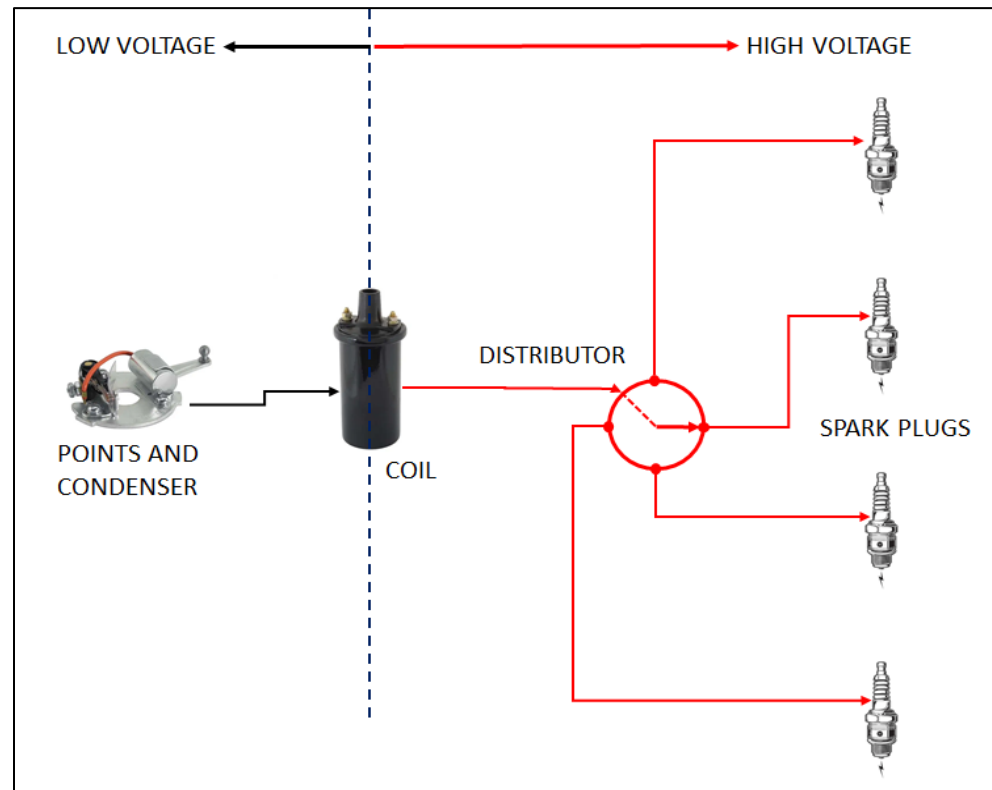
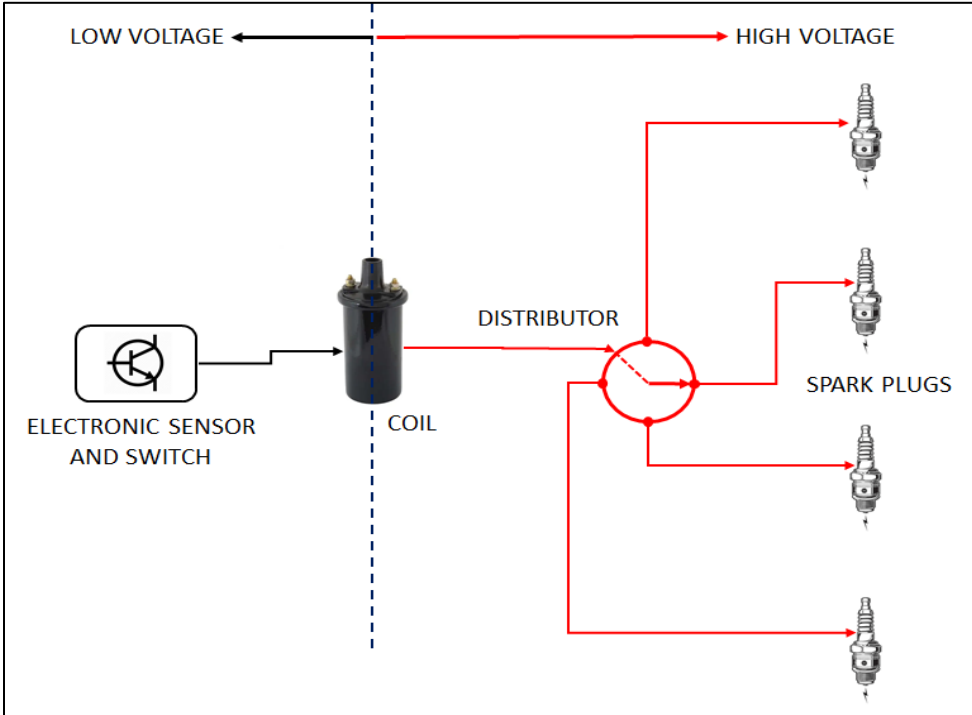


Figure 2 Breaker Point Ignition System

only one set of points to adjust instead of four. This made things simpler and made the engine run more consistently since all the cylinders were now treated to the same spark timing. But if the points or coil failed, the engine wouldn't run at all since you lost all the cylinders instead of just one. The distributor also had a unique distinction compared to the Model T timer. The distributor was non-contact. That is the rotor in the distributor never actually touches the contacts in the distributor body. It only has to get "close" and the high voltage will jump the gap and fire the plug. In the case of the Model A, "close" was 0.025 inch. Making it non-contact eliminated the friction and wear that was seen in the Model T timer.

The next break-through was adopted around the 1970's. Electronics had advanced to the point where the points and condenser could be replaced with electronic components. This Electronic or Breakerless system is shown in Figure 3. In

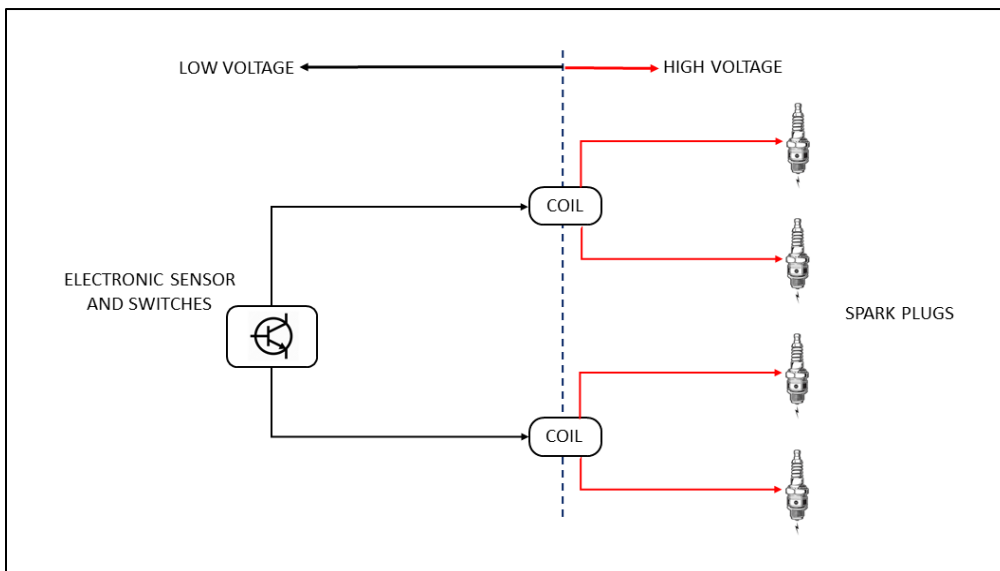
this system the camshaft position is measured with a sensor and the coil is fired using a solid state switch, such as a transistor. This system eliminated the need to file, adjust, or replace the points. The rest of the system was basically



unchanged. Today this upgrade is popular with classic car owners as aftermarket electronic components can be easily exchanged for the stock points and condenser. And since these components can reside under the distributor cap and out of sight, the car retains its stock appearance.

At this point, the only “mechanical” component left in the system was the distributor. While the distributor was non-contact, the distributor cap and rotor were still subject to deterioration from internal arcing. This was eliminated with the advent of the next system known as Waste Spark or Wasted

Spark system, as shown in Figure 4, which made its way onto the automotive scene in the 1990’s. As you can see, this system looks substantially different than its immediate predecessor. The distributor has been eliminated and the number of coils has been increased. In this system there is one coil for every two cylinders. One of those cylinders is on



the compression stroke, the other is on the exhaust stroke. The coil fires both spark plugs simultaneously. The plug firing on the exhaust stroke produces no power and is thus “wasted”. Also, this system did not need to measure camshaft position, only crankshaft position, to determine when to fire the plugs.

Figure 4 Waste Spark (Distributorless) Ignition System

Most modern cars use the Coil On Plug (COP) system shown in Figure 5 which has been around for the last 20 years or so. Here the high voltage spark plug wires have been eliminated. This system borrowed a page from the Model T design

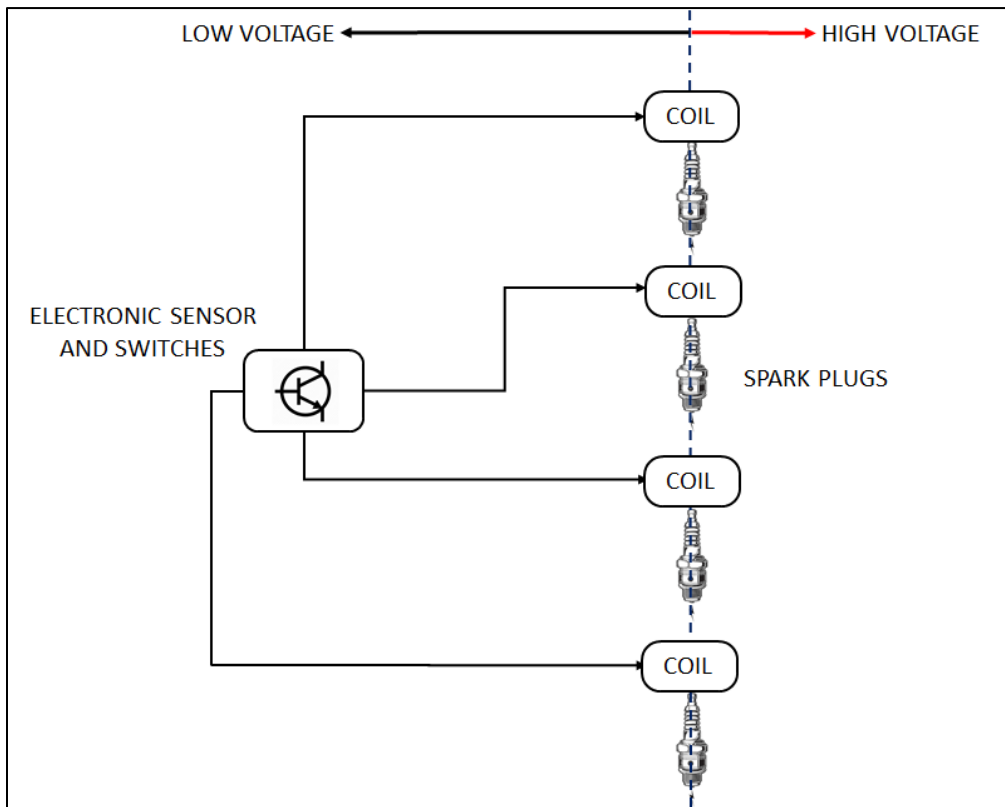


Figure 5 Coil on Plug Ignition System

book and went back to having a dedicated coil for each spark plug. And the electronics act just like the Model T timer, deciding which coil to fire and when. Except now the coil resides right on top of the spark plug giving the system its name. Eliminating the spark plug wires increases the system's reliability. Spark plug wires had to be periodically replaced. Over time the insulation around the wire core could break down, develops cracks, and wires could start arcing to ground or to each other, especially when wet, causing the engine to misfire. The classic method of detecting this was to run the engine at night in a dark area with the hood up. If you could see bluish-white arcs dancing around the wires you

knew some new plug wires were in your future. In the Coil On Plug system there are still wires going from the electronics to the coils. These wires carry a voltage pulse of around 300 volts which is created by the electronics to the coils. And while this voltage is substantially higher than the 6 volt or 12 volt battery voltage, it is still significantly lower than the voltage at the output of the coil. For this reason "low" voltage wires can still be used between the electronics and the coils. These wires don't suffer from insulation break-down or open circuits the way the high voltage spark plug wires did.

Like the Model T, some COP systems are also multi-spark. The electronics can fire the plug multiple times per combustion cycle. There are some advantages to having multiple sparks, especially when operating the engine under very lean conditions. However, modern electronics can repeatedly fire a spark plug more than 10 times faster than the Model T ever did.

Although a lot of advancements have been made since the Model T roamed the roads, it is amazing that today's state of the art technology is reminiscent of the Model T ignition system, except with modern electronic components replacing the old mechanical ones. Everything old is new again!