

DEALERS WHO ARE PARTICIPATING IN THE AUTOMOBILE SHOW



SON GIVEN TIPS ON SPEEDING UP THE FAMILY ARK

Engine Compression Must Be Raised and Lighter Parts Put In.

ALUMINUM PISTON AID

Body Can Be Altered to Roadster Type Very Easily.

The ordinary stock touring car or roadster has certain very definite virtues and certain limitations. It is built to give reasonable economy of operation, to last long under careful handling and to develop a moderate turn of speed. In short, it is adapted to what we might call general family service. This is absolutely right for the average owner of such a vehicle desiring a combination of virtues rather than a single outstanding characteristic developed at the expense of the others.

But there are certain conditions when it becomes desirable to increase the speed of a car. The old family ark may have descended to the eldest son, who desires to turn it into a speedster, fitting a snappy bucket-seated body in place of the former "carry-all." The changes may be made largely by the owner himself, though he may have to call in machinist help for certain alterations.

The engine is the first point of attack in the attempt to inject more speed into the car. As a general thing it is desirable to raise the compression. If the engine has a removable head this part should be machined a few thousandths of an inch to make the compression space smaller, or the cylinder block may be machined at the bottom to bring it down slightly. Another method is to use pistons with higher crowns or pistons of the same type as before, but with the pins just a bit lower down.

In the search for speed it is necessary to use lighter reciprocating parts than those generally fitted. Accurately fitted aluminum pistons are a great help, though cast iron ones are fair, if they are lightened by drilling. In drilling an iron piston put the hole in the skirt and not too near the piston pin. Two piston rings are enough for this construction, and the clearances for aluminum pistons are twice those allowed for iron parts.

New connecting rods of tubular steel or in the form of a machined I-beam alloy steel are advisable, though it is possible to lessen the weight of this part by drilling the one already in use, but this process weakens the rod.

The crank shaft is not usually bothered with, though it is possible to have it drilled, so that oil from the main bearings will feed the connecting rod lower bearing. Unless it is proposed to run the engine for more than half an hour at maximum speed changes in the oiling system by drilling the crankshaft are not essential.

TROUBLE WITH ENGINE NOT HARD TO LOCATE

William H. Stewart, Jr., president of the Stewart Automobile school, gives the following advice to motorists:

"While hunting for some obscure engine trouble keep constantly in mind the five-fold nature of the problem. Four conditions are absolutely necessary for an engine to start, and one more to keep it running.

"The first four may be classed as ignition, compression, carburetion and lubrication. The last is cooling. Given these five conditions, nothing but an overload can stop the engine. If they are faulty, the engine loses power. If they are deficient, the engine will not run.

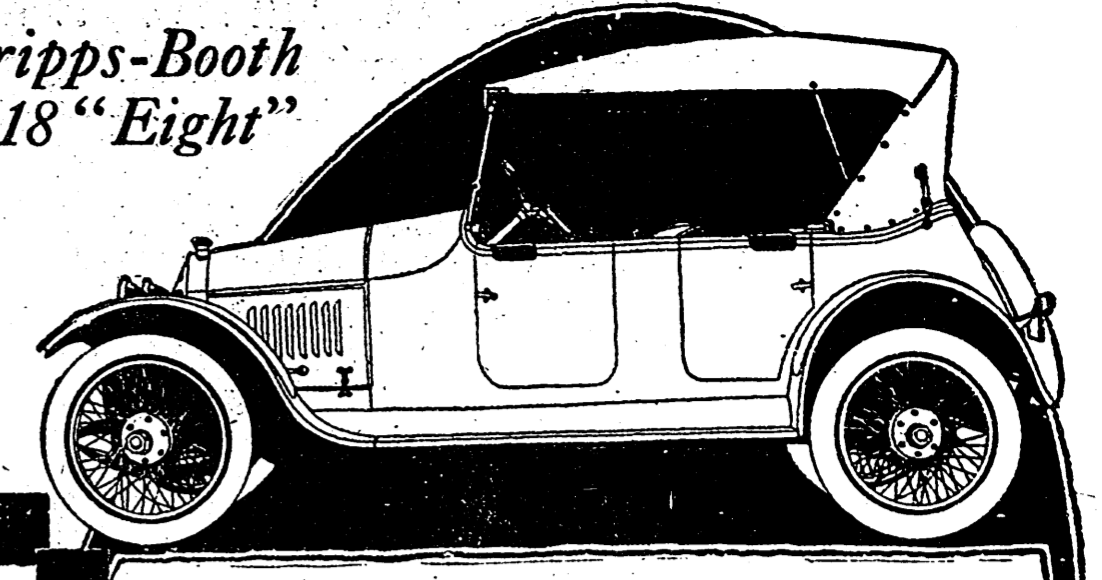
"Lubrication may be tested very easily by cranking by hand. Note if the crank turns easily without drag. There will be more or less stiffness in a new engine, which must be considered. Compression may be tested the same way. As each cylinder comes on compression it resists and shows a certain springiness or tendency to spring back, which is characteristic of good compression.

"To distinguish between ignition and

cocks or by removing spark plugs. Crank engine to start it. If it refuses to start, ignition trouble is indicated. If it starts and stops, carburetion trouble is shown. "Having eliminated these factors, start the engine and watch for overheating. This will be shown by steam at radiator, smoky engine, loss of power, pre-ignition and knocking."

Denver automobile dealers, members of the Automobile Trades association, participating in the automobile show, exhibiting all the representative motor cars handled in this territory. They are: (1) E. J. Johnson, Chalmers-Premier distributor; (2) Finlay MacFarland, president MacFarland Auto company; (3) W. J. Carter, president Carter Motor company, Exchange Auto company, Broadway Motor Sales company; (4) W. J. Miller, president Miller-Ray Motor company; (5) Thomas Ray, secretary Miller-Ray Motor company; (6) Thomas Roberts, president Roberts Auto company; (7) W. J. Haughey, manager MacFarland Auto company; (8) J. L. Armstrong, Winton-Baker Electric distributor; (9) R. C. Mulnix, sales manager Mulnix Auto Sales company; (10) L. G. Mulnix, secretary Mulnix Auto Sales company; (11) H. J. Hannon, president Hannon Motor company; (12) J. T. Graham, manager Colorado Motor company; (13) J. P. Heiser, president H. H. Heiser Brothers' company; (14) W. E. Hardy, secretary Moore-Hardy Tractor company; (15) D. B. Southard, president D. B. Southard Motor company; (16) E. Lee Yeager, president Bonney-Yeager Auto company; (17) O. N. Bonney, secretary Bonney-Yeager Auto company; (18) Floyd A. Wilson, assistant manager Wilson Auto company; (19) R. R. Hall, president Cadillac Motor company; (20) T. R. Ponsoby, manager Apperson Motor company; (21) W. W. Barnett, Oldsmobile distributor; (22) C. O. Ridgdon, president Ridgdon and McFann; (23) P. G. McFann, secretary Ridgdon and McFann; (24) A. Nelson, president Ross Auto company; (25) Paul Ross, manager Ross Auto company; (26) F. C. Cullen, president Automobile Sales corporation; (27) Frank C. Goff, manager G. W. Linger company; (28) Perry Mead, president White Automobile company; (29) W. C. Fawcett, president Platt-Fawcett Motor company; (30) George McIntosh, manager Tom Botterill, Inc.; (31) R. C. Lemm, sales manager Mountain Motors company; (32) T. F. Bennett, president S. B. I. Motor Sales company.

Scripps-Booth 1918 "Eight"



Announcing the Scripps-Booth 1918

4-door 4-passenger phaeton type touring car.

HERE is a Scripps-Booth 8-cylinder Model with all the many features of construction that have made Scripps-Booth 8-cylinder cars in the past famous for their speed and flexibility, power and economy; but here is an Eight that is roomier, better furnished, with even more luxurious finishings and greater riding comfort.

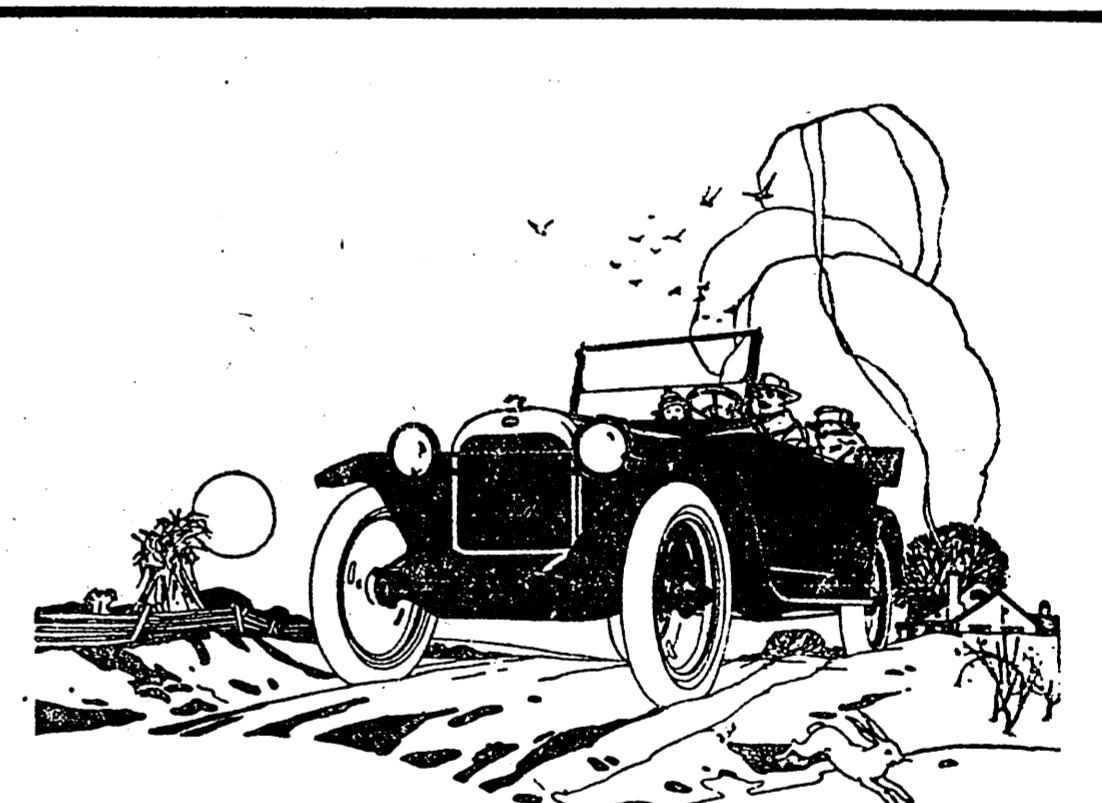
**SPECIFICATIONS:** 35 Horse Power; 8-cylinder valve-in-the-head type motor; 13-gallon rear gasoline tank, Stewart vacuum feed; 130-inch wheel base; 2,875 pounds, fully equipped and ready for the road; Remy ignition; Wagner starting and lighting; 5 detachable triple laced Hook wire wheels, with tires 28 1/2 inches and demountable rims; four 20-inch doors, front swings backward and back swings forward; bright finish, hand buffed genuine leather, with Marshall springs, assuring long wear and easy riding qualities; rainproof side curtains, made to open with doors; 30-inch cantilever extra long springs completely absorbing road shocks.

The Scripps-Booth is swift, powerful and economical. It is strong, light and saves you money by needing the minimum of repair. It has the right spring suspension, a low center of gravity and deep "rocking chair" cushions that enable you to "rest while you ride."

New Model in Space 3, Denver Auto Show

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Distributor for Colo., Wyo. and N. M. 222 16th St.



THE SENSIBLE SIX

Same Weight—More Power

One of the most conspicuous features of the 1917 Oakland Six—a feature which won thousands of purchasers—was the remarkable power of the car compared with its weight.

This advantage has been increased in the new models. The new Oakland motor generates 44 horsepower—one unit to every 48 pounds of car weight. Result: Lightning get-away—vigorous action—superb strength.

Such qualities, combined with greater roominess, finer upholstery and more dashing body lines, make the truly great Oakland of last year the still greater Oakland of 1918.

It Costs \$1100 Denver

Sharman Auto Company

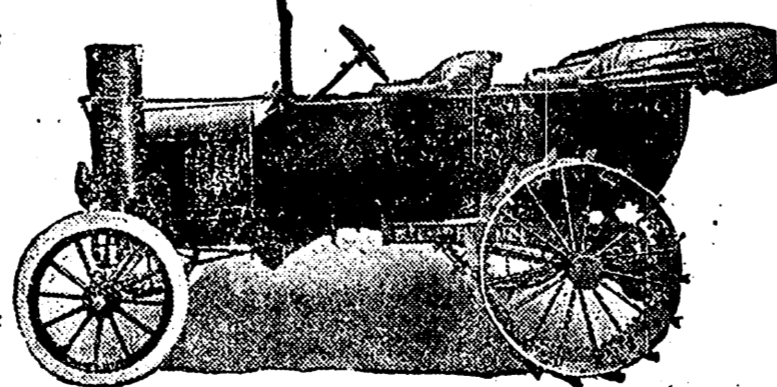
1248 Broadway, Denver, Colo. 45 W. 4th South St., Salt Lake

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- Ideal Garage, Alamosa, Colo.
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- J. S. Dyer, Mountain Air, N. M.
- Davis Motor Company, Raton, N. M.
- Tony Tourle, Gallup, N. M.
- Wm. Wallis, Laramie, Wyo.
- Lander Motor Company, Lander, Wyo.
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20th CENTURY FARM HORSE

\$150 F. O. B. Factory



Look! 1918 Model

We are very sorry that we were unable to procure space at the Automobile Show to display the 20th Century Farm Horse. Of course, it is not very pretty to look upon, but it surely is there in a hundred ways for strength and practicability for anything on the farm as well as hauling. In lieu of getting any nearer to the Automobile Show than our general office, we would ask that you pay us a visit and let us show you the 20th Century Farm Horse, as well as take you where you can see them in actual operation.

At your service and on the job all the time. Some extremely good territory now open for 1918 contracts.

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The Automatic Wick Feed DECARBONIZER

Increases pep, power, pickup and getaway—saves gas, repair bills and missing.

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