

AUTO SENSE

THE BUMPER PROBLEM

By Williamson



Bumpers protect your car from parking bumps and minor collisions, but a bumper is not heavy enough to afford very much protection in a real crash. When a car weighing more than a ton is travelling 30 miles per hour and strikes a solid object your car is going to suffer, regardless of the bumper. Bear this in mind and do not take chances with the idea that you are protected. There is one car which leaves the

factory with the bumpers set so high that they will pass over the top of even the wide double-bar type which is properly set. Drivers who buy bumpers and put them on themselves seem to have no idea of how high they should be. Unless some steps are taken to regulate their height these bumpers will continue to get your fenders. These steps will not be taken unless someone starts the movement. Let's go

If you are using a single-bar bumper you can get more protection out of it by clamping vertical strips of steel, about the thickness of the bumper, on the bar in two or three places. Cut the strips long enough to extend about four inches above and below the bar. Drill holes through them and bolt them on, one in front and one behind the bar. There should be a bolt above and below the bar instead

of one through it. Drilling the bar itself would weaken it. If you want the bumper to look dressed up when you finish, you can have the strips of steel nickel plated at a small cost. Park your car nearest the intersection, fire plug or "No Parking" sign and no one will back into it in parking. You can not always pick these places, but watch for them as you drive along.

DON'T BE TOO FUSSY ABOUT YOUR MOTOR

Some Drivers Make Mountains Out of Molehills. The old mechanic says: Whenever I look at that fellow's car over there in the corner I think of old Doc Smith and the advice he once gave me when I came to him with the complaint that I was going deaf. Doc says to me, "Maybe it's just a little cold in your ear. Why don't you rest

up for a day and keep a hot water bottle on it when you go to bed?" Sounded like quack advice to me, but I took his advice and it worked. I was just makin' a mountain out of a molehill. A lot of people do that with their car troubles. That car over there's supposed to have a piston slap, but I'll bet all I own that if I was to tear it down I wouldn't find anything of the sort. There's some sort of noise in the valve gear that

sounds like a slap, but I can't seem to convince the owner that it pays to take it easy and wait. He's let his imagination loose and if he doesn't take it easy this'll cost him a lot of money. One day he got a notion that a valve had broken. I happened to be off on a town- 'n' job and when I got back here was my man takin' the head off the engine on a wild goose chase. All they found was ever'thin' in A1 order. I imagine a valve stuck for a moment, but the owner wouldn't wait until the trouble remedied itself.

You can save a lot of money on repairs by lettin' things take care of themselves. Of course you've got to know what's what, but a good rule to go by is to take things easy when a repairer fails to get excited after you've told 'im your tale of woe. Remember the old rule, that things sometimes improve with use. I've cleaned carbon out of many an engine only to have the owner complain and imagine that I had spoiled it. A few weeks later—if he takes it easy—the chances are that he'll have the finest performance ever.

HINTS FOR THE MOTORIST

ALBERT L. CLOUGH How Transmissions Wear Out. Brutal Handling Hastens The Process. IF ALWAYS KEPT WELL LUBRICATED and handled considerately the transmission should give very little trouble and prove one of the longest lived parts of a car. But carelessness in meshing gears will sooner or later seriously damage their teeth. The clashing that occurs upon attempting to engage low, without fully throwing out the clutch, especially if the engine is running fast and that which takes place when reverse gears are jammed together with the car moving forward being almost certain to break chips off the teeth. If the gears are of very hard steel or to round off and deform them if they are not properly heat treated. If this destructive action goes far enough, the effective width of the teeth is reduced, noisy operation results, and there is a tendency unintended toward demeshing and increased liability of stripping. Habitual heavy clashing is very likely to make premature replacement necessary.

IS YOUR NON-FREEZING MIXTURE A CAR-WRECKER?

The maker of your car advises against careless use of non-freeze mixtures of unknown ingredients. They strongly recommend denatured Alcohol for your Cooling System. Maple Leaf denatured Alcohol is of highest standard quality. It will keep your car from freezing at all temperatures.—It will keep the entire cooling system clean, permitting freest possible circulation.—It will protect you from having to pay bills for repair of damage caused by corrosion. Mixtures of Maple Leaf denatured Alcohol and water can be tested for correct freezing resistance at any time, where the "Maple Leaf" sign is displayed. Is economical and easy to use. Sold by leading garages, service and filling stations. Insist on having it.



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Auto Batteries Made and Repaired When you need your Battery repaired or one made to order, also automobile repair work, it will pay you to see us. ELLIOTT & WILLIAMSON 210 DIVISION STREET PHONE 1069.

EDWARDS' AUTO SERVICE McLaughlin Car Owners Try the man that knows your car. Six years of factory experience in the McLaughlin factory. All work absolutely guaranteed. Flat rate if you prefer it. 85 MONTREAL STREET PHONE 2644W.

Batteries Called For and Delivered We give special attention to Dry and Wet Storage. Specializing in Auto and Radio Batteries at reasonable rates. Just 'phone 378. We call and deliver. G. McDougall Battery Service 110 CLERGY STREET (Near Princess)

We Can Make Your gasoline engine as powerful as when new. Arrange with us to have the cylinder reground and fitted with oversize piston and rings. Call and see our Heald reground. Automotive Grinders Limited 225 Wellington Street

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Second and High Speeds. The great proportion of shifts being between these two speeds, their engaging members usually suffer most rapid deterioration, particularly as so few operators can change down from third to second without severe clashing or are careful about throwing from second to high; the result often being that second speed early becomes very noisy. Worn Bearings and Noise. Accuracy of fit of transmission shafts in their bearings is essential to keep the teeth of gears meshing to exactly the correct depth and if bearings become worn and loose with no longer engage properly and become noisy and inefficient. The countershaft usually being located near the bottom of the housing, its bearings are rather more copiously oiled from the splash than are the others, but the bearing of that shaft from the clutch and that of the final drive shaft that transmits to the universal joint may be inadequately lubricated if the lubricant is low or so viscous as not to splash.



TIRE INFLATION AND SKIDDING. H. C. W. asks: Will the brakes of a car apply quicker and harder, causing an increased skidding tendency, when pumped to 48 pounds pressure than when pumped to 45 pounds? Answer: We cannot answer this question with accuracy, but the belief is becoming quite general that a large area of contact between the tire and the road causes to its "holding power" and thus increases maximum braking effect and resistance to side slip, this being one of the arguments in favor of balloons tires, which have very large contact area. The same question of general interest to the motorist will be answered by Mr. Clough in this column, space permitting. If an immediate answer is desired, enclose self-addressed, stamped envelope.

WEIGHT DISTRIBUTION. H. C. W. asks: Is the weight of an automobile equally distributed on all four wheels? Answer: No, the intent is to load the rear wheels considerably heavier than the front ones, approximately 60 per cent. of the load being on the rear and 40 per cent. on the front wheels, when the car is fully loaded. The object of the excess weight on the rear wheels is to give them sufficient adhesion to the road, so that they can transmit driving and braking forces adequately. Too much load cannot be taken from the front axle, however, without the sacrifice of steering power and fore-and-aft stability when full power is applied, very especially on a very steep up grade.

It was back at the garage. It figured that he has "picked up air," whereas it is simply increased air pressure as a result of squeezing the tire by making it support more weight. A low speed engine can be made to wear out just as quickly as a high speed one. It depends upon the use to which the driver puts his car. If a lower speed motor is made to deliver a car speed of forty miles an hour too frequently there is every reason why it should wear out as quickly as a high speed motor that is called upon to deliver only thirty miles per hour as a steady diet. Pure Water. Even a novice knows that radiators, piping, jackets, etc., are injured and made inefficient through incrustations resulting from mineral substances inherent in all of nature's aqua pura products, save, perhaps, rain water. The only safe thing to use, therefore, is distilled water. This is not always obtainable, but few indeed are places nowadays where artificial ice cannot be found. That's the answer; melt the ice and you have the purest water.

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Kingston Markets

Table listing market prices for various goods like Bananas, Grapes, Lemons, Apples, Potatoes, etc., with prices per dozen or pound.

Dairy Products

Table listing prices for Butter, Cheese, Eggs, etc.

Meats and Poultry

Table listing prices for Beef, Pork, Mutton, etc.

Hay and Grains

Table listing prices for Barley, Bran, Buckwheat, etc.

Hides, etc.

Table listing prices for Horse skins, Beef hides, etc.

Advertisement for Attwood & Dine, 277 Bagot Street, Phone 902m, advertising Dunlop Traction Cords and Ribbed Cords.

Advertisement for Douglas & McIlquham Contractors, 400 Albert Street, advertising brick, stone, plastering and tile setting.

Advertisement for The Monarch Battery Co. Limited, 275 Ontario Street, Kingston, Ont., advertising Monarch Radio A Batteries.

Advertisement for Mathieu's Syrup of Tar & Cod Liver Extract, advertising it as a cough stopper.

Advertisement for M. B. Trumpour, 270 Princess Street, advertising a house for sale.

Large advertisement for Kenwood Blanket, Robt. J. Reid, featuring an illustration of a woman and child, advertising pure wool blankets.

Advertisement for Dodds' Kidney Pills, featuring a circular logo with the text 'DODD'S KIDNEY PILLS'.