
Hudsonotes

Column of Mechanical Miscellany
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Accessories for Hudsons

(tenth in a series)

POWER STEERING and power brakes were first offered as options on Hudsons near the end of the stepdown era, 1954 or slightly earlier. This was inevitable, since these devices were part of the trend of the times, and they were already available on a number of competing Brand X vehicles, several of which undoubtedly needed some form of assistance because of excessive front-end weight (and excessively slow manual-steering ratios), along with marginal brakes and insistence upon too-low tire pressures.

Unsurprisingly, however, the most that can be said for these power assists on a Hudson stepdown model is that they operated as intended, and probably made parking maneuvers easier, without entirely ruining the superb control and handling qualities for which these Hudsons were noted. This judgment is borne out by magazine road test reports of the time, including *Motor Trend's* (March '54). Since Hudson had never succumbed to the absurdly slow manual-steering ratios (such as 30:1) of some Brand X's, its standard ratios (normally 21:1 for full-length stepdowns, along with standard or optional large 18" steering wheel) were also satisfactory with power assist, and the car remained normally manageable even in case of

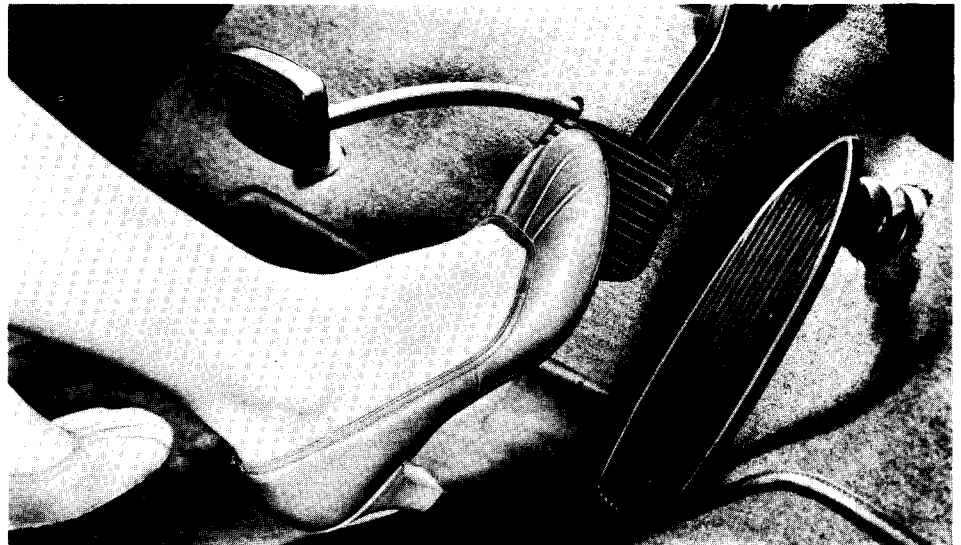
power steering failure.

The '54 power brake pedal was conveniently placed slightly lower than the standard one, but like most others of the time, tended to be somewhat "touchy" and very obviously power-assisted. This writer has never driven a power-brake or power-steering equipped Hudson, and has not discovered whether Hudson's famous safety braking system, with cable operation of the rear brakes from pedal in the event of hydraulic failure, was retained on power-brake models in '54. In 1955-57 this feature was available

curiosity), we would like to hear the opinions, both pro and con, of members who have driven Hudsons both with and without power steering and brakes. Comments will appear in a future issue.

A "POWER-ASSISTED" gasoline tank cap had no effect on Hudson handling qualities, but it was an interesting accessory available for most cars from the late 1930's through the mid-'50's, and for most of those years was in fact listed as a factory-authorized item by Hudson and several others. This cap was of the hinged type, and contained a locking

New Improved Power Brakes



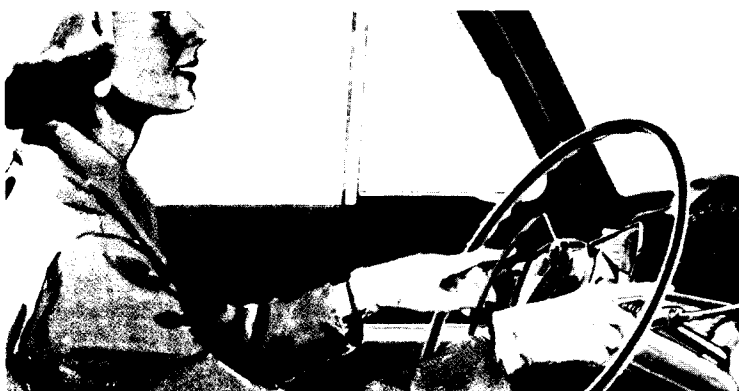
only on models without power brakes.

Occasionally there are inquiries about the practicality of converting a '54 Hudson to power steering and/or power brake operation, if the authentic parts can be found in usable condition. Although your columnist tends to take a dim view of such a conversion (except purely for its value as a historical

catch with a small solenoid so that it could be unlocked electrically by a pushbutton placed at dash, somewhat similarly to the electric trunk lid releases of later years. It thus provided a lock for the fuel tank which was more convenient to operate (especially in winter) than the usual key-lock cap — and unlike the standard non-locking cap, it could not be forgotten on trunk lid or gas pump when filling tank.

These electric locking caps were made by the Snap-Up Gas Cap Co. of Ashland, Kentucky. Outer surface of the cap was chrome plated and usually perfectly smooth; a few late examples may have had a decorative ring molded on top. Base of cap (including solenoid) was held on filler neck by two ordinary 6-32 screws with special curved-wing nuts which fitted into the two notches on lip of most tank necks. The cap had two cork gaskets — a ring inside hinged portion, and another underneath base. Occasionally replacements for these must

New Perfected Power Steering



be cut out and installed, but the upper one must not be so tightly fitted that electric release will not work, or proper venting of tank is prevented. An occasional drop of oil on cap hinge and spring, and on lock plunger, is also suggested.

Solenoid in these caps was 6-volt type, and the accessory survived until the mid-1950's changeover to 12 volts. If the cap must be used on a 12-volt car, it should have a protective resistor (with ohm rating matching that of solenoid winding) wired in series with cap and pushbutton, and placed away from filler neck.

be mounted in the long chrome strip on dash, and used either for gas cap or for an accessory horn.

CONVENTIONAL KEY-LOCK gas caps were also available to fit Hudsons of most years (and some of them still are), even when they were not listed as a factory item. Both the hinged type (similar to electric cap) and the more common fully-removable key-lock type were offered. One hinged style had no brand marking, but used a Briggs & Stratton lock (with #1 key groove), like the door and ignition locks on most Hudsons.

reportedly has happened at a few car shows).

CURBALARMS — the spring-mounted wire wands which clamp usually to the lower right rear corner of the car — are designed to make a warning noise by scraping against curbs or other similar surfaces near ground level whenever car is moved too close to these. This accessory thus can help to prevent accidental scrapes or scuffs to tire sidewalls and rear fender area, particularly when it is necessary to back into a parking space parallel to curb. Although the usual mounting location for these "curb feelers" was at bottom edge of the right rear fender or rocker panel, just behind rear wheel, they were generally sold in pairs, and the second one could be installed either just ahead of the right front wheel, or, if frequent left-side parking was necessary (as on some one-way streets, for example), it could also be placed behind the rear wheel on left side of car.

Nearly all of these curb alarms were of the clamp-on type, using one or two setscrews, with no drilling required; but they probably should not be installed if body metal at mounting points is much weakened by age or rust. On most cars they need to be angled downward, sometimes as much as 45° from horizontal, to ensure contacting low curbs properly. Some can also be adjusted for length.

This accessory has been with us since at least the late 1930's and in fact was a Hudson factory-authorized item in 1939, according to listings at the H-E-T Club Library, though it apparently was not much seen until the postwar years. It is listed in Hudson parts books of the stepdown era, 1948-54 (Curb signal kit, #HA 216160), and also is still available at present from aftermarket sources. Later versions are often of coiled or spiral construction along their full length, but those of Hudson's time were typically a plain wire wand (stainless steel or chromed), with coil-spring portion out of sight under car, and a tiny knob at the tip.

Perhaps a parking aid of this type was especially useful on Hudson stepdown models, both because of the car's sheer width and because the rear tread was slightly narrower than the front, which could sometimes make the distance from curb a bit more difficult to judge. No doubt the accessory was also more

Push button control on dash

FITS ANY CAR
EASY TO INSTALL

HUDSON

SNAP-UP *Electric*
Self-Locking
GAS TANK CAP

\$4.95 Complete

Some Hudsons have a small hole and rubber grommet already provided in filler neck box for electric cap wire. The wire should in any case be routed carefully to avoid soaking or shorts. Usually cap also has a ground wire, and it is important that the cap (and the tank) be properly grounded, for safety reasons and also so that cap solenoid and electric fuel gauge will work.

Cap should be checked for proper operation before installing. If it does not unlock, carefully remove the crescent-shaped bottom cover, and look for a possible broken connection or sticking of parts.

The pushbutton switch usually supplied with these electric caps was for underdash mounting, with an off-white button and nickel (not chrome) plated trim. If this is not available, some owners may prefer a less conspicuous button (perhaps pointed downward through hole at bottom edge of dash, for example). On some Hudson models, including 1948-49, a spare matching starter button can

Probably not as desirable, but occasionally used in the past on any car with an external fuel filler door, was a small lock with chromed keyhole, resembling a cabinet lock, for the filler door. This too is still available, and can be used with or without chrome door edge guard, but requires drilling of door.

Some old-car owners may find the use of a lock on the fuel tank to be a wise precaution not only against siphoning, but also against the dropping of any foreign materials into the tank (which



popular on cars with wide-whitewall tires.

HUDSONS SELDOM "lost their cool" even in hot weather. The cooling system on most models was of more than adequate size by today's standards. If overheating problems seem to develop when the car is old, check out the suggestions offered by Vernon Holt (see July/August 1983 *WTN*, p. 17); also the comment by Leroy Harris (March/April 1985 *WTN*, p. 29). Proper cooling is especially important for these cars at present since many are driven in summer only, and sometimes in parades or similar events which require operation at 5 MPH or less for extended periods of time in hot weather. Because the big Hornet Six uses the same radiator, water pump, etc. as the smaller 1948-54 Hudson sixes, cooling may be especially critical on Hornet models under these conditions.

A number of accessory engine cooling aids have been available over the years. Simplest of these is the pressure-type radiator cap, which was standard equipment on some Hudsons and optional on others. Maximum pressure for use on these cars is about 7 pounds (caps in the 3 or 4-pound range could also be had). A mild pressure rise of this kind allows water to carry heat away more efficiently, with less tendency to boil or evaporate. Old caps should be checked with a pressure tester (usually a small hand pump with gauge and radiator-neck shaped fitting), to make sure that they will release at specified pressure.

One aftermarket cooling accessory (also homemade in a few instances) was an auxiliary fan and small electric motor mounted in front between radiator and grille. On Hornets and all other stepdown Hudson sixes with full-length wheelbase, there is ample space ahead of radiator for mounting such a device, although space is more limited on Eights and on the short-hooded (119" wheelbase) sixes.

Kits for this purpose were available with either manual or automatic thermostat switching. Usually they were intended to supplement the car's regular fan when necessary (especially at low vehicle speeds), but a few later ones were promoted as being able to replace the conventional belt-driven fan entirely (as is done by the stock electric-fan units on some current-model cars). Add-on-radiator fan kits are still available, though perhaps only for 12-volt cars at present.

It may also be possible to adapt a large 6-volt accessory defroster fan and motor for this use.

Another auxiliary cooling device, recommended especially for air-conditioned and/or trailer towing vehicles, is a small extra single-tube radiator, to be placed ahead of or beside the main one. Also available in years past was a gadget with dash control and small reserve tank which would sprinkle the front of a hot radiator with fresh water for quicker cooling.

Readers who know of other accessory cooling-system aids which have been used on Hudson-built cars are invited to write and tell us. Possible items might include overflow tanks, acid neutralizers, special coolants, flushing devices, and more.

A LETTER FROM longtime auto engineer (and fellow *WTN* columnist) Harry Kraus includes this comment about the rope-start used on some Hudson-built models (March/April *WTN*, p. 36): "While examining my first Terraplane, I asked the owner why there was no hole in the grille to insert a crank. He said, 'If it doesn't start, I get a push . . . and there is a rope like on outboard engines that I can buy to start it otherwise.' I never really believed it until I read it last month. Thanks."

Coming soon: More accessories, and a visit to the automotive "health and beauty aids" counter of today and yesterday.

NOTES ON LOOSE STEERING CORRECTION

REPLACING THE CENTER STEERING ARM PIVOT often reveals the need for new bearings in the center steering arm bracket as shown in Fig. 1 (E) below. Install new bearings by pressing on the outer race near the part number.

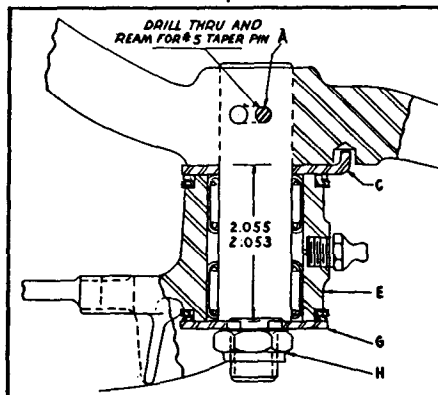


Fig. 1

To replace the center steering arm pivot shaft, press the new shaft in place

maintaining the dimension of from 2.053" 2.055" as shown in Fig. 1 before drilling the hole for the No. 5 taper pin (A).

The rubber lip of the steering arm seal should face the casting and the spacers (C) and (G) positioned as shown in Fig. 1. The center steering arm pivot shaft nut should be tightened to 50-60 foot lbs.

TIE ROD ENDS are the self-adjusting type. The ground steel bearing, (2) Fig. 2, is located between the stud (3) (which is prevented from loosening or rattling by the tension spring) and the tie rod end forging. A curved steel dust cover (5) and a rubber seal (4) provide a dustproof double seal of the unit.

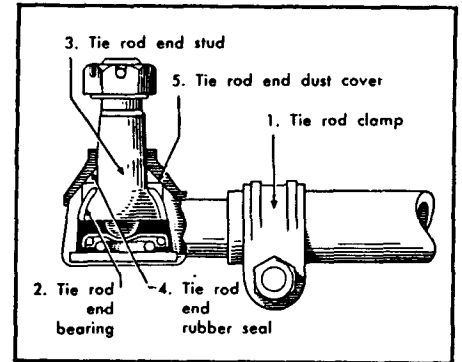


Fig. 2

TO REMOVE THE TIE ROD, remove the cotter pin and nut from both ends of the tie rod. Then take off the outer and inner ends.

TO INSTALL THE TIE ROD, replace the inner and out ends, then the nut and cotter pin.

NOTE: Tie rod adjustment affects toe-in of the front wheels so check and adjust toe-in condition after installing tie rods.

WHEEL ALIGNMENT NOTES:

Toe-in is the drawing together of the front wheels at the front to offset the tendency of the front wheels to run out or separate at the front. Accurate toe-in (within limits of 0" to 1/16" measured at the wheel rim) is vital to tire life.

Camber is the outward tilt of front wheels at the top and should be from a 1/2° to 1 1/2°.

Correct pivot pin inclination is the inward tilt of 3°36' of the steering spindle pivot pin at the top. If the inclination and the camber condition are not correct, worn pivot pin bushings may be the cause. If the pivot pin inclination is correct and the camber is off, the spindle may be bent.

Caster is the backward tilt of the top of the steering spindle pivot pin which helps keep the front wheels in the straight-ahead position. Caster should be from 1/2° to 1 1/2°.