ook at Wiring Diagram Helps Solve Difficulties.

LAWS FOUND IN BULBS

udy of Basic Principles Necessary to Know How to Find Troubles With Lighting.

Prouble in the starting and light system is something that fills the of the average car owner with Yet a careful look at the wir gram of his car will serve to most difficulties, especially derstands a few basic prin which we purpose explaining

e electric starting and lighting om of the car usually consists of enerator and starting motor, r separate or included in a single r separate or included in a single a storage battery, which is ged by the generator and then s its current to the starting r and to the lamps. Then there cutout which connects and diacts the generator to or from th at slow engine speeds, and rging rate to conform to the serv-usually demanded of the car. with various wires, switches, etc., complete the system.

Meter Ofter Troublesome. begin with, there is mounted or dash of the modern car a meter dash of the modern car a meter ome type to register the charge discharge of the battery, so that driver can tell how the starting lighting system is functioning. In the starting pedal is depressed meter begins to register dis-ge because the battery is being yn upon for current to turn the ting motor over. Sometimes the ng motor over. Sometimes the is not running and when the are not burning the hand of neter should register zero. If is not so register the hand is

he contact points may be cord. Next examine the wiring back he switch. See that all wires are insulated. In a one-wire sysses that that wire is fastened he metal to which it is attached cases where a function box is i there may be a short in this or the connection here may be a or dirty. If there are fuses in wire a fuse may have blown out he fuse connection may be peor or e fuse connection may be poor or ded. If after installing a new that blows out the trouble is see system in general from the is of excessive current supply.

systems employ circuit break-natead of fuses. tches are another seat of trou through dirt, losseness, poor adment, etc. Every switch should uspected in case of trouble. Most ting and lighting systems today under a cut-out which disconnects sinds a cut-out which disconnects obstiery from the generator circuit ten the engine is running slowly, ually at ten miles an hour carsed. The ordinary form is electroscutically operated and the magnic points should be kept clean. The tout terminals, if they become that the cut-out does not operate properunder-charging may result with thery ills in consequence.

tory illa in consequence.

Sinally, it is best to use a wiring gram of the car in hunting for ubic, so that each circuit may be equily followed from end to end, the owner has not a diagram it il be supplied by the car manufacrer or the nearest service station.

FIRST PACIFIC COAST GOODYEAR TIRE AND ITS COUNTERPART ONE YEAR LATER.



TWO TIRES PRODUCED BY BIG LOS ANGELES PLANT, WHICH GO TO MUSEUM. In May, 1919, the present site of the big plant of the Goodyear Tire & Rubber company of California at Los Angeles was a cabbage field. Eleven months later, in June, 1920, the cabbage patch had been transformed into a group of buildings of concrete and steel, representing one of the largest industrial establishments west of the Mississippi river. In the photo above, just received from Los Angeles, is shown at the left the first tire turned out by the Goodyear plant in California, the date being June 14, 1920. At the right is shown tire No. 345,612, one of the many tires turned out on June 14, 1921, just one year later. The two tires have been placed on display in the exhibition hall of the chamber of commerce at Los Angeles.

TRUCK OPERATORS ARE GIVEN POINTERS BY EXPERTS.

Check Up Operation of Machine to Prevent Overheating and Damage, Is Advice.

the heat of combustion escapes through the exhaust. It follows, there-fore, that if any part of the exhaust system is obstructed, a part of this heat must be carried off by the coolng water, which will naturally raise

12. Are the brakes free? A drag ging brake will cause overheating in hot weather that might not occur is ool weather.

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meter should register zero. If the spot as register the hand is or the magnet of the instruction may be weak or the return is may not be strong enough. If ard-working motor truck is called made and the spot as responsible to the spot as responsible to the spot as responsible to the spot as the spot as responsible to the spot as the spot as





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