
Hudsonotes

Column of Mechanical Miscellany
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Around the Year

TIRE CHAINS may possibly be one authentic automotive accessory better left unresurrected. If one's collector car is purely a boulevard showpiece, there is certainly no need for them. But they were an indispensable adjunct to all-season motoring in many parts of the U.S. during most of Hudson's 1909-57 production span, and for years were in fact listed in the Hudson parts book as a factory item. Passenger-car tires with snow-grip or mud-&-snow treads were practically unknown before World War II, appearing on the market in the late 1940's (most often in the form of recaps).

Early mud-&-snow tread designs were obviously derived from some of the special ones developed for Jeeps and other military vehicles during the war. Noise level, and performance on icy surfaces, left much to be desired, although both factors have been improved somewhat over the years since; and despite problems such as limited tread life, somewhat reduced side traction, and a special sensitivity to underinflation, these tires have generally fulfilled their promise of eliminating the need for chains under all but the most severe conditions.

Treads carrying inset studs (generally tungsten carbide, metal-jacketed) remain the only type to provide a real measure of control on ice. Studded winter tires were widely used in Europe for years before becoming popular in this country during the 1960's, but have currently been outlawed in many areas.

Tire chains, always a nuisance to put on and remove, became even more so as evolution of bodies and fenders made access to rear wheels more difficult, the skirted Hudson stepdown design being a good example. Carelessly used, chains can also damage themselves, the car, and tires. Nevertheless, when needed, they do work, and if necessary can even be used over snow tires (this requires slight added length, about the same as for a standard tire two sizes larger). Chain-equipped, my '49Cp. has scrambled obediently over heavy winter snow with ice underneath, and also out of junkyard mud on one or two spring parts-hunting trips, as it could not have done using snow tires alone. Though probably used less than once a year, the chains are kept in a corner of the trunk, in a heavy cloth bag, ready for emergencies.

Rust can be controlled if chains are taken out in summer, laid on newspapers, and brushed or sprayed with an antirust product, or just with a mixture of about $\frac{3}{4}$ solvent and $\frac{1}{4}$ clean oil, and then left to dry for a day or two before being put back. A few spare cross-chains can be stored along with them, as can some repair links (to be closed either by pliers or by car's own weight); and perhaps also a pair of U-shaped springs which fit over tire for easier chain installation.

Although chains with a reinforcing steel claw welded across each link are reportedly the most effective on glare ice, the simpler open-link type also works well, and can be installed with either side outward to equalize wear. Chains and tires will run quieter, and last longer, if fitted with hook-on tighteners, either coil-spring or "rubber-band" type.

A set of chains is normally assembled with cross-chains spaced uniformly at about every fourth link of the side chains, but this uniformity can cause unpleasantly reinforced vibrations, especially at certain speeds. To break up the pattern, chains can be reassembled — as mine are — with 18 cross-chains at one wheel and 17 at the other (instead of original 16 each), spaced sometimes 3 links apart and sometimes 4, in no regular order. Result is much less throb and rumble when in use.

"Strap-on" chains for emergency use, made with two cross-chains plus a buckle and strap, usually in sets of eight or more, were carried by many motorists during the Twenties and later. They can also be used with modern drop-center wheels if a longer strap is provided for

them.

SPECIAL RUSTPROOFING treatments for auto bodies have become extremely popular during recent years as it has been realized that ordinary undercoating material offers only mild anti-rust protection; and later, when it ages and hardens, generally becomes worse than useless as it separates slightly from metal surfaces, thus letting corrosive moisture in and trapping it. Undercoater is essential on some parts of the car for silencing purposes, and it also helps protect panels underneath from flying stones and similar damage, but it is not reliable against rust.

Modern rustproofing processes usually feature two different compounds. One, the "outside" coating, is not unlike ordinary undercoater, and can be applied to clean, exposed surfaces in about the same way; but it is made without the usual thick filler material, and is designed never to become completely hard. Along with it there is an "inside" compound which is also non-hardening and is intended for use inside door and quarter panels, lower body pillars, rocker panels, frame rails, and other hard-to-reach places where corrosion may start. This is customarily applied using a special long multidirectional nozzle inserted through drilled holes which then are closed with distinctive plastic plugs.

The holes and plugs do indicate that a late model car has been rustproofed, but they are not necessarily desirable on a collector vehicle; and in fact their placement in any visible spots can usually be avoided if door and quarter trim panels, aluminum scuff plates, etc. are removed for rustproofing, and full use is also made of existing body holes (drain, courtesy-lamp, etc.).

One problem with plastic body-repair materials is that they usually contain a mineral filler which readily absorbs moisture, often causing a patch to warp — or to rust out the metal surrounding it — in a year or two, under damp or salty conditions. Much of this can be prevented if outside of plastic patch is sealed and painted, and then the inside surface fully coated with rustproofing compound. Undersides of brazed or welded repairs can be treated in the same way when cool.

For spot protection of small areas, if rustproofing compounds are not available, a coat of wheel-bearing or other heavy water-resistant grease, rubbed well onto metal, will keep off rust for years if not disturbed. Used engine oil should be avoided because of the odor and usually a slight acid content, but fresh oil, or the heavy oil from manual transmissions and rear ends, will protect for a time. Exposed bolts and screws can be greased, or one of the "anti-seize" compounds (special grease containing metallic particles, etc.) can be used on

them.

When attempting to rustproof an older car, the most troublesome part of the job is usually cleanup, and the removal of old hardened undercoater which holds tightly to metal even though partly separated. Any petroleum solvent will eventually soften the undercoater, but it's a tedious process. My own suggestion, which has been found fairly successful, is to brush or spray the area with heavy oil, leaving it in place for several months. The oil will give good temporary rust protection for at least a year, and during that interval will also soften old undercoater so that all separated portions can be easily scraped away, while portions still clinging properly to the metal can be removed or left in place as desired. In addition, the oil will tend to loosen any heavy rust scale for easier removal. A

coat of good-quality "outside" rustproofing compound can then be applied for more permanent protection. This method also works well inside car for floors, stepdown frame sides, etc., but a sheet of polyethylene plastic may be needed on treated surfaces to keep oil or rustproofing off carpets and other interior trim.

Most rustproofing is of course done on new cars, and is much simpler since no preliminary cleaning or scraping is needed. Old-car owners do have one advantage, however: if working on a familiar model (such as a Hudson stepdown), they have undoubtedly seen enough other examples of it — in all conditions — to know which parts of car are vulnerable and must be protected with especial care. On stepdowns, for example, there are the front fender areas just below

headlights and just behind front wheels, the small square pillar where cowl and side kick panels are joined, and the riveted frame joint (behind mud flaps) just below this; the side frame at rocker panels; rear frame members inside, outside, and behind the rear wheels (and rear fender area just above wheels); parts of trunk and front-seat floors, and so on. Frame and rocker panels may have curled-hair or sponge-rubber filler pieces which should be pulled out to insert compound properly. If in good condition, they can be coated lightly (do not apply oil to rubber), and later put back near original position. Convertibles have an extra stiffening member inside outer frame rails (October '78 WTN, p. 29), presenting added surfaces which should be treated. This writer is currently working on rustproofing his '49Cp., and plans to report progress in a future issue of WTN, along with any comments and suggestions from members who have already rustproofed their cars.

National Geographic Magazine, January, 1920



Taxicabs
use **WEED TIRE CHAINS**

Because they can't afford to take chances and because, with Weed Chains, they get greater mileage out of their tires.

It's a business proposition, pure and simple, with taxicab companies. They use Weed Chains for economy and accident insurance.

The main incentive for the use of Weed Chains is the accident-preventing feature—a most important factor as it means the saving of lives and property.

But further than that it is known from bitter and costly experience that the continual, constant and yet hardly perceptible slipping of the rubber tire-surface on wet roads and pavements—only the foot or so of lost traction at a time—is an alarming expense item—wearing out tires just the same as if you pressed them against a rapidly revolving grindstone.

Taxicab companies have learned from experience that *only by the use of Weed Chains* can this continuous wear on tires be prevented. Their drivers are *ordered* to put on their Weed Chains "at the first drop of rain" because of the thousands upon thousands of dollars that are thus actually saved every year in tire service and the elimination of skidding accidents. Wouldn't it be well for you to learn wisdom from the fellow who really knows?

Be as wise as the taxi driver and always put on your Weed Chains "at the first drop of rain."

Weed Chains are also made to meet the demand for an efficient traction and anti-skid device for trucks equipped with single and dual solid tires or with the very large pneumatic tires. They are so constructed that they satisfactorily meet the requirements of heavy truck service in mud, sand or snow.

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WHEN WINDOW CHANNELS, or rubber weatherstrips at doors and trunk, are frozen with ice, it may be nearly impossible to get them open without damage. A liberal application either of silicone or of Door-Ease wax will help prevent this, however, since ice does not stick effectively to these products. For best results, apply Door-Ease to both rubber and metal surfaces, softening end of stick slightly if necessary by dipping it in paint thinner. If a sliding window is frozen tight, it should not be opened at all until thawed, since if forced, the added strain on glass near where metal channel is attached at bottom may cause the start of a crack which quickly will spread upward. Preferred lubricant for felt and velour glass channels is silicone or wax compound in a spray can, but plain paste wax (in thinner or alcohol) also will help.

A PAIR OF farm fence pliers (combination wire stretchers, cutters, etc.) may look surprising in a mechanic's tool box, but this tool is excellent for pulling stubborn cotter pins, and is especially good for removing upholstery hog rings without cutting the rings or tearing cloth.

FRONT STUB FRAME assembly from a Hudson stepdown can be used as a convenient engine stand for repair work and, if radiator and battery are left in place, for running and checking out the engine as well. Accessibility is very good; and with front wheels and suspension (and perhaps steering box) also left in place, the stand is easily movable.

'TIS THE SEASON too for holiday greetings. Here's wishing a Merry Christmas to everyone in H-E-T . . . and best of luck through the coming 1980's. It will be an interesting decade, I believe, but one in which automotive enthusiasts of every persuasion will need to remain friends, and to pull together.