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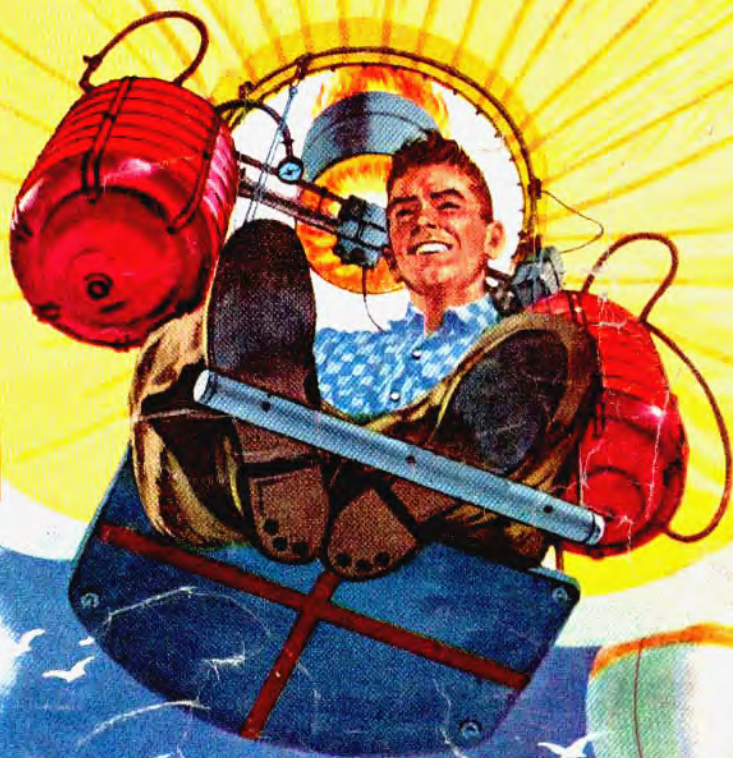
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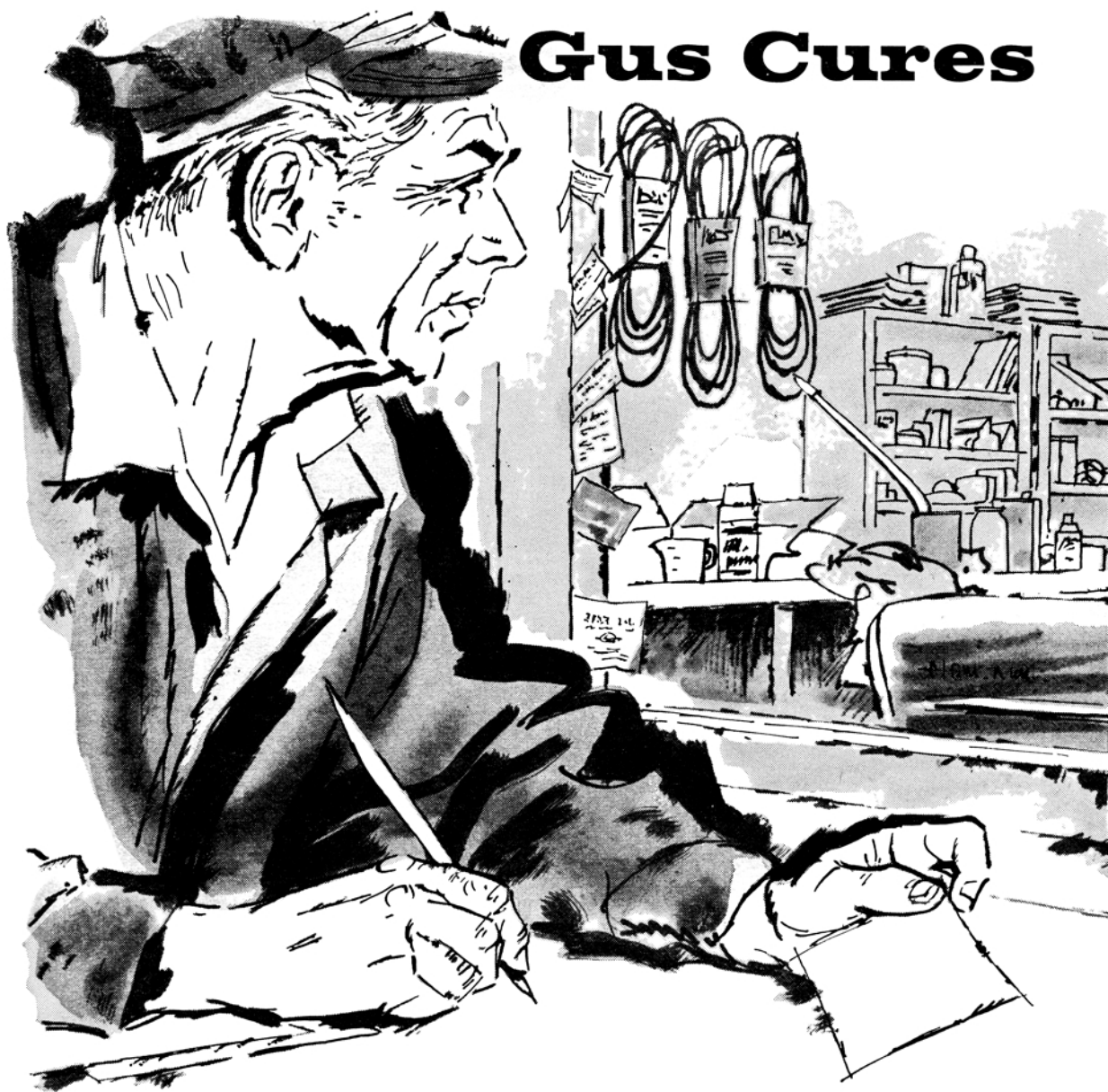
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Build Your Own Kennedy Rocker

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Gus Cures



By Martin Bunn

“STAN!” called Gus Wilson from the office door. “While you’re . . . Stan?”

There was an empty silence in the Model Garage as Gus looked for his missing assistant. He crossed to the open shop door and looked out.

Alongside the air-gauge stanchion stood a big, four-or-five-year-old hardtop, its hood up. Two slim figures were bent over the engine—Stan, in coveralls, and a young man in slacks and sports shirt.

Both straightened simultaneously as Gus called again.

“If it’s about Mr. Gilpert’s car,” Stan said, “the lube job’s done.”

“Fine. He phoned to change the oil while you have it on the lift.”

“Will do,” Stan said, starting off toward the shop.

“Hold it, Stan,” said Gus. “The oil change can wait if you have a customer.”

“Uh—not exactly, Boss. That is, he’s a friend of mine.”

The young man turned as if on cue, to show a sandy-haired, cherubic face in a fringe of fuzzy beard.

“Hello,” Gus said. “It’s Kendrick Holcomb, isn’t it? How’s college?”

“Okay, Mr. Wilson,” returned the

the Big-Car Blues



Twice Holcomb jumped into the big car and drove out. Each time he returned, the beard-fuzzed chin seemed to sag lower.

youngster. "I didn't think you'd remember me."

"The face is familiar," replied Gus. "But the car sure has changed."

"Just got it," said Holcomb with a proud glance at the road locomotive.

"See you again," said Gus, and headed back to the shop. Before he entered, he caught the first words of renewed discussion.

"Those cats sure won't go for a laggin' wagon. It's gotta have some oomph . . ."

ENGROSSED in adjusting a troublesome clutch, Gus heard the lift sigh its way down and the Gilpert car drive off it.

Shortly afterward, Stan sauntered over and stood beside him.

"Something on your mind, Stan?"

"Need some advice—Ken and me, I mean."

"I'm almost through with this job," said Gus. "Why don't you drive your pal's car in?"

Stan bestowed on him the sort of look reserved for mind readers. When Gus walked over, the big car was gleaming under the shop lights.

"Let me explain," began the lightly bearded youth. "It's . . ."

Stan waved an urgent appeal for silence. "Boss, the college types where

Ken's studying have taken up these big luxury cars as a fad. He found this one on a trip upstate, tagged so low he can sell it at a good markup."

"That's if it runs good," broke in the bearded youth. "But it's gotta have sass . . ."

Stan flagged him down again. "It lost its pep, Gus, when Ken drove it here. I'd like to check it out. He's short of money, so I'm in with him."

Gus nodded gravely. "Makes it sort of in the family. Go ahead. First I'd check the usual tune-up spots."

TWICE while Gus was writing checks for jobbers' bills, Holcomb jumped into the big car and drove it out. Each time he returned, the beard-fuzzed chin seemed to sag lower than before.

"How's it going?" asked Gus.

Stan shook his head. "Plugs are new. Timing's right on the nose. The air filter is clean and carburetor settings seem okay. Points were kind of dirty, but I cleaned and set them. They're not pitted enough to be the trouble."

"Those new plugs may not be gapped right," said Gus. "While you have them out, you might check compression."

A customer back for his car kept Gus busy briefly, but he returned to the big sedan in time to see Stan check the last two cylinders.

"Close to 125 pounds all around, Gus. Nothing wrong there."

Gus nodded. The plugs, carefully regapped, were reinstalled. Stan started the engine. It ticked over like an expensive watch. But as soon as the throttle

was opened its even beat faltered and turned rough.

"Could be that those points are dirtier than they look, or pitted enough to take the fine edge off the setting at high speeds," Gus said. "I'd try new ones. Or it could be sticking valves; a can of top lube might be all you need."

"Money!" croaked Holcomb.

"Ken's sort of broke," Stan explained, "after having to buy new plugs on account of an oil change."

"His credit's good for a set of points," said Gus. "Top lube's cheap."

"We'll try the points, thanks. No car ever needed top lube less."

PONDERING this cryptic remark, Gus went back to addressing his envelopes. Through the office window he saw Stan remove the distributor to install the new points.

Soon the big car rolled out again. But even as Holcomb fed it gas to climb the door apron, its faltering note told Gus the trouble was still undiscovered. Sorry he'd suggested new points, he sealed the last envelope and sauntered over to

where Stan stood in the open doorway.

Gus hardly had his pipe alight when the sound of a big engine swelled over the street noises. A moment later the sedan rolled in again.

"No?" asked Stan.

Dolefully the bearded youth shook his head. "Man, this one's really dead."

Gus asked, "Why did an oil change make you buy new plugs?"

"Real square," said Holcomb. "I mean this character at the service station. I tell him to change the oil, while I eat. So

Where'd it come from?



The unknown "x"

The Greeks were such concrete thinkers that they didn't bother to develop an algebra with abstract "unknowns." The closest they got was Diophantus's, which some think may be a version of the word *arithmos*—number. The Egyptians hold the earliest claim to equation writing: A manuscript of 1800 B.C. speaks of the unknown as "hau"—heap. The Hindus did better. They used abbreviated syllables or initials of objects, but they also had plus, minus, and equal signs.

The 16th century Frenchman, Vieta, is credited with first using capital letters for unknowns. Fifty years after his death Descartes' *Geometrie* appeared which specified that the beginning letters of the alphabet be used for given quantities, the end letters for unknowns—and so it is still done today.

I come out, pay him, and drive off. In about five miles, the engine begins to make like a bucket of bolts. Of course I go back, but fast."

"What he'd done, Gus," put in Stan, "was forget to drain the old oil. He poured five extra quarts on top of it."

"Crazy, hey?" asked Holcomb. "So he apologized, drained it, and put in five fresh quarts. Man swore no harm was done—that the racket was because foaming oil made bubbles in the hydraulic valve lifters."

"It ran okay then?" asked Gus.

"Ran quiet. Guess I was a hundred miles away before it flashed on me that the old pep was gone. Stopped again and

shaft pulley as Holcomb started the engine. The red flash showed the timing mark rock-steady in line with the pointer.

"See? On the nose," said Stan.

"Right," said Gus. "Now reconnect the vacuum-advance line, but leave the light."

Puzzled, Stan complied. Gus speeded up the engine. The timing mark didn't budge.

"Spark advance isn't working," said Gus. "That's why the car has no pep."

"Money?" squeaked Holcomb in alarm.

"Maybe not. Stan, remove the vacuum advance."

Taking the double-chambered unit from Stan, Gus tilted one of its two vacuum-line couplings downward. Oil trickled out onto his palm.

"Should be nothing but air—or vacuum—in there," he said. "This oil blocked the diaphragm. Vacuum couldn't advance the breaker plate. There's no centrifugal advance on this model, so your spark stayed fully retarded."

"How'd oil get in?" asked Stan.

"With a 10-quart level, it traveled up the distributor shaft. Normal wear left enough clearance around it, and the helical gears could act like a pump. Oil probably filled the distributor case to just under the points, then flowed along

the arm that links this diaphragm to the breaker plate.

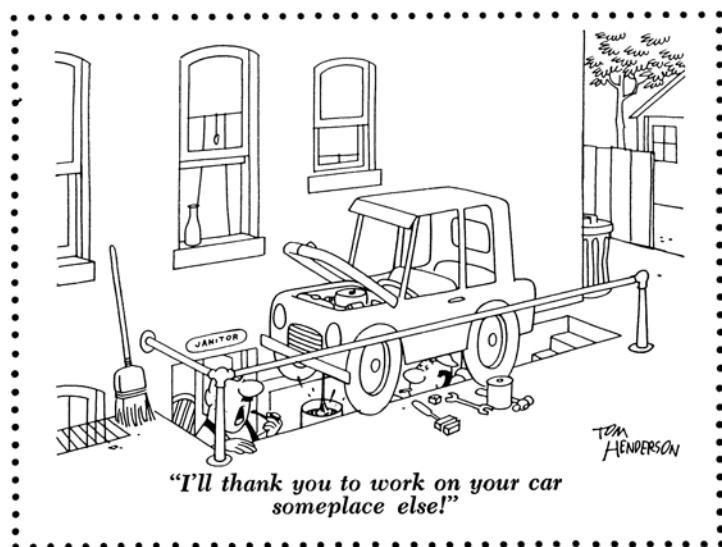
"The diaphragm must have had a pinhole leak before—manifold vacuum would advance the spark despite a small one. Then the vacuum pulled oil through the pinhole. Once enough oil got to the other side, the vacuum couldn't pull the weakened diaphragm against it."

"Cool thinking!" breathed Holcomb.

"Better junk this unit," advised Gus. "We replaced a worn distributor on a car like this not long ago. It's still here. You can take the vacuum advance off it."

"Knowing about that oil change, I should have figured this one," said Stan.

"It wouldn't have made any difference at all," said Gus. "What turns out to be at the bottom of any grief is always the last thing we check." ■ ■



a service man showed me the old plugs were oil-fouled. Sold me a new set."

"That's why I can't see using top lube," put in Stan. "It had a big oil bath. But the valves quieted, so I figure the oil didn't do any more harm than foul up 12 bucks worth of spark plugs."

"Money!" winced Holcomb.

"No other place all that oil, way above normal level, could go to make trouble," said Gus.

"Maybe that's what fouled the points," said Stan, "but we've got new ones in now."

Gus knocked out his pipe. "Let's see. Hook up the timing light again."

STAN hooked the light to the No. 1 plug, disconnected the vacuum advance, and held the light near the crank-