

# Readers to the Rescue

## HUDSONOTES

By George Schmidt

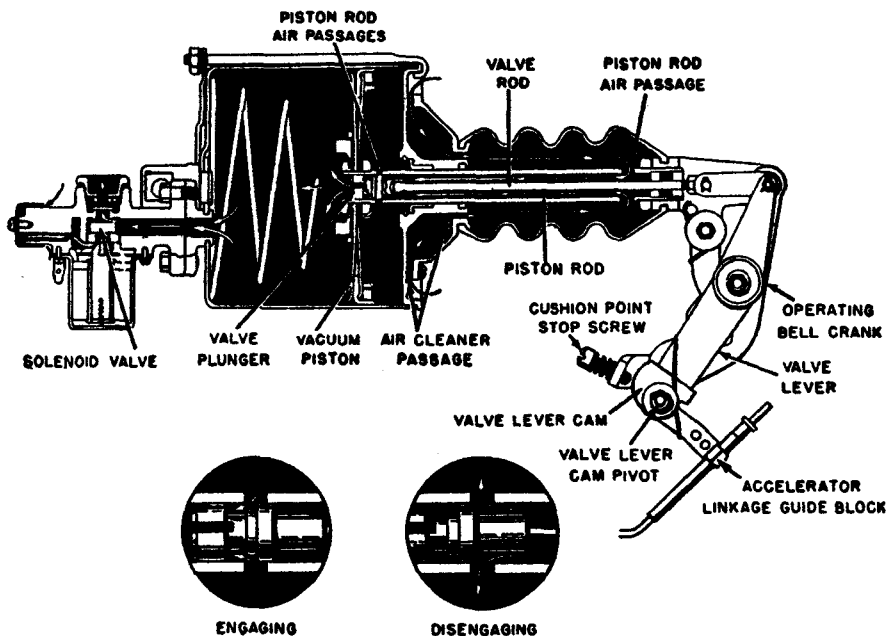


Fig. 29 Vacuum clutch control details, 1942-47

XEROX COPY of Hudson's 1950 option and accessory folder was sent to me a while ago by Jim Zimmerman, Wisconsin. It includes the factory-installed (and some dealer-installed) options, along with prices. Here are a few sample figures: Pacemaker 6 sedan—\$1933.00. Commodore 8 club coupe—\$2341.25. Commodore 6 convertible—\$2809.25. Oil filter (6-cyl.)—\$12.96. Radio—\$83.76. Spotlight—\$23.18. Heavy-duty shock absorbers—\$12.08. Glareproof mirror—\$4.46. Backup light (single)—\$5.75-plus. Aluminum cyl. head (6-cyl.)—\$10.75. Drive-Master—\$104.65. Overdrive—\$94.96. Exhaust extension—\$1.84. Seat covers—\$25.62 to \$50.46. Front grille guard—\$22.50. Rear deck guard (for Pacemaker and '48-49)—\$22.50. Fog lights—\$18.24. Oilbath air cleaner (8-cyl.)—\$8.29. Deluxe steering wheel

(most models)—\$18.36. Two-tone paint—\$20.98. Whitewall tires—\$23.34. Economy rear axle (3.82 ratio)—no charge. Leather trim (most models)—\$121.85. Power windows (convertibles only)—\$63.03. Vacuum booster pump—\$9.70. Windshield washer—\$10.37. A few expected items are not shown in this June 1950 folder for customers—for example: rear radio speaker (despite 1950 sedans having a rear shelf cutout for it), or heavy-scale springs for front or rear. Also not shown is the rear-window wiper, probably because it would be difficult to fit on the two-piece rear window used on most models in that year.

However, an earlier pamphlet (May 1950, for dealer use only) shows list prices for dealer-installed items, among them: Electric locking gas cap—\$4.25. Turn signals—\$20 & 24. Fire extin-

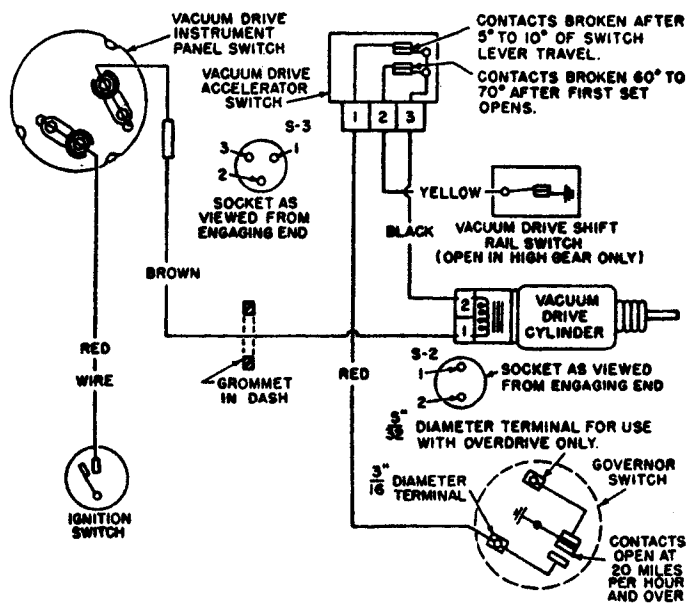


Fig. 33 Vacuum clutch control wiring diagram, 1948-51

guisher (quart size)— \$15. Auxiliary floor mats (2 colors)— \$1.95. Electric clock— \$24-25. Rear speaker— \$12.60. Prismatic traffic-light viewer— \$4.50. Hydraulic hill-holder— \$15. License frames (most sizes)—\$7.95. Gasoline filter— \$2.44. Kleenex tissue dispenser— \$2.50. Vacumotive Clutch kit (a '48-49 holdover, also fits '50)— \$47.50. Chrome front-fender "eyebrows"—\$5.25. Small chrome shields above front windwings— \$2.50. Trunk light (automatic)— \$2.25. Karvisor (external) — \$21.95. Radiator pressure cap— \$1.40. Tire chains— \$9.15. Rear window wiper (Pacemaker and '48-49 only)— \$17.50. And to dress up Pacemakers and '48-49's a bit, the chrome side trim for center of sweep panel— \$17.25. Although the lists here are far from complete, they do give an idea of what might perhaps be found on a well-dressed (or maybe "loaded") Hudson in 1950. Of course many of the items were also available in "groups," or as standard equipment on some models.

A GUN RACK for the rear window of a pickup truck was a familiar aftermarket accessory in some areas for years (though Wisconsin and some other state laws require that guns in vehicles be cased, and not loaded). Does anyone recall whether these racks were available circa 1930-47 to fit Hudson

trucks? Are any still in existence from that period?

Hudson's automatic battery filler (1950 price—\$4.25) brought more reader mail than, any other item in the March/April '06 column, including comments from Dan Morton, Texas; and Bruce Marshall, Florida. Thanks for writing. Special thanks also to M.E. (Red) Burke, California for supplying the 16 and 17-tooth speedometer pinion gears—and to Bill Wunder, New York, for sending me a NOS 28-inch oil filter hose (July/ August '06 column) from his stock!

I DO NOT understand why some Hudson owners, even today, still prefer to remove and discard a Vacuum Clutch or Drive-Master system found on their cars, rather than repairing and using this equipment. Apart from the question of whether one would rather destroy automotive history or preserve it, there is the fact that these systems are just fun (and quite effortless) to drive—and they can also be switched instantly back to full manual control whenever desired. Yes, they are practically guaranteed to send any Brand X mechanic into a tailspin...unless he has worked on some of the modern sliding-gear automatics, that is. Yet they are quite easy to work on at home, since all of the parts are externally mounted for ready access, without eviscerating the

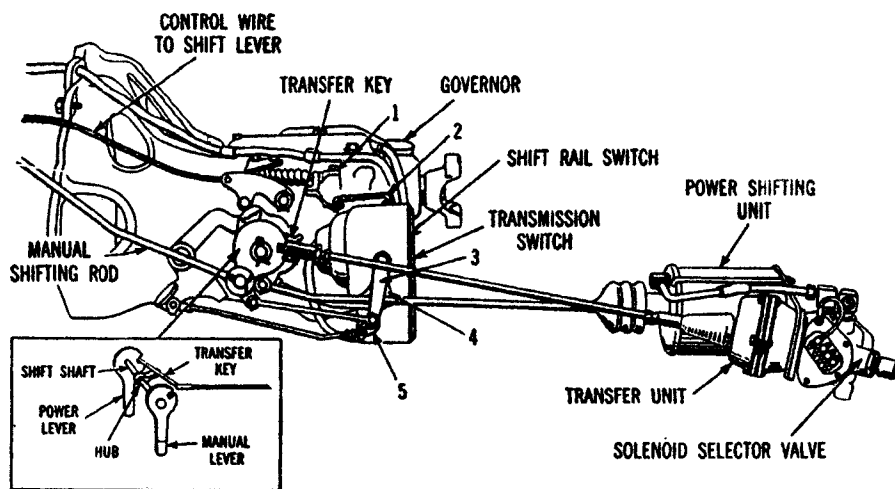
car. Remember, too, that if problems seem puzzling, I can usually help, either by mail or now in most cases by telephone (920-755-2052). No charge.

There also were articles in some earlier monthly *WTN's*—June to August 1974 and December to March 1974-75; plus some tips in later issues including Sept./Oct. 1993 and Nov./Dec. 1999 (check with Back Issues or with the Club Library). Original factory instructions are available from the Club Store or in the big old *National Automotive Service Data* book (predecessor of *Mitchell's*); and much of this is also found in *Motor's Manuals* of the time.

A CORDIAL LETTER from Hank Davis, Maryland, says that he enjoys the *WTN* and the column, but has been an HET Club member for only a few years, and wishes there were more restored Drive-Masters in the Club, since he would like to see one. He's familiar with the Chevrolet shift system c. 1940-46, which was non-automatic—and non-electric—but used a similar vacuum power cylinder (and worked O.K. for him, he reports). As on Hudson, the cylinder required occasional lubrication with shock-absorber fluid.

It's true that Drive-Master problems were more often electrical, one example being dirty contacts in governor, sometimes worsened by a worn-out leather oil seal on shaft. The seal is mounted in a metal ring, about 1" diameter, underneath rotor (I've sometimes wondered whether anyone makes a replacement which will fit here). Check for this problem also on Vac. Clutch and/or Overdrive-equipped cars; and be sure the small vent at top of gearbox is clear, to avoid pressure buildup. Carburetor or choke-cleaner spray is helpful when cleaning the contact points (don't bend them!).

Norman Puls, California, writes



**Fig. 12 Drive-Master automatic shifting units, 1942-47. The numbered levers operate (1) transmission crossover, (2) transfer switch, (3) selector switch, (4) neutral and limit switches, (5) clutch switch**

that he learned to drive on a '47 Hudson (with foot radio control), but then drove the family's next car, a '49 Hudson with Drive-Master. Everything worked well, although Norm mostly liked to drive it as a plain stick shift (along with overdrive, which he added). His mother, however, preferred to drive it as a full automatic, while his father, it seems, liked to drive using only the Vacumotive Clutch section. It sounds like a good way to keep everyone in the family happy. Everything was still working when the car was finally sold (over Norm's objections) in 1959.

CLUB LIBRARIAN John O'Halloran sent me a bundle of Xerox copies apparently taken from early Hudson engineering notebooks, circa 1912-1920. Nearly all in longhand, pen and ink, the pages contain very detailed specifications, sketches, and calculations for Hudson engines and other mechanical components—bearing sizes and stresses, crank distortion, connecting-rod weights (both ends), various Hudson transmissions, ratios, gear tooth numbers, and so on and on. Included too for comparison are specs from some Brand X cars (mostly expensive ones)—Packard, Hispano, Mercedes, etc.). Also, some of the figures seem to be intended for models never actually built—there is even a proposed Hudson farm tractor! I wish I could make head or tail of more of these pages; but if nothing else, they demonstrate that automotive design even in

those days was far from a mere cut-and-try procedure—it involved much mathematical work of a sort which today would doubtless be done (for better or worse) by a computer.

John also sent copy pages about very early tires and rims. For a time it was not unusual to have the wood-spoke wheels on a carriage or early automobile cut down to accommodate pneumatic tires and rims on a vehicle which did not have these originally, or possibly for use with a more available tire size (there were dozens).

SPEAKING OF TIRES, I've found the original-type bias plies to be entirely satisfactory on Hudsons, even for fast maneuvers—if they are high-quality, truly round, and have fairly soft tread rubber; and if they are firmly inflated, which means a uniform 35-39 p.s.i., cold (this for bias plies only). Some of mine in the past admittedly were rather tired old specimens, but nice and round and crack-free. One or two which were found slightly cupped or lopsided were corrected using a heavy grinding wheel placed on ground next to one front tire. Rotate high spot on tire very slowly against grinding wheel.

However, the factory's once fashionable recommendation of only 24 p.s.i. inflation is actually dangerous (especially without Inner tubes), besides being squealy, harder to steer, and causing needless rolling resistance. A mixture of bias and radial tires is also dangerous since handling will be dis-

tinctly treacherous.

On the other hand, a slight oversize (say 8.20 instead of 7.60:15—or modern equivalents—on the 5.5.-inch wide rims) works quite well in front, especially on stepdown Eights, and can give a bit of extra road grip for cornering and braking. At rear the larger size can carry heavier loads (and help correct a too-fast speedometer), but may not allow clearance for chains, and may perhaps need to be deflated to get tire on and off car under the skirted fenders.

Six-ply tires will also carry heavier loads, and were a Hudson factory option, but are not recommended, because of their harsher ride—and worse still, when inflation pressure is lowered to compensate for this, their life expectancy is short. Nor do they improve traction or quiet.

UNLIKE RADIAL plies, standard bias tires when pushed too hard around curves will break away gradually, thus giving the driver fair warning. Their one practical disadvantage is shorter tread life than with radials; but they usually take well to recapping (don't scorch those wide whitewalls). Generally if a Hudson will not handle properly with the bias tires for which it was designed, either the car or the tires are defective and need to be checked. As a preliminary check, try switching right and left tires; and look also for abnormal wear patterns such as "feathering" of tread, single-edge wear, cupping, out-of-roundness, etc.

Next look for bent wheels (or drums)—any more wobble than about 1/16 inch is questionable. Then check wheel alignment (a bit of extra caster, maybe about 1/2 to 1° on each side, does no harm...particularly on "groovy" roads!). Inspect steering parts for excessive wear—the gear, center arm, king-pins, tie-rod ends; drag link. Bounce each corner of the car to find defective shocks, and check also for a weak spring (front or rear) at one side. Look at rubber end bushings on stabilizer bars, front and rear. And don't forget dynamic wheel balancing (with mud removed, and no water inside tires). Perhaps readers can offer further hints.

As a temporary help for worn king-

pins, tie-rod ends, or center steering arm, one can use a small gun to insert heavy wheel-bearing grease. This will not eliminate the wear, but can give smoother steering for a time.

I'M AWARE THAT some of the preceding comments about tires will put me in direct contradiction with a few other Club members including one or two fellow *WTN* columnists. So be it. Bear in mind that radial-ply tires, though invented in France c. 1949, did not come into general use on American cars until long after the Hudson era. If you like radial tires, why not use them on a later vehicle which was designed for them?

But do radial tires cause added stress and possible breakage on old rims? I do not believe this is true, especially considering their usually softer sidewalls and lower air pressures. However, the question arose last year in the Chicago/Milwaukee Chapter's *Hud-Nut News*, which published a photo of a Hudson 15 x 5.5-inch wheel with at least 12 inches of the rim split away (and no, it wasn't a split-rim type wheel!). The owner says it was used with a radial tire, and he wondered whether that was the cause. More likely the cause was a flaw in the wheel itself, perhaps originally, or if rusted, or if badly bent and then straightened. I've bent a few Hudson wheels myself (including one severely when it struck a piece of steel lying in road), but I've never managed to break one.

An intermediate type of tire, with cords biased only slightly so they somewhat resemble radials, has been used on racing and sports cars, but probably is not found on standard passenger cars. At the other extreme are "long cord" tires with an extreme bias—not recommended except perhaps for rear-engine vehicles.

A GOOD SPRINGTIME to all—and  
keep those letters coming!



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