

# Hudsonotes

Column of Mechanical Miscellany  
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## Keeping Clocks Contented

CLOCKS WERE INCLUDED on a few cars from almost the earliest years. . . and some cynics may possibly ask why they have not accordingly evolved to a better level of reliability by now. The answer seems to be mostly a matter of costs, along with the extremes of temperature, humidity, dust, etc. to which the clock is subjected when installed in a car. Whether the currently fashionable digital-readout clocks will show a better long-term reliability record in cars is not yet known.

A number of early car clocks were made as part of the speedometer assembly (which was itself an option on some cars). Perhaps this is where the idea for those clock/tachometer combinations of the 1960's originated. Other early models had clock separately dash-mounted in the usual manner. Manufacturers of early clocks for cars included the Waltham Watch Co. We have not been able to find out what year Hudson first offered an optional clock, but are hoping a reader will help us.

One type of clock offered by Hudson and a number of Brand X's in the mid-1930's was built into the inside rear-view mirror at one side. Movement was usually of the daily-wind (30-hour) type, and this mirror clock was listed as part of several different accessory "packages" in 1936. However, an 8-day-wind mirror model was also available—an unusual item, since 8-day clocks have not been common on U.S. cars over the years, despite their familiarity on some foreign-built vehicles such as Mercedes.

Hudson in 1936 also offered a conventional self-winding electric clock as an alternative. It sold for \$13.50 (vs. \$4.50 and \$12.00 for the two mirror clocks); and like most other car clocks of the 1930's and '40's, it mounted in the glove compartment door. This was a good location for appearance and service accessibility, but it proved impractical when too many clocks were brought to an untimely end (pun intended) by overenergetic slamming of the glovebox door. Later cars, including Hudson 1948 and up, had clock moved to a stationary position on dash.

On these stepdown Hudsons the clock was not an add-on, but was standard equipment on all cars. An electric clock was supplied on Commodore models, and a 30-hour springwound one on Supers (with the electric available as a dealer option). The springwound clock mechanism was by Lux Clock Mfg. Co., Inc. of Waterbury, Connecticut, also known for its appliance-control timers and present-day household clocks.

Electric clock mechanisms on Hudsons from the '30's through the stepdown years

were made by the Geo. W. Borg Corp., Chicago. An excellent article on the care and servicing of these clocks, by former H-E-T member Karl Liskow, was published in the *WTN* just ten years ago (November 1972 issue), and perhaps some readers can find the article, or obtain a xerox copy. A few additional suggestions are given here:

UNLIKE SOME Brand X units—the Jaeger Watch Co. clocks used on many Nashes, for example, which had field coil placed to deliver a tiny magnetic impulse to the balance wheel with every individual tick—the Hudson/Borg clocks were "electric" only in being able to rewind themselves electrically each time after running for 3 or 4 minutes on spring power. This type of clock, besides its normal ticking, invariably emits a faint "brpp" sound every few minutes, when winding itself. A spiral mainspring about an inch long is pulled tight by a swinging armature bar whenever solenoid coil is energized. This winding device is attached to the rear of the clockwork proper. Clockwork is partly jeweled, with sapphire bearings for balance wheel only (escapement fork and other bearings are metal).

Since most of these clocks have simply been left inoperative for most of their lives, it is rare to find one which shows significant internal wear. Parts actually bent or broken are also rare. The most usual cause of stoppage is oxidation or dirt on the electric contact points, so that clock will not wind. These contacts can usually be cleaned up with an ignition point file (or even with a nail file, if necessary); but sandpaper and similar abrasives should be avoided, since they will usually help cause worse oxidation later. Try not to remove any more metal from the points than necessary, but be sure they make good contact over most of their surface. The movable contact must swing freely on its pivot, without sticking (see 1972 article). Be careful not to lose the small H-shaped link between contact arm and flat spring. The armature bar has two small ratchet pawls; be sure both are holding properly, with their tiny wire springs in place.

To help reduce future arcing and burning of the contact points, connect a small capacitor across the circuit. This can be a spare ignition condenser (of approximately .20 mfd.) fastened to back of clock case and with its tail wired to the "hot" terminal.

The second commonest cause of clock stoppage is simply the eventual gumming up of gears, pivots and other parts. Clockwork can be washed out with a solvent such as lacquer or enamel thinner, using an eye dropper, and keeping the solvent off solenoid windings and all plastic and painted parts. Products such as carburetor cleaner (in can with long spray tube), or even WD-40, usually also will free sticky clock parts, which then can be blown dry with air pressure, if it is not too severe (perhaps from hand tire pump).

For lubrication, if a regular high-quality clock oil is available, it should be used. If

not, possibly the lightest grade of household oil will serve the purpose. This writer has had passable results with Standard Oil's "Finol," used sparingly. One vintage Ford and Mercury enthusiast of my acquaintance reports very good results with the use of extra-thin LPS #1 (not the heavier #2) on car clocks. After servicing, the clock will usually run well for several years; and the cleaning, lubrication, etc. can then be repeated. Current drawn by these clocks is negligible, and they will keep time for many months without discharging battery.

When a Lux springwound clock quits, or keeps erratic time, it can sometimes be helped by cleaning and lubrication as described above. The mainspring and winding gears may be given a touch of somewhat heavier oil, perhaps with a trace of STP or similar thickener. These clocks are seldom run as constantly as the electric ones; if they are, it is probably well to clean and oil them each year.

Since these clocks are not jeweled, wear occasionally shows up as an increase in friction, particularly at the balance-wheel pivots. A jeweler may be able to polish these parts to original specs, but it is not a home repair project. As another correction for sluggish operation, a change was made in these Hudson/Lux clocks circa 1950, when they were given heavier mainsprings. This stiffer spring can also be installed in the earlier clocks (if you have deft fingers); or alternatively, the complete later clockwork can be fitted with the earlier face, hands, and winding knob. For best lighting of the face and hands, use the later shell with three small dents at rear for the clockwork mounting posts (or shorten the three posts slightly).

Electric self-winding clocks, too, sometimes require slightly increased torque from the mainspring, to operate more reliably. On these models the small spring can be tightened by bending its outer (stationary) hook nearly 1/8 inch farther outward, without quite touching external shell of clock. (On some Brand X electric-wind clocks, the spring may need to be shortened 1-3 turns). Winding mechanism will usually handle the slight added load without complaint, if all connections are good, and full voltage is available for winding.

A small in-line fuse is provided at rear of clock. The original 3-ampere size is preferable, but 4-ampere can also be used. Some Borg clocks (especially if dealer-installed) also came with a miniature instruction book attached at rear. This contained a few useful tips, although the suggestion that clock be removed each year and sent to an "authorized repair station" was somewhat unrealistic.

THE SLOW/FAST regulator lever on a Borg electric clock is "geared down" so that it is not oversensitive, and accurate adjustments can be made quite easily. Also, if one comes to the end of the "slow" or "fast" range and needs to go a bit beyond, it is usually possible to lift the small pinion gear on regulator inside clock and shift the

operating range of the handle somewhat one way or the other.

The small regulator lever on the Lux clock, however, is "direct drive," and so must be handled carefully, since even a small adjustment may make a difference of several minutes per day. Also, the regulating slot in back of case is quite short; hence if one comes to the end of the adjustment range and needs more, clock should be removed and a hole drilled at each end of the curved slot to lengthen it somewhat. If desired, a square of tape may be kept over the slot to help keep dust, moisture, etc. out of clock. It will be noted that both of these Hudson clocks were spared the bothersome "self-regulating" gimmick found on some later Brand X's, which set regulator faster each time clock hands were moved ahead manually, and slower each time they were set back.

Removal and replacement of clock and other instruments from dash panel is more difficult on some Hudsons than on others. Although clock and speedometer through most of the stepdown years were made with matching round cases and four mounting "ears" each, on certain models—1951, for example—they must be installed, and the screws tightened, from behind dash; and often radio speaker must be removed for easier access. On these models it is suggested that the two lower ears on case be slotted or forked in such a way that case can be lifted out of position and put back without complete removal of the two lower screws. This will simplify both clock and speedometer work.

Many Hudsons 1950 and up (and a few late '49's) had the dial figures and hands on both clock and speedometer made of an ivory phosphorescent plastic. Generally these parts still look original today even though most of the phosphorescence has been lost with the years. However, the hands and pointers on standard 1948-49 dash instruments, both Super and Commodore types, were finished in the then-new "neon" or "fluorescent orange" color, and these, like most dyes of that type, have faded rather badly with the years. Fortunately these "day-glo" colors, neon orange and others, are still available in paint form, usually in small spray cans, so the faded clock and speedometer hands (not forgetting also the matching fuel and temperature gauge hands, and the radio dial pointer) can be restored to practically their original color quite easily, preferably using a small art brush.

When changing clock (or speedometer) face and hands to match a given car, it will be noted that the bezel, glass, and dial numbers (and the hour hand and speedometer pointer) will generally fit from one model to another; but the minute-hand shaft is smaller on the springwound clock than on the electric, so that it may be necessary, when changing over, to work the tiny metal core carefully out of the back of one minute hand (use needle or sharp small tool), and then to epoxy-cement this piece

into another minute hand. Allow to set for a day before installing.

**A PLACE TO DISPLAY** the adhesive-backed souvenir plaque from the H-E-T National Meet? This writer's favorite place is the lower rear corner of front glass windwing on passenger side of car. Another good spot (on sedan models only) is the rear quarter glass wing. Decal-type trims, such as the H-E-T Club badge (#2-A) are a bit easier to place, since they can safely be used on roll-down windows (and on curved rear glass).

Another attractive decal, with Hudson name and trademark on a blue background, was printed some time ago for the Hudson Owners Association International. Although this organization is no longer active as a separate entity, the decals were at last word still available from one or two sources, including Jack Clifford, California. This decal can be used "as is," or if preferred, it can be clipped to use only the blue center section. For a sawtooth or notary-seal effect, center circle can be trimmed using pinking shears. (We hope this will not offend any former member of Hudson Owners International!)

Insignia of the selling dealer, placed on car exterior at rear, could be found on many cars of the Hudson stepdown years and no doubt earlier (does any reader know the approximate year dealers began using these?). Dealer ornaments were often die castings, chrome plated, and some were of sheet aluminum (the foil stick-on type came later). One style for 1948-49 Hudsons was a small aluminum "apron," black and silver, which fitted neatly below chrome ornament on trunk lid. Today the dealer identification can add another authentic detail to a restored vehicle, if it is correct for the car's make and year. Very probably a few owners have also preserved key tags and similar small dealer giveaway items.

Bumper stickers on a collector car may not be to everyone's taste, although there have been some interesting examples. This columnist's favorite appeared in California (and was reported by *Motor Trend*) during the 1960's: "Us Hudson Owners Would Rather Fix Than Switch." We haven't heard whether it is still available, or has perhaps been reprinted. Another thought-provoking one was seen during the 1974 fuel shortage. It said: "Out of Gas? Burn an Ecologist." What's your favorite?

**SEAT BELTS WERE NOT** a part of any Hudson Motor Car Co. product, so far as this writer can discover, except for some race cars and the Italia sports car (which sometimes had genuine leather ones). Some contemporary Brand X's did have belts—Nash around 1950, in keeping with the "Airflyte" theme; and Ford around 1956, as part of a campaign to sell "safety." In both instances the idea went over with the public like the proverbial lead balloon.

Many H-E-T members are also regular readers of *Old Cars Weekly*, a Wisconsin publication which has perhaps come to be

accepted not only as a source of historical articles, want ads, and news of the hobby, but as a friend—someone who understands and is on our side.

It's probable that much of this attitude evaporated after one issue this past summer (15 July 1982), when *OCW* printed an editorial advocating a *compulsory seatbelt installation* law, even for collector vehicles.

We thought that this kind of officious meddlesomeness was finally out of date, after bedeviling us through most of the 1960's and 1970's. And we thought that the editor of an old-car publication, at least, would know better. Most of us, I'm sure, love our Hudsons not only for their own obvious virtues, but for their freedom from seatbelts, funny bumpers, smog-control junk, and all of the other latter-day government-mandated "improvements" which have helped to make our present automotive Dark Ages what it is. Our old cars are mementos of what was a saner era—in mechanical matters, at any rate—and we intend to keep them that way. Incidentally...we wonder whether the *OCW* editor has ever worn a seatbelt while riding in a car when it was sideswiped.

**VANITY MIRRORS** for visor mounting evidently appeared in the 1930's very shortly after interior adjustable sunvisors came into use. Some earlier cars had included a vanity case or compartment with mirror in the rear-seat area. Visor-type mirrors during the Hudson years had spring-clip (not screw or adhesive) mounting. A few aftermarket ones included a light, with wires to be connected (unlike some later lighted mirrors, car compasses, etc. which contain dry cells). Sometimes spaces for comb, pencil, etc. were provided, and occasionally, after the small 2½ x 4¼-inch packs of tissues became available, a pocket for those was included as well.

Visor mirrors offered for years by new-car dealers usually featured the car name and trademark (Hudson and most Brand X's) in white, along with frosted oblongs at each side intended for penciling in mileages on trips and for oil changes and other servicing. The mirror was not a costly accessory—Hudson's version listed for \$1.00 in 1936—but if in good condition, it can still add a touch of authenticity and convenience to one's collector vehicle.

The usual problem with these mirrors over the years has been failure and peeling of the silvering coat. Although metal shell of mirror is crimped to glass, it is made of fairly light stock, and the edge can usually be stretched, with the careful use of a sharp knife blade, enough so that the glass can be removed without chipping or breakage. Mirror re-silvering service has been available for years, and may perhaps be offered through a local glass, furniture, or antique shop. Check edge of metal shell for any rough or poorly fitting spots; then set re-silvered glass in place, using a suitable adhesive such as automotive trim cement on the edges. Assemble mirror with clips placed at bottom edge.