

Hudsonotes

Column of Mechanical Miscellany
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Lamps and Locks

BACKUP LAMPS were among the several automotive lighting devices invented by former Model T Ford engineer C. Harold Wills for his own new Wills St. Claire car in 1921. It is reported that Mr. Wills had been known to back occasionally into unseen objects at night. His remedy for the problem consisted of a single auxiliary clear lamp at the rear of the car, operated automatically by a switch at transmission.

Besides providing illumination to the rear for nighttime maneuvers, backup lamps serve the added purpose, day and night, of warning other drivers that a vehicle is to be moved in a reverse direction. However, it was not until the years after World War II that these accessory lights became as familiar on U.S. cars as, for example, fog or spot lamps. A number of states had laws prohibiting use of white lights at the rear of a vehicle, and it is possible these were enforced even against backup lights in a few instances.

A check through the available literature by Club Librarian Charles Liskow indicates that backup lights were first offered as a Hudson factory accessory for 1939. The 1939-40 unit was a single lamp, but it also included a warning bell (as on many large trucks today), though this latter feature could be easily disconnected when not wanted.

Whether the accessory was a popular one in those years is doubtful, since it apparently disappeared from the factory listings for 1941-42, making any backup lights on '41-42 Hudsons probably independent or aftermarket items only. Hudson re-introduced the option (in kit form, sans bell) for the 1946 and 1947 models, and for the new stepdowns 1948 and up.

Most backup lamps have been automatically switched. Packard during the 1940's had an optional linkage-mounted switch which would serve as a safety (reverse lockout) switch for overdrive, or as a backup light control, or both. Many other Brand X's had a backup lamp switch operated by gearshift parts on steering column. Hudson's "single-lever" transmission used 1941-51, however, did not lend itself readily to this type of switching, and factory backup-light kits accordingly included a manual switch and knob, styled to match others on car (with small underdash mounting bracket if necessary), generally to be placed for use by the driver's left hand; plus a small

extra pilot light, matching the one for directional signals.

Later conventional two-lever transmissions, mid-'52 & up, presented less of a switching problem; and on cars using a GM Hydra-Matic, the "neutral safety switch" for starter often included spare terminals for backup lights as well. In addition, aftermarket backup-light switches have been available, along with various brackets to adapt them for "universal" mounting on most gearboxes; but if these are to be fitted to a Hudson single-lever transmission, two switches will be needed: one at main gearshift linkage and one at crossover cable, both wired in series.

Backup light installations on many Hudsons as late as 1950 included only a single lamp (on driver's side), although a matching second lamp could of course be ordered separately and connected in place. Standard bulb for these lights in either case was the 6-volt #1129.

Backup lamps are customarily wired through the ignition switch (at "GA" terminal). When many accessories are so connected, there is a possibility of overloading ignition switch, and some manuals suggest adding a relay here (a single-type headlamp relay will do) for that reason. Your columnist, however, has had no ignition-switch problems with his '49Cp. despite a load which includes backups, directionals, heater fan, Drive-Master, and more—though all connections must be clean and tight (including the one at junction terminal underdash which feeds ignition switch); and also, these accessories should be switched off while engine is being started in cold weather.

WIRING FOR backup lights was sometimes only #16 gauge, adequate for a single lamp; but for a pair, #14 wire (or twin #16) is preferable, to avoid loss of brightness. If wiring does not include a fuse, this can be added: 10 or 14-amp., in-line between ignition and backup switches.

Some Hudson models 1953 and up, like many Brand X's, had provision on the car itself for backup light installation—a removable dummy set into chrome apron above rear bumper, for example. Prior to that, all Hudson backup lamps were standard add-on types, most of them apparently from Unity Mfg. Co., Chicago. Unity's Model B was available with a "Hudson" nameplate and was styled to resemble a miniature fog light, making an especially handsome match on any car equipped with Unity fog lamps. This model mounted with a single stud at rear of case (similar to through-the-fender fog lights), and was easily adjustable for aim. Today a few aftermarket backup lamps of similar style, but pedestal-mounted, are still available.

More common on Hudson stepdowns, however, were the domed or "beehive"

shaped types, particularly one from Unity, and one (Model 491) from Auto Lamp, Chicago. These were slightly more efficient, with better side visibility, but were more difficult to aim straight rearward from most points on car body. They were usually furnished with wedge-shaped bases and mounting gaskets to permit some adjustment. Auto Lamp's ubiquitous #491 also appeared on some later vehicles, as a front "running lamp" or otherwise, so that replacement lenses (with molded-in fresnel-type rings) and other parts may still occasionally be found.

The exact placement of these add-on lamps at rear of car was somewhat a matter of choice. This writer has found that for best appearance on the '48-51 stepdowns, a pair of lamps can be located on the narrow panel just below trunk lid, about 28 inches apart (or 14" from car's centerline). If spaced farther apart, shadows from the bumper guards will be conspicuous—though this has been avoided on some installations by placing lamps higher and nearly in line with tail-lights, on trunk lid itself.

What can be used as a substitute—or supplement—for backup lights when necessary? On many cars the spot-lights(s) can be swivelled rearward and down to illuminate side and rear for close nighttime maneuvers. The idea is not new, having been suggested in Hudson accessory literature for 1929, which offered a choice of several spotlight models, although backup lamps were not yet listed.

LOCKS AND KEYS on Hudsons for years, like those on many Brand X's, were by Briggs & Stratton, although Hudson differed in choosing the round-handle key for ignition and the octal-handle one for trunk, rather than vice versa. Replacement key blanks were also available from other makers, one of whom in the early '50's began offering a special decorative type with Hudson or other car insignia molded in the handle. During stepdown production, original key numbers were generally crayoned on outer side of right kick panel (later to be hidden by front fender), and also on top of the cardboard glovebox. Numbers were Briggs & Stratton code, with carmaker's initial. Hudson, during 1937-49, used key series H600 to H1100. Groove specified was No. 1, though most replacement blanks had a wider groove to fit this and several others. Locks had five brass wafer-type tumblers.

Although not extremely secure by today's standards (there were not enough different combinations available), these locks are seldom a real problem until they become somewhat worn. They may then begin opening to more than one key. One temporary repair which usually helps, if you have several similar locks with different tumblers and keys, is to take all of them apart, removing the

cylinders. Check for any sticking tumblers, and, on door locks, for an outer shutter which sticks open, letting dirt and moisture into the keyhole. Use penetrating oil and patience to free sticking parts; then blow dry and relubricate. Special lock lubricants, usually containing graphite, are best, but a few drops of light oil or a touch of lithium (Lubriplate-type) grease are better than nothing.

Reassemble with the cylinder and tumblers of one lock placed in the outer case of another (which may not be worn at quite the same points as the original). Unless locks are severely worn, this will extend their term of usefulness. Check by trying several old keys in each.

Cylinder removal procedures vary. On most Hudson ignition locks, including all '48-51, a small round hole will be found on outer lock cylinder. With lock turned "on," a needle or small tool can be inserted into hole to compress a crescent-shaped retainer on inner cylinder so that this cylinder, with key, can be withdrawn from housing. Door locks, once freed from door panel (pry out flat spring clip behind door edge), can be given about a quarter turn counterclockwise (using key) from the center or key-withdrawal position; and inner cylinder will come out. On trunk handles (both large and small), inner cylinder has small hole at edge, beside keyhole. With key in the unlocked position, needle or small tool can be inserted deep enough in hole to push down a retainer plate so that cylinder and key can be given an additional 90-deg. counterclockwise turn; both can then be pulled out (pull needle or tool out first, or cylinder will only turn part way). Glove compartment locks on step-downs have only four working tumblers; the fifth (outermost) one serves as a retainer. Turn to locked position, and remove the key. Find tiny hole in metal cap of lock housing. Insert needle or tool to push retaining tumbler down so that cylinder can be pulled out with fingers.

Postwar exterior lock cylinders usually do not have code numbers stamped on them, but the number of a missing trunk key can be found on glove compartment lock from the same car. For ignition key code number, cylinder must be removed from lock housing.

Earlier Hudson products, 1929-33, used a somewhat more complex ignition lock system called Electrolock (as did some Auburns, Hupmobiles, et al.). It featured an armored-cable connection to distributor, including an extra grounding circuit, intended to make car much more difficult to "hot-wire." It is also much more difficult to disassemble for repair, especially if new parts are not available, since some items were not meant to be re-used. Lock cylinder and key, however, were of standard type, either Briggs & Stratton or Yale. See "Understanding & Repairing Electro-

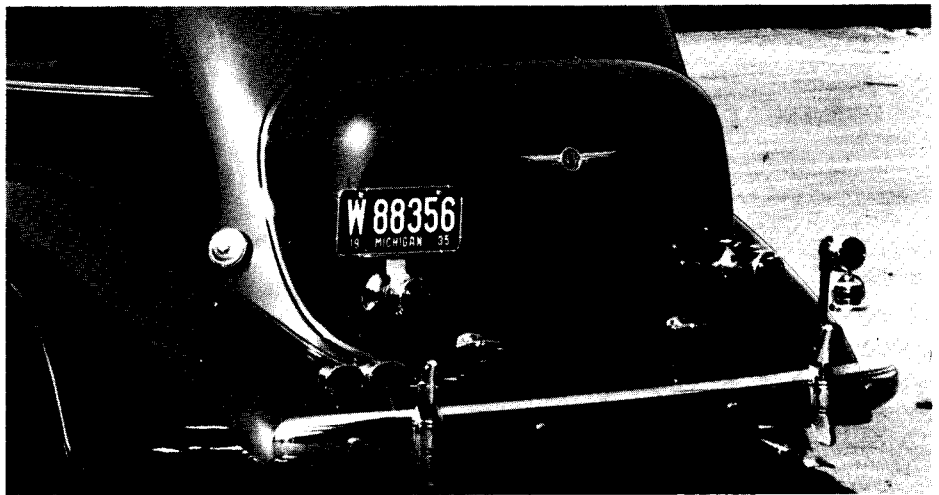
lock," by Alex Burr, in December '74 WTN. Meritt Marks reports that there has also been a more recent article, February '77, in the California car restorers' magazine, *Skinned Knuckles*, and subsequently reprinted by one or two other car-club publications.

A FOOTNOTE to the history of Hudson directional lights has also been furnished by Charles Liskow at the H-E-T Library. Although manuals indicate that modern-type turn signals, fitted into tail and parking lamps, were introduced on the 1940 models (see March/April **Hudsonotes**), the factory offered a separate add-on unit called the Tell-Turn Light, as early as 1936, and again in 1937. Whether this was a Hudson exclusive or available on other cars as well is not clear, but the unit featured a pair of flashing curved amber arrows, with a small control switch for drive. See illustration.

Also pictured is an improbable accessory stoplight unit offered during the same years. Usable singly or in pairs, it features a swinging red-illuminated lantern reminiscent of a railway crossing signal. (Has any club member seen either of these accessories installed on a Hudson?)

Cornering lamps (as distinct from flashing turn signals, though controlled by the same switch) were not used on any Hudson product, but long before these lamps appeared on a few post-Hudson Brand X's, an interesting attempt was made to provide similar light around curves by means of the Three-Beam Headlights on Hudsons for 1934. The third beam was designed to serve as a cornering light, and was controlled by a toe switch along with the usual high and low beams.

(Next time: Fog and driving lamps.)



Swinging Stop Light and Tell-Turn Lights displayed below, shown installed on 1936 Hudson, above.

