

# Hudsonotes

Column of Mechanical Miscellany  
by George Schmidt  
Mishicot, Wisc.

## Accessories and Additives (part 14 of a series)

TOP CYLINDER OIL or "valve lubricant" is an accessory additive item which has been available for decades, probably since the 1920's or earlier. Many brands of "top oil" were offered, including some from independent sources and others from nearly every major oil company, including Mobil (Upperlube), Shell, Texaco, Amoco (also sold at Standard stations), Marvel, Pyroil, Shaler (Rislone), Wynn's, Bardahl, and more.

During the past few years, however, most of these brands have apparently been discontinued or become hard to find, due no doubt partly to continued "antismog" hysterics. Used in excessive amounts, these products could of course dirty not only the air but the spark plugs; but used correctly, they could make for a somewhat cleaner burning engine, mainly by reducing valve sticking and valve guide wear, and probably also by reducing upper cylinder and top ring wear and possible ring sticking. Better fuel economy was sometimes claimed as well, but this writer found the most noticeable benefit from occasional use of these products to be a slightly smoother running engine, and perhaps also easier starting.

This seemed to be especially true with older flathead engines such as Hudson (including Eights). Surprisingly, it also proved true with small air-cooled engines (on power lawn mowers and the like), some of which have been notorious for sticking valves and power loss when hot. A number of the top-cylinder lubricants contained small amounts of special cleaning materials in addition to the usual light oil. Amoco's "Top-C-Lube" included an ester-type solvent which was particularly effective.

Most often these "top oils" were used simply by adding them to the fuel tank, one 4-ounce can for each 10 to 20 gallons of gasoline, at every filling or perhaps at every 2 to 4 fillings or 1000



miles. A few brands such as DuPont or STP which included a sizable amount of ordinary anti-gum gasoline solvent along with the top oil could be used in a double (8-ounce) amount; or if preferred, the other brands could be used along with an equal amount of such solvent (Gumout, Gold Eagle, etc.) purchased separately. This latter type of solvent, still generally available and useful mainly for carburetor cleaning purposes, is clean burning, but should not be used in stronger than recommended concentrations, since damage to the fuel pump diaphragm could result.

None of the products mentioned here could work miracles on a worn-out or damaged engine or carburetor, but they often had a useful "spring tonic" effect on units in good to fair condition,



### PEPS UP THE OLD

Restores that New-Car Zip to the old and sluggish engine.

### BREAKS-IN the NEW

Provides extra insurance for maximum performance from the new engine. It gives additional protection to pistons and cylinders and helps set rings properly.

especially those which had perhaps been standing idle too long, or subjected to excessive short-run or stop-and-go driving — or used with inferior gasoline.

Today, with special top-cylinder lubricants not as readily available as they were in past years, some mechanics suggest using an equivalent amount of plain light straight-grade motor oil, usually #10, in the gasoline instead. (Multi-grades such as #10W-30 should be avoided since they do not dissolve well in fuel, and may also cause added deposits.) Probably a high-quality two-cycle engine oil, or even some aircraft oils, could be used for this purpose as well.

A FEW TOP-CYLINDER lubricants also are still available at present. Although the convenient 4-ounce cans have disappeared from gasoline stations, several familiar brands (in larger containers, 12 ounces or more) can be found at some auto-accessory or repair shops, the automotive departments of some chain stores, and similar outlets. Brands may include Marvel Mystery Oil (Robert Poe, Illinois, reports that a special effort has been made in recent months to increase the distribution of this long-known product); also Bardahl Top Oil (now in plastic bottles), Rislone Karbout (oil plus special solvent), and perhaps others. These products are intended to help



This is a specially designed petroleum base product with a chemical additive. The oil used has exceptional cleansing properties which, together with the chemical additive, help tune up engines when used as directed. Hudson Tune-up Oil is entirely harmless—will not injure the finest mechanism.

lubricate valves, guides, and the upper cylinder area; remove fuel deposits, free sticking valves, and reduce repair costs. Your columnist's experience has been that they generally fulfill all of these claims to some degree.

Since the 1950's and probably earlier, there have been accessory devices which offer an alternative method of feeding top-cylinder oils to the engine. These "top oilers" usually mounted underhood and featured a glass jar for the oil, along with a vacuum-operated feed system including a metering control and one or two tubes leading to the carburetor base (sometimes a special base). Accessory top oilers for cars and trucks were available from several companies (including Pyroil, if memory serves. Does any reader remember other brands, and the approximate years?) Your columnist has seen one of these oilers (brand unknown) on a '52 Hornet, and another on a Studebaker of the same era. We would like to know whether any Hudsons in our club are equipped with working top oilers at present. Because of vacuum actuation, most of these oilers probably have tended to feed more oil at idle (when vacuum level is high), and less when the engine is working under load with throttle open.

Bob Poe, who recently assumed the Marvel Oil Company distributorship for Chicago and the surrounding area, informs us that the Marvel Inverse Oiler, in several models and sizes, is still being marketed for use on cars, trucks, and stationary engines. The special feature of this oiler is that it feeds top oil in inverse proportion to engine vacuum level, so that most of the oil is supplied when the engine is being run under heavy loads with large throttle openings, and is most likely to need the extra lubrication.

MANY OTHER ADDITIVES for gasoline have been used in past years — some sold separately in cans, and others added by refiners (or conceivably by their advertising agencies). *Gasoline Retailer* (a trade paper) in one mid-1960's issue featured a takeoff on fuel commercials of the time, describing a fictitious gasoline which had 237 additives, and was free ("you pay only for the additives"). But whether despite the additives or because of them, gasolines of the '60's were of course generally of better quality than those sold today.

Of the additives available in cans,

solvents such as Pyroil Carburetor Cleaner, Gumout, and Gold Eagle Gum Chaser have already been mentioned. They can be found in both aerosol-spray and liquid form, and they provide cleaning action but no top-cylinder or valve lubrication.

A lower-cost type of fuel additive contains mostly an alcohol (either methyl or isopropyl, both unfortunately undrinkable) and has only slight cleaning value, but is highly miscible with both gasoline and water, and so will remove condensed moisture from the fuel by holding it in suspension. "Heet" is one of the familiar brands.

One other class of fuel additives has appeared since the recent irresponsible outlawing of tetraethyl lead in gasoline. These additives, it is claimed, can counteract or minimize the harm to engines (and to engine performance) caused by the elimination of lead compounds in fuel. Though your columnist has not yet tried any additives of this kind, we are hoping to hear from readers who have tried them, either in a Hudson (especially a hot Hornet) or in a Brand X.

It is wise to read the instructions carefully before using any additive. For badly sticking valves, some brands (including Karbout) are recommended to be poured into the intake, through carburetor (engine running), and left to stand for several hours before restarting. If an additive is to be mixed with the gasoline in tank, one method is to make a premix with a gallon or two of fuel in an external container, but this is seldom necessary. An easier method is to pour the additive into tank; then follow immediately with several extra gallons of gasoline to promote proper mixing.

A SPICY SUGGESTION is offered by Carl Laska, Wisconsin, who has written to tell us about an unusual emergency additive for a leaking radiator (column, November/December '87 *WTN*). He relates:

"About 12 years ago we were returning from a fishing trip . . . my car at the time was a Pontiac with 400-CID engine . . . when much to my dismay the engine overheated . . . After it cooled down I refilled the radiator, only to find a good-sized hole as the cause of overheating . . . A passing motorist stopped and told me to check with a tavern owner that was a couple of hundred yards down the road. When I drove into the parking lot of his

tavern, he came out smiling, and commented that he thought he might be able to fix me up. He called to his wife to bring some cinnamon (yes, I said cinnamon!).

"After filling the radiator and running the engine to get it hot again, he put about 1½ heaping tablespoons of cinnamon into the radiator, put the cap back on, and waited while the engine continued running. You could see the leak start to plug up, and in about 15 minutes the leak stopped. Car smelled like Danish pastry, too. He said that ginger will do the same thing, but it will plug up the cooling system.

"I ran that Pontiac with the cinnamon radiator for 9 months before getting it repaired — with no problems, either. Since that time I've done the same stunt with my daughter's '77 Firebird and Bob Patzer's '52 Hudson Hornet; and needless to say, my Hudson has a small bottle of cinnamon in the glovebox at all times."

Thanks, Carl, for an interesting tech tip. It is certainly one of the more appealing suggestions for making an emergency radiator repair. Since receiving your letter, I've been told that some motorists have also used granulated pepper for this purpose.

ALTHOUGH POWER STEERING and brakes may not be the most distinctive accessories in Hudson history, they certainly have drawn the largest number of reader comments during past months. Most of those who wrote apparently view these two options more favorably than does your columnist. A letter from Forrest Schaeffer, Pennsylvania, tells us:

"I purchased my Super Wasp in 1967 on the streets of the Bronx, New York. At the time it had no power steering. I restored the car, and like it a lot; but a 1954 Hudson Wasp is a hard steerer (18.2 to 1 ratio), and doesn't handle as well as the [longer-wheelbase] 1948-49 Supers and Commodores.

"In 1980 or so I met an H-E-T member at 'Doc's' meet in Virginia. This member was from Minnesota originally, and told me about a '54 Wasp sedan resting in a junkyard in New London, Minnesota. That car, he was sure, had power steering, and he told me it was just what I needed for my '54 convertible. In the spring of 1981 I contacted the "Windy Hill Auto Ranch" in New London — and lo and behold, they did have the '54 with power steering. I came to terms with the man at Windy Hill, and he agreed to remove this

equipment from the car and send it to me. He did; and it was miraculously all in fine condition except for the pump, which would not maintain enough pressure at low speeds when power-assist is needed most. I had the pump rebuilt at a local hydraulic repair shop, and proceeded with the installation. It is a Vickers pump [illustration, January/February *WTN*, p. 40].

"Putting power steering on a Wasp with stick shift was quite a challenge. First of all, the unit is Monroe, and completely different from the Saginaw on a Hornet. Second, unlike the Hornet, the Wasp steering-gear housing assembly is not interchangeable between manual and power-steering models (among other things, the ratios are different). Third, the column and worm assembly is different with power steering on a Wasp; and fourth, the center steering arm and pivot assembly is different; thus all of these parts had to be replaced. Lastly, on stick-shift Wasps, the clutch cross shaft bracket (which attaches to the frame) is a special one if the car has power steering. Of course the power-steering cylinder, drag link, etc. are unique to the '54 Wasp.

"Fortunately, Windy Hill had sent me all of the needed goodies; and after a few frustrating days I figured out the jigsaw puzzle of pieces, and properly mounted my 'new' power-steering option. It works fine, and has made the Super Wasp a much easier-to-handle car. The power-assisted steering is not too light. It takes enough effort to steer so that you still have the feel of the road . . . I drove Chrysler power steering of the 1952-55 era, and if memory serves me correctly, my Hudson steering is much superior. I've never driven a Hudson Hornet with power steering, so really can't compare Wasp and Hornet on that score.

"I might add that the Hudson power-steering hoses (now 34 years old, including some time in the junkyard) are still working and looking fine, which is more than I can say for my 1984 AMC Eagle which required a new steering hose after just 3 years and 60,000 miles.

"I did not add power brakes to my Super Wasp, even though I have a power-brake unit that could be put in. I want to keep the safety of mechanical brakes on the pedal. Furthermore, I find that the regular hydraulics work well, and are not too hard."

WE'RE GRATEFUL for Forrest's letter, and for the practical details he gives

about converting to power steering. Not everyone, it's true, objects to the quick manual steering on Pacemaker and Wasp (except possibly for parking maneuvers). The larger optional (18") steering wheel is helpful on these cars, as are a few extra pounds of tire inflation.

Most of us are likely to agree with Forrest's comment about Hudson brakes. However, another letter received early this year indicates that the Bendix power-brake systems found on 1954 Hudsons may not all be of the same design. John O'Halloran, Illinois, writes:

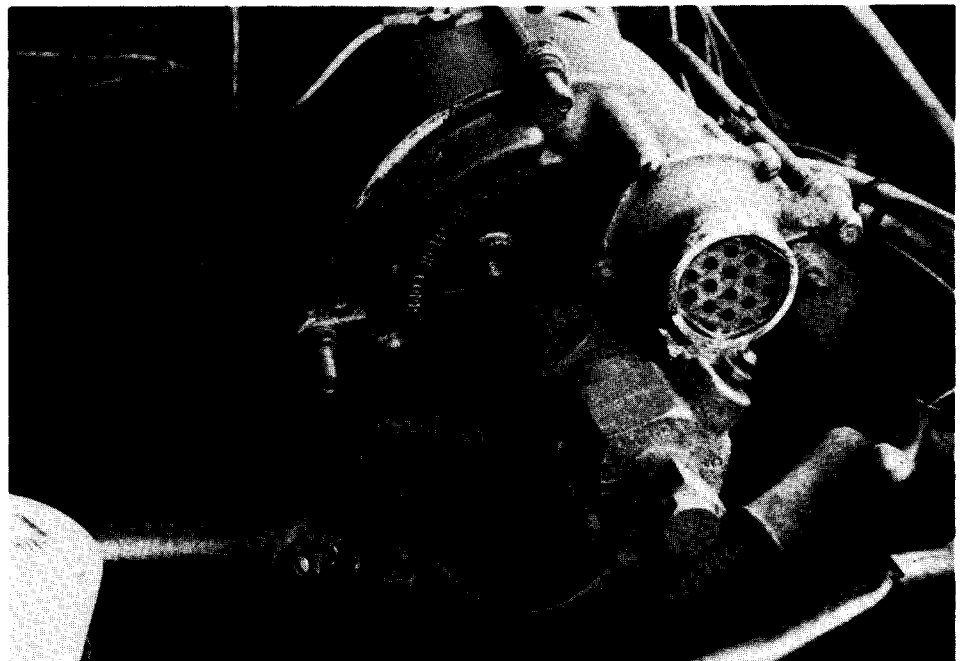
"After the November/December *WTN* came out, I took several pictures of the power accessories on my yellow [1954] Hornet. Unlike John Miesner's car, which you mentioned in the *WTN*, this car has a brake setup which utilizes the existing master cylinder and brake pedal. You can see from the photo that this power booster was [also] made by Bendix. With this setup, the Triple Safe brakes still operate."

The above paragraph was certainly a surprise to your columnist, who had never heard of this type of brake booster being installed on a Hudson. According to the photograph, this power brake unit mounts underhood in the usual location (at firewall, left side). It apparently is fed by a large vacuum line from the manifold,

and a brake fluid line from master cylinder underneath car. There is another fluid line which evidently connects the unit to the front and rear brakes. The unit also has a standard brake bleeder screw, but no visible fluid filler cap. Rear portion of unit is a Bendix vacuum cylinder much resembling the one in a power-brake unit of the type more commonly used on 1954 Hudsons (see illustrations in November/December '87 *WTN*), or the one in a Hudson vacuum clutch control unit, 1938-51.

We are curious as to whether this unusual power-brake installation was perhaps an aftermarket add-on item for Hudson and other cars, or a one-off custom job on this '54 sedan, or possibly even a factory prototype, or an alternative layout used on a very limited share of Hudson production. Can any reader tell us?

A BAD misprint was also in the November/December *WTN*, p. 38: "Although Hudsons in any case are noted for excessive nosedive or weight transfer to the front when braking . . ." It should of course have read: "Although Hudsons in any case are *not* noted for excessive nosedive or weight transfer . . ." (Drat those type gremlins.) In a future column: more reader letters and Hudson accessories.



*Power Brake cylinder from John O'Halloran's '54 Hornet.*