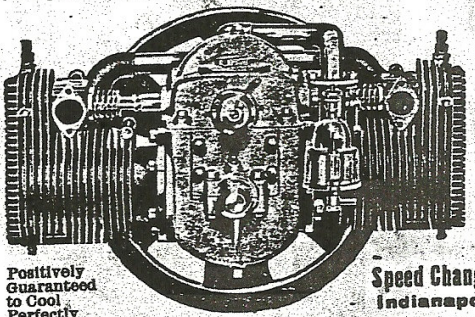


A quarterly publication primarily to help Sears owners more accurately date their cars, find parts, and sell cars and parts. Subscription is \$1. per year. Published by Hayden Shepley, P O Box 481, Toughkenamon, PA 19374. 610-268-2349

As I said in the last issue, the man who was going to send me the Shop Manual that does 'nt exist has at least given me addresses of the sources of needed parts, as follows. PISTON RINGS: Niagara Co. 4906 Ida Park Dr., Lockport, NY 14094 716-434-8253. WHEEL BEARINGS: Torrington Co. 59 Field St. Torrington, CT 06790 860-482-9511. FOUR FENDERS & FOUR HUBS, used. \$25 each. Can be bought singularly Paul Lane, Vintage Motorcars, 67 Minerva St., Derby, CT 06418. 203-734-1302. He is sometimes still there until 6PM. He has an enormous restoration business and is often hard to find. He owns Sears #H1125 which he bought as a 1905 in Oregon.

This may be the next to last issue as I am running out of material

**1909 Model "K" MOTOR**  
For High Wheel Buggy Type and Light Delivery Wagon. 14 H.P. air cooled—16 H.P. water cooled



**OR-Set Cylinders.**  
**Straight Connecting Rods.**  
**Mechanically Operated Valves.**  
**Perfectly Balanced.**  
**Thoroughly High Grade.**  
**Over All Dimensions:**  
**Length 37 1/2".**  
**Width 15 1/2".**  
**Depth, including Fly Wheel, 19 1/2".**

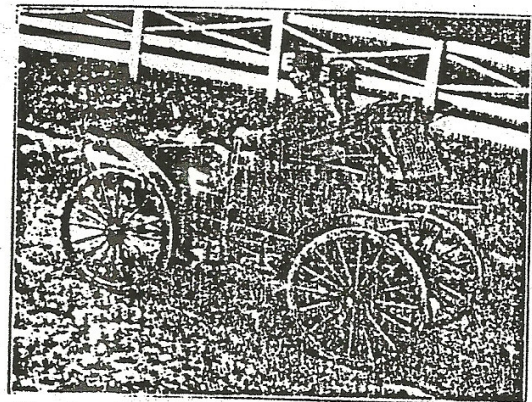
Positively Guaranteed to Cool Perfectly

**Speed Changing Pulley Co., Indianapolis, Ind.**

**SEARS**  
1910



FROM HEARNING'S MOTOR NEWS



Mr. Lones of Elkton, Ohio, Satisfying Himself that His SEARS Can Climb Hills

Here are two more Sears untruths. This 'so called' Mr. Lones is actually a JUDGE who received his KROTZ in late 1908, according to his testimonial letter, before the Sears started production. Notice the top heavy fence posts all leaning down hill!

### IMPORTANT NOTICE

**K**EEP platinum points clean and free from pits. This coil is NOT a vibrating coil, and WE CAUTION YOU AGAINST LETTING ANYBODY ADVISE YOU TO CHANGE IT, BECAUSE IT CANNOT BE MADE TO VIBRATE. When these platinum points make a contact, it is indicated by a SHARP CLICK and NOT a buzz.

If necessary to adjust, follow these instructions:

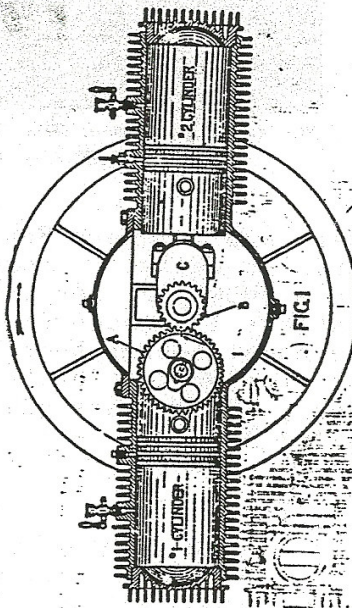
See that wire terminals do not come in contact with any part of coil except binding post. Depress vibrator with the finger and adjust so that platinum contacts just touch, then turn screw back one-half revolution. This leaves contacts separated by a space equal to the thickness of note paper. Refer to our Instruction Book and read paragraphs 10 and 11 on page 13, also paragraphs 12 to 19 on page 14.

I am leaving Florida May 8 but won't reach PA until the 14th as I will show my Sears at Winchester, VA for its third year.

Unfortunately my contact who is restoring the Sears X for the Sears Co. misunderstood the difference between a shop manual and an owners manual. So the only way to time a Sears is on P.22 to 24 in the Owners Manual. As it starts at the bottom of P.22, perhaps some of you overlooked it as I did.

**INSTRUCTIONS FOR SETTING EXHAUST VALVES FOR No. 1 CYLINDER.**

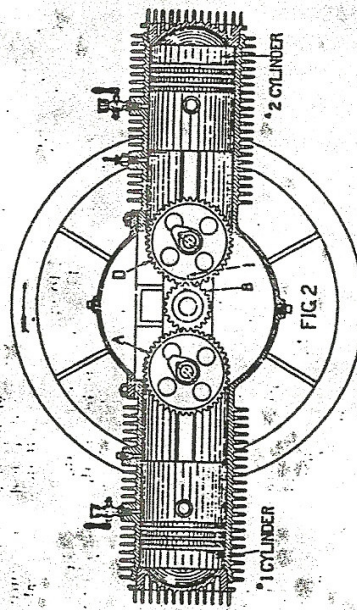
The right hand cylinder as you are sitting in the car. Advance the timer, which is indicated by "P" in the illustration, as far as possible as shown in the illustration; then set the timer pin "G" so that it make a contact with the upper timer disc, indicated by "H," so that it make a stroke, that is, the stroke toward the head of the cylinder and immediately after the exhaust stroke, and when the piston is about 2 3/4 inches from the end of the cylinder, as shown in the illustration.



On the crank shaft, marked "C," is a flat place, and on this place is a line cut which prints between two teeth on the small crank shaft gear, which is marked "A."  
Set the tooth up the cam gear which is marked No. 1 in the space indicated between the two teeth on the small crank shaft gear.

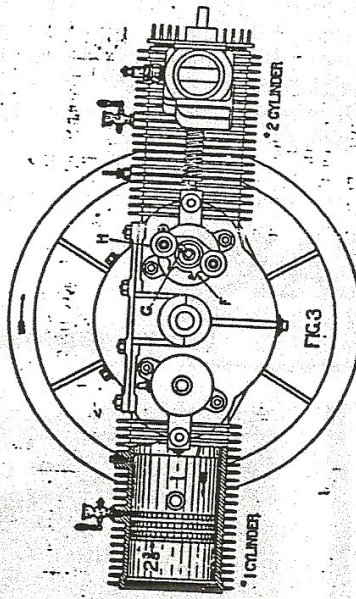
**INSTRUCTIONS FOR SETTING EXHAUST VALVES FOR No. 2 CYLINDER.**

The left hand cylinder as you are sitting in the car. After having set the gears in the No. 1 cylinder, turn the fly wheel one-half turn in the opposite direction from which the motor usually runs. This will place the pistons on dead center, as shown in Figure 2. This position of the pistons is known as the inner stroke.



Set the tooth marked No. 1 on the left cam gear in the space indicated by the line on the small crank shaft gear.  
After you have set the valves it will be necessary to see that the timer pin projects on the proper side of the cam shaft, to make the contact at the right time, and the following instructions will enable you to do this:  
First, see that the wires are connected as shown in the wiring diagram. Now remove the cylinder head from the No. 1 cylinder, which

is the right hand cylinder as you are sitting in the car. Advance the timer, which is indicated by "P" in the illustration, as far as possible as shown in the illustration; then set the timer pin "G" so that it make a contact with the upper timer disc, indicated by "H," so that it make a stroke, that is, the stroke toward the head of the cylinder and immediately after the exhaust stroke, and when the piston is about 2 3/4 inches from the end of the cylinder, as shown in the illustration.



You will be able to determine if the pin projects from the proper side of the cam shaft by watching the exhaust valve in the No. 1 cylinder at the point where the push rod comes in contact with the valve stem. The push rod will begin to push the valve open when the crank shaft has made about one-quarter of a revolution, after the timer pin has made contact with the timer disc. In other words, after you have set the engine one-quarter of a turn and then ascertain if the exhaust valve in the No. 1 cylinder is starting to open.

When the timer pin makes a contact with the discs these discs should spread apart from 1-32 inch to 1-16 inch as the timer pin passes between them. When this contact is made it is called "closing the circuit," and it is at this time that the vibrator on the coil clicks.

When looking at the motor you will be able to see where the push rod from the cam box comes in contact with the end of the exhaust valve stem.

When these valves are closed there should be a space between the end of the push rod and the exhaust valve stem about the thickness of an ordinary postal card, and if upon investigation you find that there is not, you must either put in a new fiber plug or adjust the old plug.

This can be done by removing it, cutting off the worn part, and before inserting the fiber plug again put in the hole a packing of sufficient thickness to hold the fiber plug out the distance necessary to allow the proper clearance between the plug and the valve stem. See Paragraph 31. When the push rod comes in contact with the end of the stem you will know that the exhaust valves are beginning to open, and this opening should take place 7-16 inch before dead center on the outward or expansion stroke, and they should close after the piston has traveled from 1-16 to 1-16 inch past dead center on the inward stroke.

In attaching the cam box to the cylinder care should be taken to draw it down tight to its seat to prevent the cam shaft binding in its bearings.

In tightening the cam box do not tighten up on one bolt as far as you can, then on the other, but tighten slightly on first one and then the other, and keep this operation up until the cam box is firmly seated. If you have occasion to remove the cam box, in replacing it be sure to replace the spider spring on the inside. This should be replaced in such a way that the three projections on the spring come in contact with the inside of the cam box.

