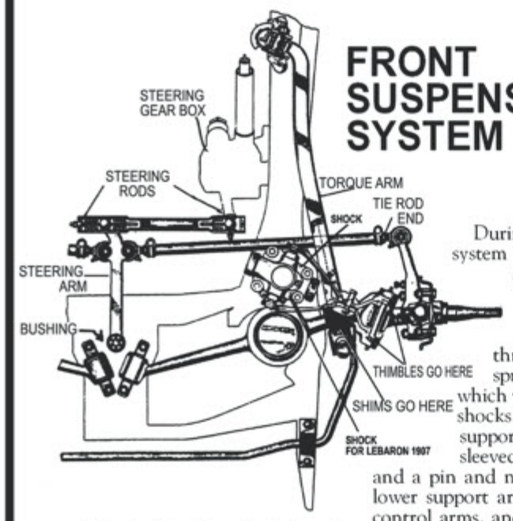
# ALIGNING A 1941 PACKARD With Safe-T-fleX

by Bill Johnson, *Publisher*




## FRONT SUSPENSION SYSTEM

During the '30's, many of the car companies were working on steering system innovations, converting from the straight-axle to independent suspension, which provided better handling and smoothness of ride. Packard introduced the Safe-T-fleX suspension system in 1935 on their new Junior Series 120, 8-cylinder cars, then added it to the Senior line in 1937; the Super 8's and 12's, continuing through 1942 on the non-Clipper cars. Safe-T-fleX was a front coil spring, king pin system, the left and right upper support arms of which were attached to each of the front Delco hydraulic shocks. These shocks were bolted to the left and right frame rails and the wheels supports were attached at the shocks by way of a rubber-and-metal sleeved bushing with a bolt through the top end of each wheel support and a pin and needle bearing/bushing at the wheel support's lower end at the lower support arm. Left and right torque arms attached forward at the lower control arms, and rearward near the cowl area at the bottom of each frame rail via a rubber ball bushing 2 1/2" in diameter, at the end of each torque arm, held in by a cover plate. This setup was designed to give protection to the alignment of the front wheels, and prevent the front end from twisting in the event of a rear-end collision. The steering system was also re-designed to include a central control lever that conformed to the geometry of the new suspension system. We rebuilt this system on our 1941 Packard 180 LeBaron Sport Brougham.

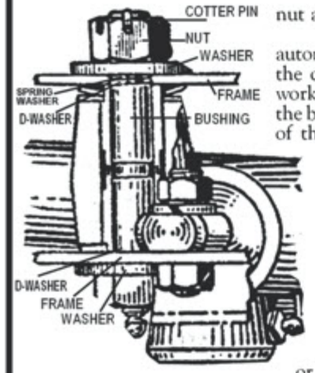
Our first test drive, before any adjustments had been made, revealed three problems: the first being "wandering", a steering wheel that wouldn't right itself after cornering, and, in a hard right turn, the rear of the right front wheel scraped the torque arm, although in a hard left turn, the rear of the left front wheel cleared the torque arm by over 1". We decided to do some alignment basics at our shop.

Before we started, we knew that all of the front end components had been restored and were not bent, and the front bearings were packed and correctly set. We began with the Toe-in. This is the adjustment of the front wheels, so that the distance between them is less at the front than at the rear. Toe-in is usually set after the Camber and Caster adjustment is done, but we wanted to rough it in now to get an idea of how all of our new parts were going to line up. We put the car on the lift, then put a piece of masking tape in the center of each front tire, drawing a line on the tape exactly in the middle of the tire tread. Using a measuring tape, we measured the distance from line to line, then rolled the tires around 180 degrees and measured from the back side. You can do this with chalk, holding it stationary in the center of the tire, then spinning the tire around, so that the chalk makes a center line all around the tire, but the tape system seemed a little more precise. Our Toe-in measurement was about 2" off! To adjust this, we loosened the clamps on the tie rods, then rotated each one while checking our Toe-in distance. (Rotating the tie rods lengthens or shortens them, depending which way they are turned.) We set our Toe-in about 1/16" less in the front.

Packard's Toe-in specification is 0 to 1/16", measured at or as near hub height as possible. We also re-checked our wheel scraping problem. This time, when we cut the wheels to the right, the rear of the right tire cleared the torque arm by 1" and the same on the left wheel. Both wheels had a good clearance in the front. It's also a good idea to check the wheels for trueness. A bent wheel can scrape the frame sporadically as it turns, mimicking an alignment problem.

With the Toe-in done, it was a good time to finish our steering arm assembly. A piece called a "Belville" (spring) washer had come up missing. Our buddy Ron Carpenter found one for us and sent it, along with installation instructions. (You've got to love the hobby!) The steering crank (arm) is mounted with one bolt and bushing in the center of the front crossover frame. It allows the arm to pivot. The mounting bolt components are: Main bolt with grease fitting and fixed nut at bottom, Flat washer, D-washer, Bushing, D-washer, Spring (or Belville washer--points upward), Flat washer, Castellated






nut and Cotter pin.

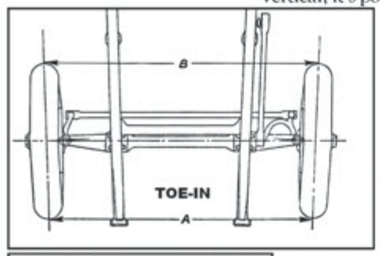
The spring washer is crucial to the assembly because it automatically pre-loads the bushing and steering crank. Installing the cotter pin in the top of the bolt is difficult, due to the tight working space. We found that making a mark at the bottom of the bolt, in line with the cotter pin hole at the top, made installation of the cotter pin a lot easier. We were also able to adjust the steering rods, located at the end of the steering gear. First adjust the one at the steering gear end of the drag link by bottoming it out, then backing it off one full turn. Then back off the one on the opposite end two full turns.

All of our steering parts appear to be aligning up and working smoothly. We are now ready to take the car to the alignment shop to precisely set the Caster/Camber and re-set the Toe-in.


NOS STEERING ARM BUSHING ASS'Y

Here's how they will set the Caster/Camber:

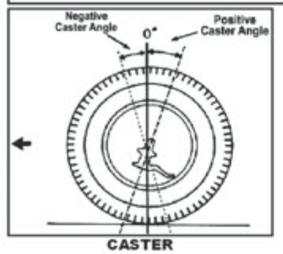
CASTER: Is the backward or forward tilt of the steering pivot. In other words, it's the tilt of the king pin or ball joint as seen from the side of the car. When the support arm tilts backward from vertical, it's positive. When tilted forward from vertical, it's negative. Its purpose is to improve





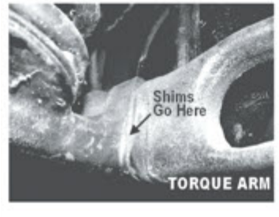
FINDING CENTER OF TIRE


TOE-IN MEASUREMENT



CASTER


SHIM



TORQUE ARM

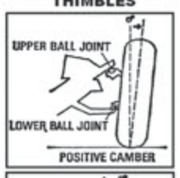
steering stability (keeping the car from wandering, and helping the steering wheel to right itself after making a turn). Most pre-1974 cars had "negative" Caster, due partially to the need to correct the positive Caster effect that the OEM bias-ply tires had on the steering system at higher road speeds. When putting radials on an old car, it's a good idea to discuss with your shop the prudence of changing to a more positive Caster to help prevent wandering that can occur with original Caster angle settings combined with radial tires.

SETTING CASTER: The Caster angle on our car is set at ¾ degrees negative, but a minimum of 1 ¼ degrees and a maximum of ¼ degrees negative is permissible. To set the Caster, special tapered shims are inserted at the front ends of each of the torque arms, between the torque arm and spring perch. They come in two sizes: one-half degree and one degree*. If more than one degree is needed per side, you should look for bent parts.

CAMBER is the angle of the wheel in degrees when viewed from the front of the car.. If the top of the wheel is leaning out from center, it has positive Camber. If the wheel is leaning in at the top, it has negative Camber. Correct Camber provides for easier steering. our Camber angle is ½ degree. A maximum of 1 ¼ degree is permissible. Our Camber is adjusted by installing offset pilot thimbles. They are inserted on the inside of each arm of the front shock absorbers, at the steering support. The pilots are available in five sizes: 0, 1/16, 1/8, 3 1/6 and 1/4*. A change of 1/16" in amount of offset changes the Camber angle 1/3 of one degree.

In addition to all of the above, there are other problems that can cause our steering wheel not to return to center. For example, bad or mis-adjusted steering gears, or steering bind (misalignment of the steering gear), but these are less likely to occur on a lower-mileage car like ours, or one that has not had the steering column or steering gear removed.


THIMBLES



POSITIVE CAMBER


NEGATIVE CAMBER


**Get your cars ready for Spring and Summer outings, and remember, Keep 'em driving!**

*Caster shims and Camber thimbles are available from Max Merritt Packard Parts, 800-472-2573

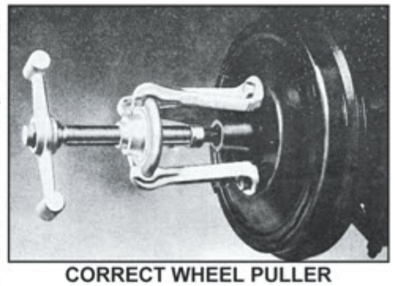
# WHEEL CYLINDER REPLACEMENT
## On A '48
# Packard

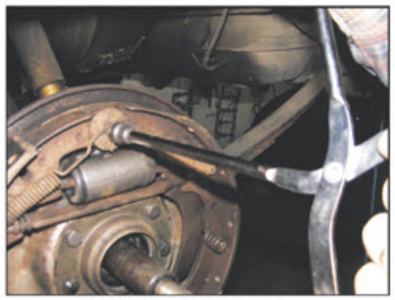
by Bill Johnson — Publisher

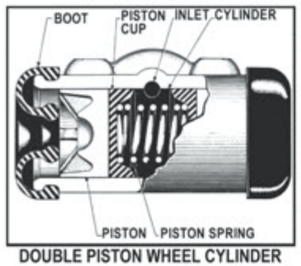
I have spent a lot of my restoration time this year working on cars in my collection that are already restored, but have slight annoyances that have kept me from driving them. My '48 Custom 8 4-door had what seemed to be a sticking left rear brake shoe.

The '48 is such a pleasure to drive, and I missed driving it, so I finally decided to pull the rear drum and take a look.

The '40's Packards have tapered rear axles, and require a special, heavy duty, three-armed puller to remove the rear brake drums. We pulled the Custom 8 into the shop and up on the lift to check out the problem. After removing the fender skirt, hubcap and cotter pin, I got in to hold down the brake pedal and we unscrewed and removed the 1 1/2" axle nut and washer, and set up the arms on the puller to pull the drum. We then disconnected the hand brake, backed the brake shoes off, tightened down the center bolt of the puller, putting pressure on the axle, and the drum popped right off. As we looked at the brakes, it was obvious that the spring on the primary shoe had snapped, preventing the brakes from releasing after being applied. (They weren't just sticking because the car wasn't being driven regularly, as I had thought.) But no problem--we had another spring. We cleaned up everything, put on the new spring, cleaned up the linings and drums with brake cleaner, and put everything back together. While the car was on the lift, we wanted to bleed all of the brakes. Then the bleeder broke off on the brake we had just repaired. Everything had to come back off.


CORRECT WHEEL PULLER

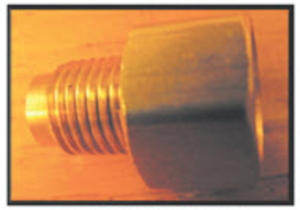

REMOVING SPRINGS



DOUBLE PISTON WHEEL CYLINDER

We removed the wheel cylinder and checked its part number and piston bore. It was a 15/16" bore, which is OEM correct for all '48 Packard rears. Before buying a new one, we wanted to be sure we wouldn't have another bleeder valve to break, so we checked the other wheels' bleeders and they turned freely and would bleed okay. We then checked our factory parts manual and found that Packard changed to a larger piston bore on the rear cylinders on its '49 Custom 8 (ours is a '48 Custom 8) to get more fluid to the rear cylinders. We could get original 15/16" bore cylinders or have ours rebuilt, but we decided to do as Packard did in '49, and move up to the 1" bore on both rears.

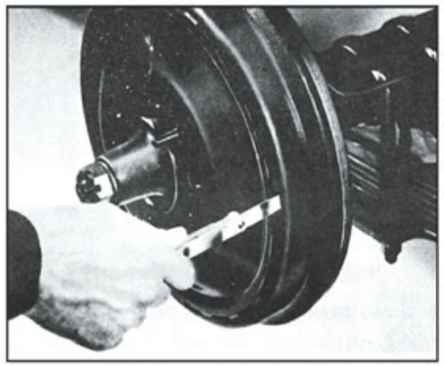
We called NAPA and found them, left part # 9025, right part # 9026. The only assembly change was the female to male fitting that goes between the brake line and the wheel cylinder was different. These new NAPA wheel cylinders take a 3/16" male to 1/4" female part # 7828. It also uses a metric bleeder instead of the 3/8" original. That was almost a deal breaker for me. I don't like going back and forth from standard to metric while working on the same car, but since that was the only vice, I moved on, bought everything and put the left side together.


3/8" to 1/4" FITTING

We did the same thing on the right side by removing the fender skirt, hubcap, cotter pin, nut, washer and used the axle puller. This time, the drum would not come off the axle! We unhooked the brake line to release pressure, unhooked the hand brake, backed off the shoes and put pressure on the axle puller, tightening it down while tapping around the circumference of the drum with a hammer. We continued spraying it with penetrating oil, still tapping and tightening–nothing! Two things you don't want to do is heat the axle or hit the center of the axle hard enough to drive it into the thrust plate between the spider gears. If this happens, you can crack the plate, and you'll know it immediately upon driving the car by hearing noise from the rear end. Finally, we tightened the puller nut as tight as we could, hit the nut on the puller one moderate hit, and the drum came off! Inside was pretty much the same as on the left side, but with no broken springs, so we cleaned up everything with brake cleaner, took a die grinder with wire wheel and cleaned up the adjuster, and put in the new wheel cylinder. We put just a smear of high heat axle grease on the axle and pushed the drum over the axle and into place, put on the leather* washer, washer, nut, locking it down as tight as it would go with a breaker bar, then the cotter pin. The Packard manual doesn't give a torque spec, but after tightening, it suggests driving it around the block, then re-tightening, then putting in a new cotter pin. We hooked up the hand brake, reconnected the brake line and bled the brakes twice, refilling each time with Dot 3 fluid as recommended (not synthetic).


ONE CONTROLLED THUMP


LEATHER SEAL


BRAKE SHOE ADJUSTMENT

The brake shoes are adjusted by installing a .10 feeler gauge into a slot in the brake drum and adjusting the shoes until they can be felt up against the feeler gauge with just a little drag. Its the same on all four wheels. Now they stop correctly--no pull, no sticking, and we're ready to enjoy the car without worrying about the brake dragging and overheating.

*Keep 'em driving!*

***Available from Max Merritt Packard Parts, 800-472-2573, www.packardparts.com***

***(Thanks to our Packard buddy Ron Carpenter for his consultation on this project, and friendship.)***

# DRIVING OLD CARS

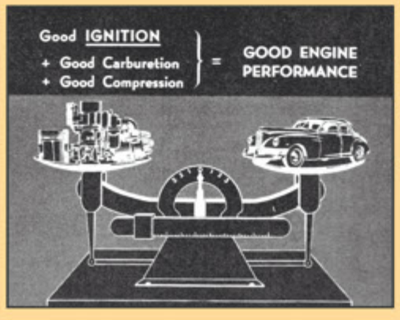

# IGNITION SYSTEMS IN OLD CARS

by Bill Johnson — Publisher

With the beginning of Spring, many cars were not started during the Winter. The first thing I check is the ignition system (that is assuming fresh gas with stabilizer and the battery was kept on a battery tender). Here is how the IGNITION SYSTEM works:

## CONSTRUCTION AND OPERATION

Good ignition, plus good carburetion, plus good compression equals good engine performance. Good engine performance can be obtained only when all three are functioning properly. Since good ignition is one of the requirements of good engine performance, the function, construction and operation of the ignition system must be clearly understood, so that an accurate diagnosis of ignition troubles can be made and the ignition system can be properly serviced.

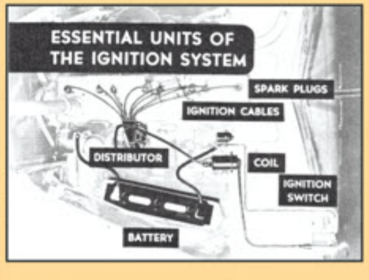



The function of the ignition system is to provide a spark of the correct intensity at the proper time to ignite the mixture of fuel and air in the cylinder.

## DESCRIPTION

The ignition system of Packard cars consists of the following essential units:

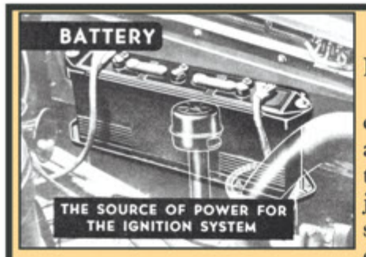
A- A battery and generator as the source of power
B- An ignition switch to control the starting and stopping of the engine.
C- An ignition coil to step up the voltage
D- A distributor to direct the spark to the proper spark plugs at the correct time.
E. Ignition cables to carry the current to the spark plugs.
F. Spark plugs to ignite the mixture.




Actually, the generator is the source of all electrical energy in the car. It supplies power for the ignition, lights, heater, radio and other accessories. The battery stores some of the generated energy in chemical form to be used when the generator is not operating. But, for the purpose of simplifying the ignition circuits, we will assume that the battery is the source of power for the ignition system.

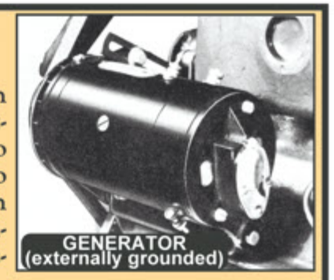
The function of the ignition switch is to close and open the circuit between the battery and the ignition circuit. The voltage of the generator and battery is limited and is not great enough to cause a spark to jump the spark plug gap. Therefore, the voltage must be increased. This is accomplished by the use of an ignition coil.

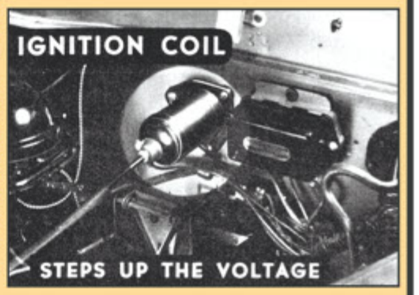




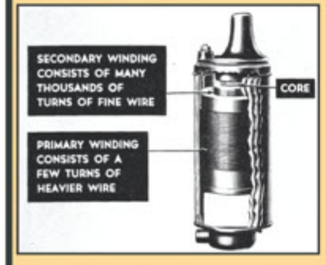

## IGNITION COIL

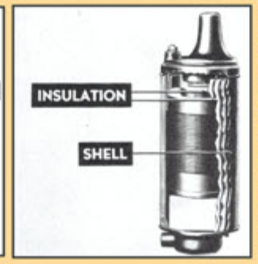
The function of an ignition coil is to transform the low voltage supplied by the battery into the high voltage necessary to jump the spark plug gap. In simple language, it is a transformer. The ignition coil is an electrical unit having two windings: a primary and a secondary winding. The secondary winding, which consists of many thousand turns of fine wire, is wound around a soft iron core. The primary winding, which consists of a few turns of heavier wire is wound over the secondary winding. A soft iron shell encloses both windings and provides an outer path for the magnetic field. Thin insulation is placed between the winding layers of the primary and secondary windings and between the outside of the primary winding and the coil outer shell. The coil is a sealed unit to protect the windings from moisture and air.

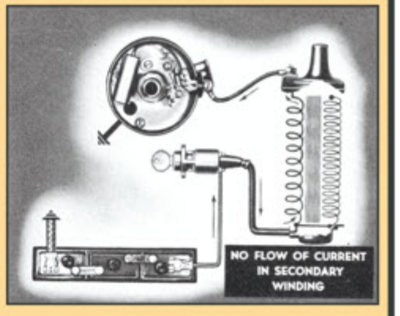



When the ignition switch is closed, current flows through the primary winding. As long as the flow of current is steady in the primary winding, there is no flow of current in the secondary winding. But, if the flow of current is suddenly stopped in the primary winding, a high voltage will be induced in the secondary winding. The flow of current in the primary winding is stopped by the use of a set of breaker contacts which are connected in the primary circuit and are located in the distributor.




## TESTING THE COIL

The symptoms of a bad coil are hard starting, chronic high speed missing, and cutting out during acceleration. To test the coil, first remove the high tension cable between the coil and the distributor at the distributor cap. Hold the end of the cable about 3/16" away from some grounded part of the engine and crank the starter with the ignition switch ON. A *blue* spark should jump the gap, indicating a good coil, or a weak *yellowish* or *red* spark indicates a bad coil. The test must be done with the battery, points and condenser in good condition.

Another test using a 6-12 volt test light with two leads can be done: Remove the distributor cap, then crank the engine until the points open. Turn the ignition switch on, connect one test light lead to ground on the engine and the other lead to the coil's primary terminal that goes to the distributor (this is the + on our car). If the test light bulb lights, that shows the coil is getting current and the primary windings are right. If the bulb lights when the test lead is touched to the coil's other

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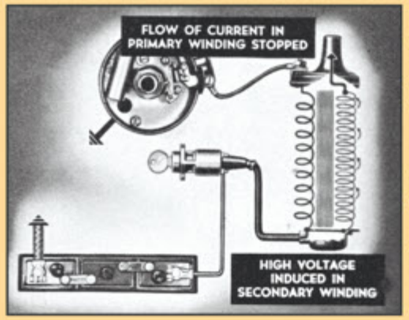



terminal (one not to the distributor) the coil is bad and the primary windings are faulty.

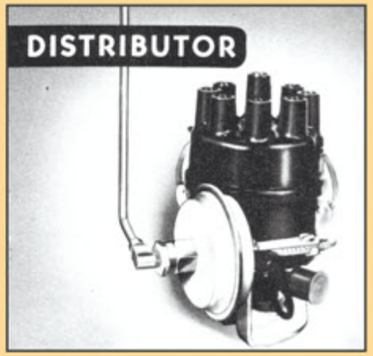
DISTRIBUTOR

The distributor has two functions:

1. To provide a ground for the primary circuit through the contact points and to interrupt the flow of primary current at the right time.

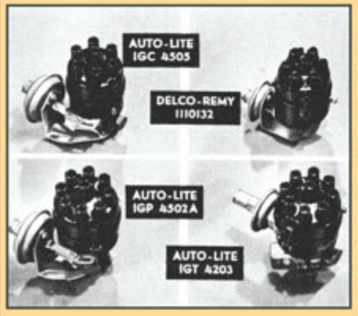
2. To distribute the secondary high voltage to the proper spark plug at the proper time.

The Packard distributor is of the singer breaker type using centrifugal governor advance and vacuum advance for automatic timing control. Four models of distributors are used on the 1946 21st Series Packard cars: The Auto-Lite IGC 4505 and the Delco-Remy 1110132 are used on the Six, the Auto-Lite IGP 4502A is used on the Eight, and the Auto-Lite IGT 4203 is used on the Super Eight. Ours is the Auto-Lite IGP 4502A.

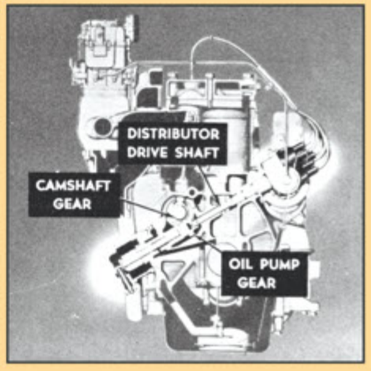



The distributor drive shaft is driven by a slotted coupling of the oil pump gear. The oil pump gear, which meshes with a gear on the camshaft, rotates the distributor shaft at camshaft speed which is one-half engine speed. The other end of the distributor shaft is connected through a governor mechanism to the distributor cam and rotor.

PRIMARY CIRCUIT



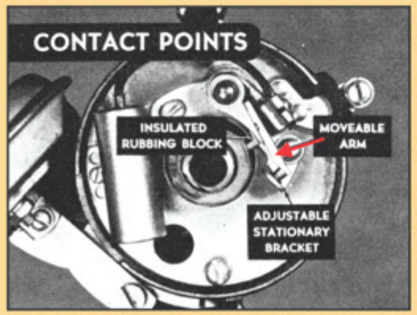

The distributor primary circuit contains a set of breaker contacts, one of which is on a stationary bracket but is adjustable, the other on a movable arm. The contacts are opened by the distributor cam acting against a molded insulated rubbing block attached to the movable arm. The contacts are closed by the action of a flat spring attached to the contact arm. The contacts are mounted on the distributor plate and are connected in the primary circuit.




When the breaker contacts are closed, current flows through the primary winding creating a magnetic field around the primary winding. As the cam is rotated, it opens the contacts, breaking the primary circuit. This collapses the magnetic field around the primary winding and induces a high voltage in the secondary winding. The collapse of the magnetic field also induces a voltage in the primary winding. The effect of this inductance is a tendency to keep current flowing in the same direction in the primary circuit. The voltage induced in the primary winding is great enough to cause an arc at

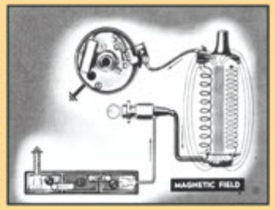




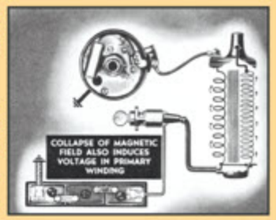



the contact points. If it were not for the condenser, this arc would prevent the sudden collapse of the magnetic field and, consequently, a low secondary voltage.

CONDENSER

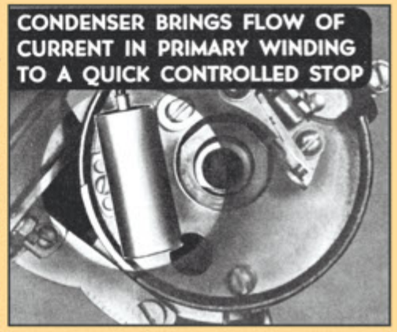



The condenser is provided to bring the flow of current in the primary winding to a quick controlled stop. The condenser prevents arcing at the contacts by absorbing and momentarily holding a charge of primary current. When the condenser discharges the current, it speeds the collapse of the magnetic field and helps to induce the high voltage in the secondary winding.




The condenser is made up of two layers of metal foil, insulated by two layers of hallo wax impregnated paper. To save space, these layers of foil and wax paper are rolled into a small roll and enclosed in a small metal shield. The outer layer of foil is connected to the outer shell which is grounded to the distributor plate and the inner foil is connected to a lead wire which is connected to the contact arm terminal. The condenser shell is sealed by a gasket to protect it from moisture and air. The gasket is retained by the crimped edge of the shell.

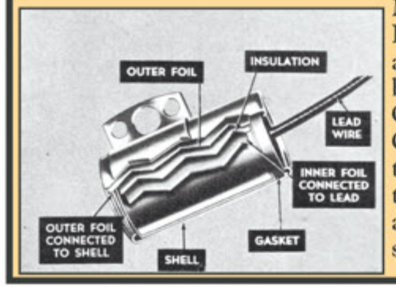
CONDENSER TEST




Condensers help the coil by the reduction of arcing and giving longer point life. They are rated specifically for your car's ignition system in MFD (microfarads). Our '46 is .20-.25 MFD. A grounded primary circuit with misfiring at high speed can be the result of a bad condenser. Fortunately, condensers are inexpensive and easy to replace. But you may want to run a few tests before replacing it.

A common problem is the condenser's mounting strap becomes loose. Before tightening it, lightly sanding the strap and condenser at strap contact with emery cloth can help to make a good ground. A loose condenser can cause an erratic ignition. When the points are burned or pitted, it's usually the condenser, or the points set too close.

To test the condenser, you can buy a coil/condenser tester, or use a multimeter.




MULTIMETER TEST:

First, remove the condenser (the metal case is the ground and the lead wire is the hot). Discharge the condenser by shorting the lead wire to the car. Switch the meter to Ohms. Set the resistance range to the highest setting. Connect the test leads together and zero the meter. Touch the red lead to the "hot" lead on the condenser and place the black lead to the metal case of the condenser. On an analog meter, the needle should jump slightly to the right toward 0 ohms,

CONTINUED

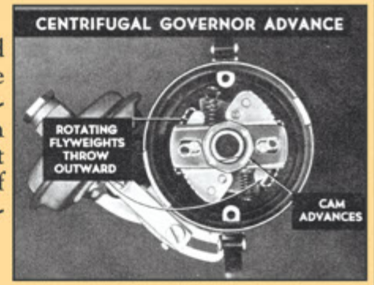
then drop back to the left towards infinity. By holding the test leads in place for 20 seconds will charge the condenser. If this test shows any other readings, the condenser is leaking and is bad.

In addition to closing and opening of the contacts, the purpose of the distributor is to deliver the high voltage to the proper spark plug at the proper time. The exact instant at which the spark must occur for most efficient engine operation is determined by the:

1. Speed of the engine
2. Throttle opening of the carburetor
3. Engine load.

The exact ignition timing to satisfy these conditions is accomplished automatically by the centrifugal governor advance and vacuum advance mechanisms.

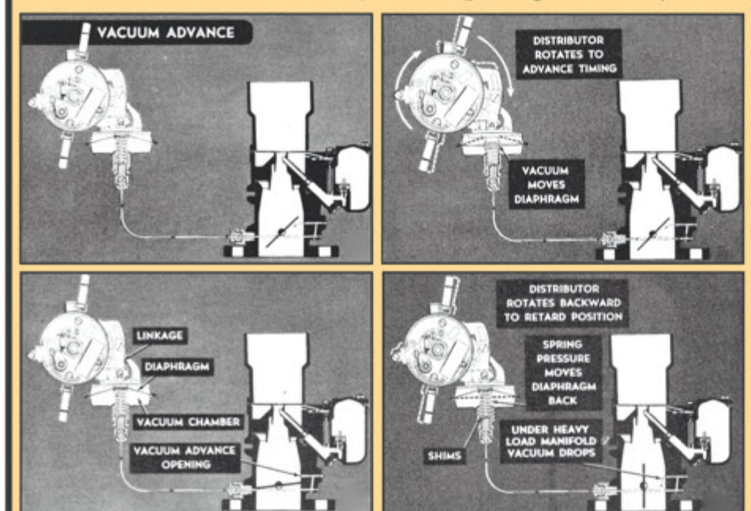
## CENTRIFUGAL GOVERNOR ADVANCE




The centrifugal governor advance is so designed that, as engine speed increases, the centrifugal force of the rotating flyweights will gradually throw the weights outwardly and will automatically advance the distributor cam in relation to the distributor shaft. The rate and amount of advance is controlled by the design and calibration of the flyweight springs and the centrifugal governor flyweights.

## VACUUM ADVANCE

During part throttle (or part load) operation, there is a great vacuum in the intake manifold. Consequently, the charge taken into the cylinder is not so highly compressed as it is when the engine is under heavy load. With this condition, an additional spark advance will increase fuel economy. This is accomplished by the use of the "part load" advance or vacuum advance, as it is commonly known. The vacuum advance mechanism consists of a spring-loaded diaphragm operating in a vacuum chamber and is connected through a linkage to a lever on the distributor. The chamber on the spring-loaded side of the diaphragm is air tight and is connected through a vacuum line to a small opening in the carburetor throttle body. This opening is located just above the throttle valve when the the throttle is in idle position. There is no vacuum at this opening during idle and, consequently, no vacuum advance.




When the throttle is opened, it uncovers the opening of the vacuum passage, which is connected by a vacuum line to the distributor vacuum chamber. The vacuum acting on the diaphragm moves the diaphragm and compresses the spring in the chamber. The diaphragm, connected by a linkage, rotates the distributor in its mounting to advance the timing. On the Super Eight distributor, the vacuum advance mechanism rotates ONLY the breaker plate. Under heavy load or full throttle operation, when the manifold vacuum drops, the spring pressure on the diaphragm will rotate the distributor backward, retarding the timing to prevent detonation. The spring load is calibrated to give most efficient operation under any operating condition. It is adjustable by the use of shims in the spring seat.

## SECONDARY CIRCUIT

### DISTRIBUTOR CAP

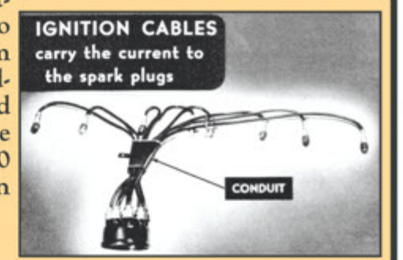
The distributor cap covers the distributor and is molded of a non-conductive material. It contains one center carbon contact, to which the secondary wire from the coil is connected, and a series of brass contacts, each of which is connected to a spark plug by a spark plug cable in the correct sequence of the firing order of the engine.


### DISTRIBUTOR ROTOR

The rotor also is molded of a non-conductive material. It carries a steel segment that makes contact between the center contact of the distributor cap and the brass contacts. Actually, the segment does not touch the brass contacts, but it comes so near to them that the high tension current can jump an arc to the brass contacts. The rotor is rotated by the distributor cam and is so timed that the secondary current from the coil is distributed through the radial contacts and the spark plug cables to each spark plug at the proper time and at each opening of the breaker contact.


### IGNITION CABLES

The ignition cables carry the current to the spark plugs. These cables contain several strands of low resistance wire and are covered by a rubberized insulating material. The insulating material is protected by a cotton braid and a lacquer coating. High tension conduit is used to support the cables and keep them from chafing. We always use stranded wires on vehicles with points and condenser ignition systems. These wires will help produce the 20,000 volts at the spark plugs these old cars require. Suppression wires won't do that.




### SPARK PLUGS

The spark plugs are rated according to their temperature range. A plug with a long porcelain exposed to the combustion chamber is "hot" plug. A plug with a shorter porcelain is a "colder" plug. The spark plugs used in Packard cars are the AC-104, The Champion Y4A, and the Auto-Lite P-4. The thread size is 10mm. Each is of the proper heat range and should always be replaced with the same type plug.

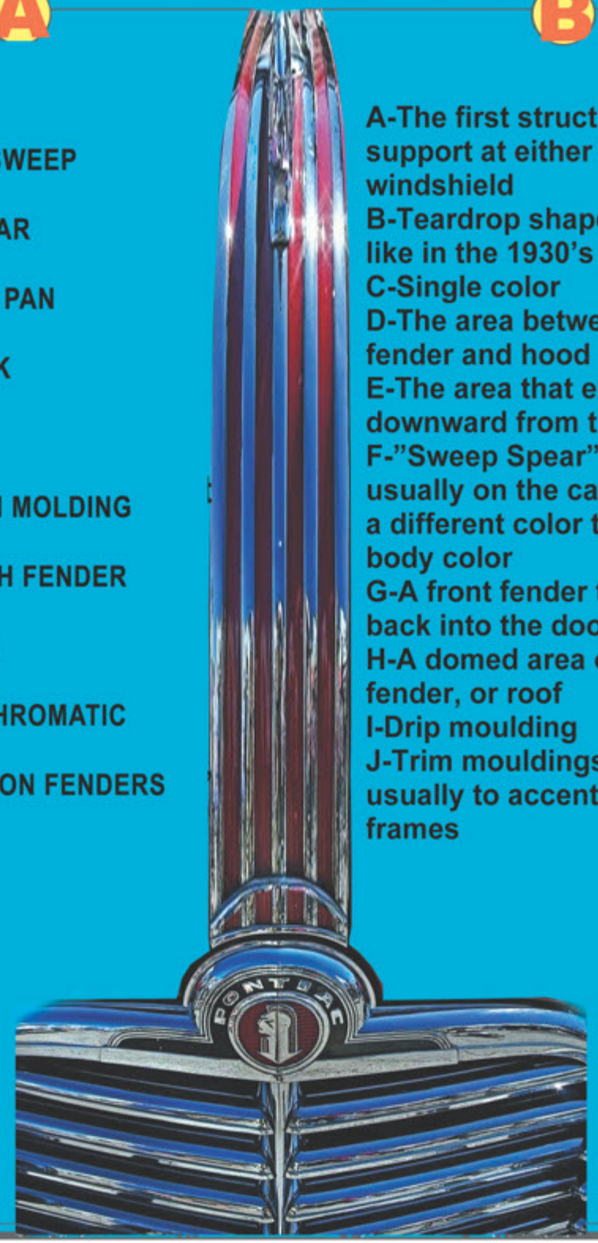

Next month we will continue exploring the ignition system, and in the meantime, enjoy your cars, keep 'em driving!

OLD CAR

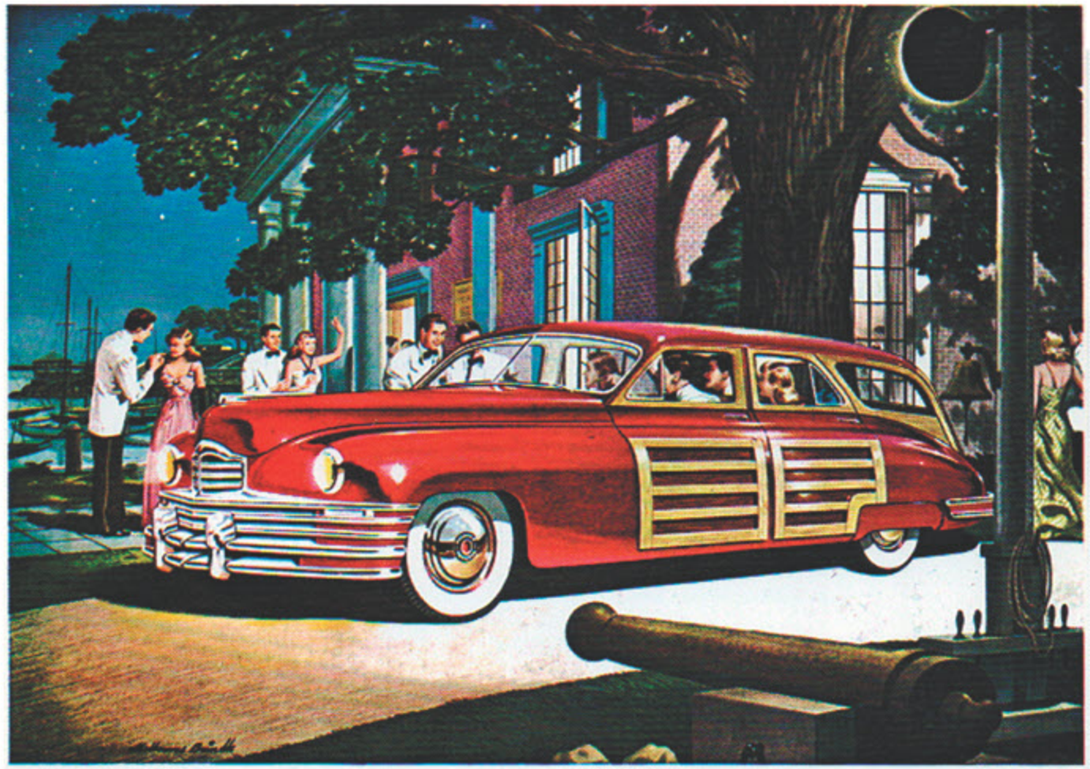
# MATCH GAME

(Answers on Page One)

| | A | B |
|---|---|---|
| ☐ | 1. COLOR SWEEP | |
| ☐ | 2. “A” PILLAR | |
| ☐ | 3. BUMPER PAN | |
| ☐ | 4. CATWALK | |
| ☐ | 5. CROWN | |
| ☐ | 6. GARNISH MOLDING | |
| ☐ | 7. THROUGH FENDER | |
| ☐ | 8. GUTTER | |
| ☐ | 9. MONOCHROMATIC | |
| ☐ | 10. PONTOON FENDERS | |




A-The first structural roof support at either side of windshield
B-Teardrop shaped fender like in the 1930’s
C-Single color
D-The area between the front fender and hood
E-The area that extends downward from the bumper
F-”Sweep Spear” in area, usually on the car’s side that’s a different color than the body color
G-A front fender that flows back into the door
H-A domed area of the hood, fender, or roof
I-Drip moulding
J-Trim mouldings on doors usually to accent window frames



# What a double-duty beauty!

THE stunning new Packard Station Sedan is truly an entirely *new kind* of car.

Here, for the first time, sedan luxury is combined with *the real carry-all utility of a station wagon.*

Previewers tried to place their orders for this car months before production began. Conservative, habitual buyers of black sedans saw it and exclaimed, "That's for me!"

You have to *see* this dazzling new motor car with your own eyes to know what all the excitement's about—because nothing else like it has ever rolled off *any* assembly line!

It's equally at home carrying six distinguished passengers to a summer theater opening, a formal country club dance, or skimming over a country highway loaded with farm produce or camping duffle.

You not only enjoy restful sedan comfort in the finest Packard tradition, but with a twist of the wrist the rear seat folds forward, tail gate lowers, to form a cargo platform nearly eight feet long!

Roof, floor and structural side panels are of steel—strong, safe, rattle-free. The fine-grained wood panels are of selected northern birch.

Don't miss seeing this exciting new car—inside and out—at your Packard dealer's!

ASK THE MAN WHO OWNS ONE

THE NEW

**PACKARD**

**STATION SEDAN**

Out of this world . . . into your ♥ heart