
Hudsonotes

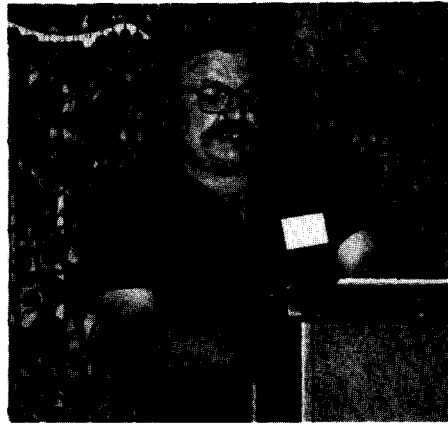
Column of Mechanical Miscellany
by George Schmidt
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From the Accessory File (11th in a series)

VERY FEW CARS, old or new, on the road today could be considered totally "authentic," in the sense that every part is precisely identical in brand, construction, and appearance to those originally installed at the factory. Often, to be sure, the factory itself specifies slightly different parts for service or replacement use (or for production later in the year), and of course some items such as tires and light bulbs may be of assorted brands even as standard equipment on the production line. After the car has been in use for a few years, ignition tuneup parts, and perhaps filters, exhaust components, etc., are likely to be of other than the original brands (sometimes with no loss of quality). As the car grows older, this may also be true of suspension parts (joints, shock absorbers, etc.), mechanical parts such as U-joints, seals, brake linings, engine and other bearings, piston rings; and many more items.

Is all of this bad from the collector's or auto historian's standpoint? Probably not. For some owners, perhaps, the question is entirely a financial one: will the presence of aftermarket parts or accessories decrease (or increase) the market value of the car? Apart from that, however, there are at least two other practical considerations. First, there are not nearly enough good "original" parts to go around (this is true even with some relatively late models), and the deciding factor as to whether a desirable older car will be restored and/or kept on the road — or not — is often the availability of aftermarket parts, at a sane cost, which will look, fit, and function as they should. They may be either "reproductions" or just good-quality parts originally made for the replacement or accessory trade.

A second consideration is that aftermarket parts and gadgets have been a normal part of the automotive scene since the earliest years, and so perhaps



need also to be preserved as a legitimate part of automotive history. Usually these items have been sold because of a price advantage, or as novelties; but sometimes because appropriate factory-authorized parts were not available, or were not entirely satisfactory. Whether aftermarket parts and accessories will improve one's collector vehicle (or late model) or spoil it depends upon many factors, but especially upon faithfulness to the car's own era and design, usefulness and reliability of the parts — and personal taste.

REPAIR KITS, or pre-packaged sets of parts for a given component of the car, have long been offered by most car-makers. Hudson listed kits for brakes (linings and rivets, or linings on shoes, or for rebuilding master or wheel cylinders), for the water pump, for engine or transmission overhaul (including all gaskets), for steering spindle (kingpin) re-bushing, for tie rod ends, for rear spring shackles, for universal joints, and for several other parts of the car. Aftermarket suppliers offered various additional kits including those for rebuilding carburetors (Carter), rebuilding the center steering arm pivot (McQuay-Norris), rebuilding fuel pumps (AC or Carter, with or without vacuum booster); and there was even a small unbranded package which contained parts and instructions for repairing broken Trico windshield wiper cables. This of course is not a complete list of repair kits for Hudsons, and we would like to hear from readers who know of additional ones.

At least one brand, Champ-Items (a division of the Standard Ignition firm) long offered an assortment of "problem solver" parts intended to provide a quick fix for anything from sagging suspension springs to a broken connector stud on the starter motor. Many other special

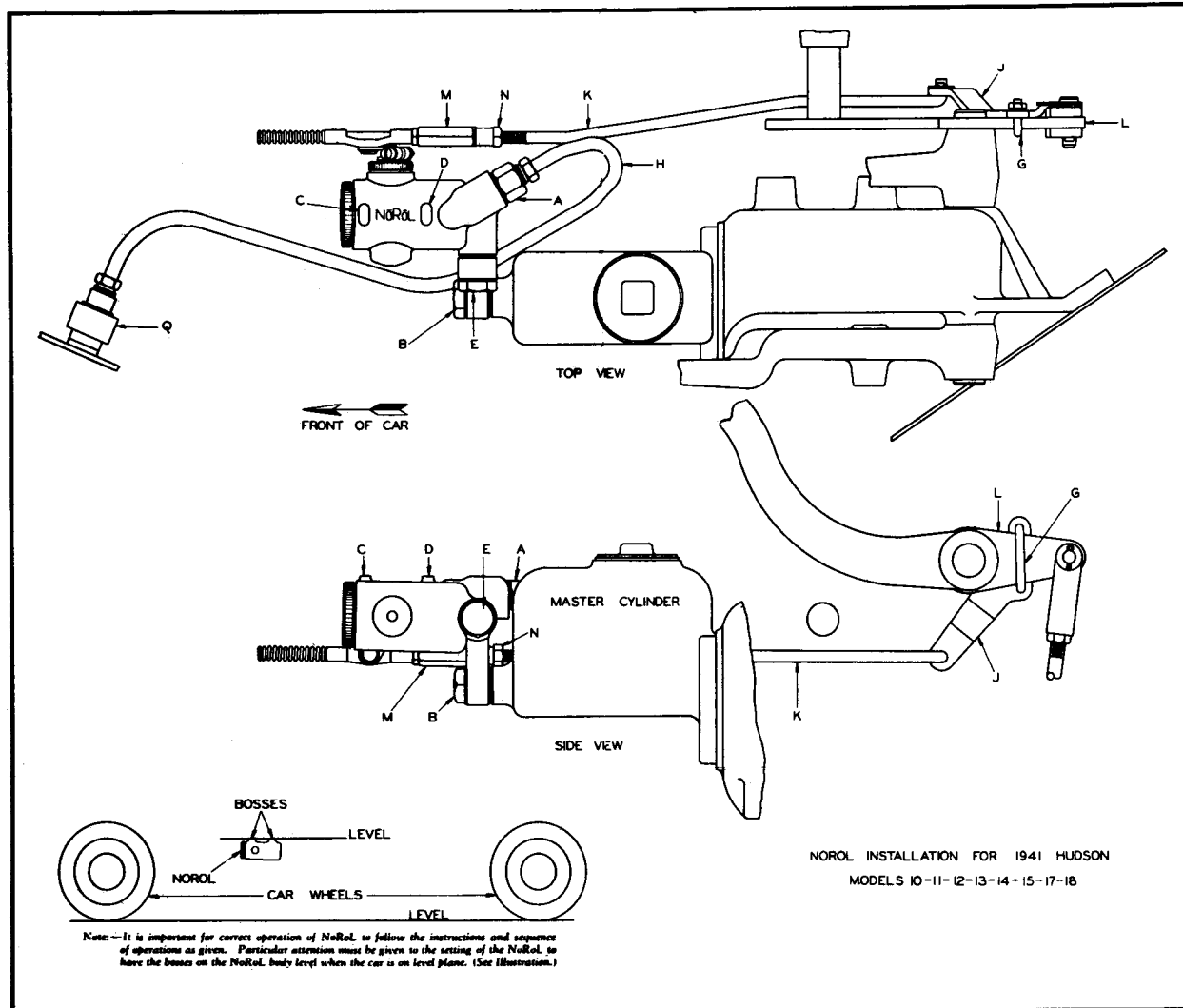
repair and accessory parts, designed to fit most cars of their era, have been made by various small companies (not always with a brand name). If such items are to be used, those which are of about the same age as the car are logically preferable to those which were not in production when the car was new.

ACCESSORIES FOR BRAKES were not numerous, but a few were available. A "hill holder" for early cars and perhaps some horsedrawn vehicles was sometimes home or blacksmith-made. It consisted of a heavy iron bar or "sprag," one end pointed and the other hinged at the rear axle, along with a control cable or cord, so that it was normally held up out of the way, but could be quickly dropped to the road surface by driver to prevent car from rolling backward when it was stalled or stopped on an upgrade. Though not of much use on hard pavement, the sprag "dug in" quite well (sometimes too well) on softer surfaces.

When hydraulic brakes came into use, at least one type of hydraulic hill holder was offered for use with them. This was the Wagner "NoRoL," often remembered by Studebaker enthusiasts since it was standard equipment on many Stude models and optional on others. However, it was also a Hudson dealer option during 1940-1950 or longer. It was a small iron cylinder-shaped valve, connected in the brake fluid line near master cylinder, and mounted on car frame in a perfectly level position. It contained a check-valve ball and seat at one end, along with a lever which could push ball away from seat and thus hold the valve open. This lever was linked to the clutch pedal. When the car was in either a level or a downhill position, the valve also remained open since there was no tendency for ball to roll toward seat, and thus the brakes operated normally. With the car in an uphill position, however, the ball would seat itself so that when the brakes were engaged, they would not release when foot was removed from brake pedal, until the clutch pedal was also released. This accessory thus eliminated the apparent need to hold three pedals simultaneously in order to make smooth uphill starts with a manual-shift car, although correct adjustment, and a leakproof seal at lever shaft, were essential.

The NoRoL hill holder was reportedly liked by owners who had used it, but this

INSTRUCTIONS FOR INSTALLING NoRoL PART No. FF-2031 on 1941 HUDSON CARS---ALL MODELS



1. Place car on level floor. If car must be raised, all four wheels must be an equal distance from floor.
2. Remove and discard brake tubing which extends from outlet end of master cylinder to frame fitting (Q).
3. Remove and discard outlet fitting from end of master cylinder.
4. Attach NoRoL valve to master cylinder with bolt (B) in position shown on drawing; valve body to be above master cylinder outlet hole. Do not tighten bolt (B).
5. It is now necessary to level the NoRoL.
 6. Place a small accurate spirit level crosswise on either boss (C) or (D) and swivel unit around bolt (B) and tighten bolt (B) securely when unit is in a level crosswise position. Place spirit level lengthwise on bosses (C) and (D) and swivel unit around bolt (E) until unit is level lengthwise; then tighten bolt (E) securely.
 7. Connect tubing (H) to frame fitting (Q) and to outlet fitting (A) on NoRoL. Tighten tube nut securely.
 8. Recheck bosses (C) and (D) for crosswise and lengthwise level position. The fundamental operation of the NoRoL depends upon the unit being level.
 9. Assemble operating lever (J) on motor side of clutch operating lever (L). Secure with original clevis pin and with U-bolt (G). U-bolt (G) should straddle clutch operating lever (L) and go through holes provided in lever (J). Secure with nut and lockwasher.
 10. Assemble clutch rod (K) as shown on lever (J) and secure with washer and cotter pin.
 11. Bleed system at all wheels to remove air, and refill master cylinder with genuine Lockheed Hydraulic Brake Fluid.
 12. Wipe all connections dry. Hold brake applied for one minute after which examine connections for leaks.
13. Start the motor, fully depress the clutch pedal, engage low gear and apply the brake. Release brake pedal but continue to hold the clutch pedal fully depressed. Slowly engage clutch, noting where the NoRoL releases the brakes in relation to clutch engagement. If motor has a tendency to stall it will indicate that the brake release is delayed. This condition may be corrected by threading rod connector (M) away from clutch pedal. Should the brake release before the clutch engages, it will be necessary to thread rod connector (M) toward clutch pedal. When the NoRoL is properly adjusted, the brakes release as the clutch plate engages. Locknut (N) should be securely tightened after final adjustment is made. Car should be tested on slight incline to prove that adjustment has been properly made.

AUTOMOTIVE PARTS DIVISION

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writer has not seen one installed on a Hudson, and does not know whether it was installed in large numbers or not. We are hoping that a reader who has driven a Hudson or other car equipped with this accessory will write and tell us how well it worked.

A small warning light indicating when the parking brake has been left on is another accessory liked by many owners. It was available as an aftermarket item during the 1940's and no doubt longer, one version being made by Ekland, Chicago (see "Help for Handbrakes," April '75 *WTN*). A small thin cable (picture wire) or pull cord must be attached to the handbrake rod, under dash, to operate the light switch. This is fairly simple on most Hudsons 1950 and older, but on models after that which have the brake rod sliding inside a closed tube, with only a small short pin projecting at side, it may be necessary to wire-weld (very carefully) a small hook or extension onto the pin to hold the control wire for light.

How does one adjust handbrake cables when rusted threads at the end cleaves promise a major struggle, or possibly all of the available adjustment has already been used? Usually the threaded parts can eventually be loosened, if a good penetrating oil has been applied several times in the days beforehand, but one alternative is to use the aftermarket "brake cable tighteners" which have been available for many years. These slip over the cable and have an adjustment screw and locknut at one side. They should be placed where they will not strike exhaust or other parts, or hang down under car; and if used on the front cable (where less strength is required, on most Hudsons), they must not be able to drop off when the cable is slack.

A few liquid products intended for application to brake linings have been offered over the years. Today they are usually for cleaning purposes only, and are packaged in spray cans, although a careful washing with ordinary lacquer thinner (which dissolves both grease and brake fluid) is often about as effective.

During the 1940's or thereabouts, however, one occasionally saw posters and ads for liquid compounds which were claimed to improve brake performance by depositing a special coating on (or in) the lining. One of these was

called "Cop-Sil-Loy," and was said to contain an alloy of copper and other materials. Whether such products were mostly a ripoff of the customer's dollar (as many automotive additives, "gas saver" gadgets, etc. have been), or whether they possibly were of some benefit, especially in an era when brake linings were generally more porous and absorbent than those of today, is hard to say at present. Can any reader tell us?

HILL CLIMBING ABILITY was a much prized performance characteristic in the early days of the automobile. With less engine power and usually steeper hills than in later years, this was understandable. Hill climbing events attracted nearly as much attention as races, and there was much talk about whether a given car, for example, would climb a "50% grade" (it was sometimes possible, under ideal conditions). Such a grade has a half-foot of rise for each foot of horizontal travel, so it is equal to about a 26½-degree angle from the horizontal, and is far steeper than highway designers would allow at present. Even in the early days, the usual practical limit for roads was about a 20 to 25% grade (¼ foot or less of rise for each foot of horizontal travel).

One accessory available for early-day autos (and carriages) was a small "gradometer" which would indicate the steepness (in per cent) of the incline being climbed or descended. Its usual form was a curved tube a few inches long, slotted and with numbered marks along its length, and with a ball inside which would roll from the center (zero) position to indicate the amount of slope. This device needed to be mounted on the car in an exactly level position front to back, so that it would indicate zero when the car was parked on level ground, with a normal load. It is probably a rare item today.

THE 1950'S BROUGHT a number of auto accessories which were typical of the period. It was the heyday of drive-in restaurants and movie theatres, and accessory swing-away underdash trays to hold food, drink, etc. were available. Some cars, including 1954 Hudsons, also had the inside of the glovebox door designed to present a level surface when open, with round indentations to help hold drinking cups and the like in place. Another accessory was a set of flat spring

clips which could be swung over door-jamb switch buttons to hold them in. Intended to prevent the distracting flash of courtesy lights each time a door was opened when a film was being shown, these clips were also convenient battery savers whenever car doors needed to be left open for other reasons such as interior cleaning or repair work.

"Educated Nuts" were a much-advertised accessory of the '50's. They were available to fit most cars, as a replacement for the standard castellated nuts used on front wheel spindles to hold bearings in place. The outside of an Educated Nut had a very fine-toothed spline, and the cap portion, which fitted over this, had a matching spline, and was held on by the usual cotter pin. The splines permitted extremely fine adjustment when tightening the wheel bearings, with no need to "back off" nut to line up with cotter pin hole. It was claimed that the standard nuts, which are normally limited to adjustment steps of 1/6 turn, did not offer sufficiently precise adjustment for ideal performance of wheel bearings, avoidance of shimmy or vibration, etc. Whether this was true or not, when the bearings were properly greased and the tire/wheel/drum assembly was accurately balanced, is open to question, but at any rate the special nuts probably did no harm, if properly installed and adjusted.

Also in the questionable category were "Gane Air-Flow Needles," available at about the same time. These were replacements for the standard one or two idle mixture adjustment screws on carburetors, and could be had for any U.S. car. They resembled the original screws, except that each one had a small air bleed hole drilled through it lengthwise. This, it was claimed, would improve the air/fuel mixture which is normally metered by these screws whenever throttle plate is in the idling position. However, it is likely that with most carburetors, the extra air admitted by the Gane needle screws merely required a slightly changed adjustment of the idle mixture setting to compensate.

Fuel pressure regulating devices, usually including also a fuel filter, to be installed in gasoline line between fuel pump and carburetor, were another much-advertised 1950's accessory. With the general increase in engine horse-

power (and fuel appetites) at the time, several Brand X's found it necessary to raise fuel pump pressure much higher than the long-standard 2½ to 5-pound range, in order to ensure an adequate supply of gasoline at all times. Unfortunately the pressure increase from some pumps was excessive, causing frequent flooding and other problems at the carburetor. Add-on pressure regulators were sold under several brand names, including "Filt-O-Reg." Does anyone know of one of these in use on a Hudson?

By the 1950's, the manual spark-advance lever on steering column had long since gone the way of acetylene headlights and hand starting cranks, but it still was occasionally found desirable to be able to vary the static ignition timing slightly from the driver's seat, preferably without disturbing the action of the automatic centrifugal and vacuum advance mechanisms, in order to compensate temporarily for high altitudes, poor fuel, or the like. At least two versions of an accessory device for this purpose were available in the '50's (see "On Time," January/February 1980 *WTN*). These featured a small chromed underdash control and a cable which could rotate the distributor slightly.

THE 1987 CENTRAL Regional Meet (Dodgeville, Wisconsin, June 13th) was fun despite the very hot weather. A number of beautiful cars were present, including a 1928 Hudson which was difficult to photograph because it wore a car cover most of the time, a 1947 Hudson coupe which had just had the Drive-Master installed and put in working order, a 1927 Essex with an improbable but authentic paint job, a spectacular cream 1942 Hudson, and more. My red 1954 coupe was there too, but looked a trifle unhappy when it saw that most of the others had wide-whitewall tires and shinier paint. It apparently enjoyed the long trip, however (with two friends, Craig Nichols and Ron Cigler, doing most of the driving). Also present was a 1949 Hudson with a remarkable collection of accessories from its era. More about those later.