

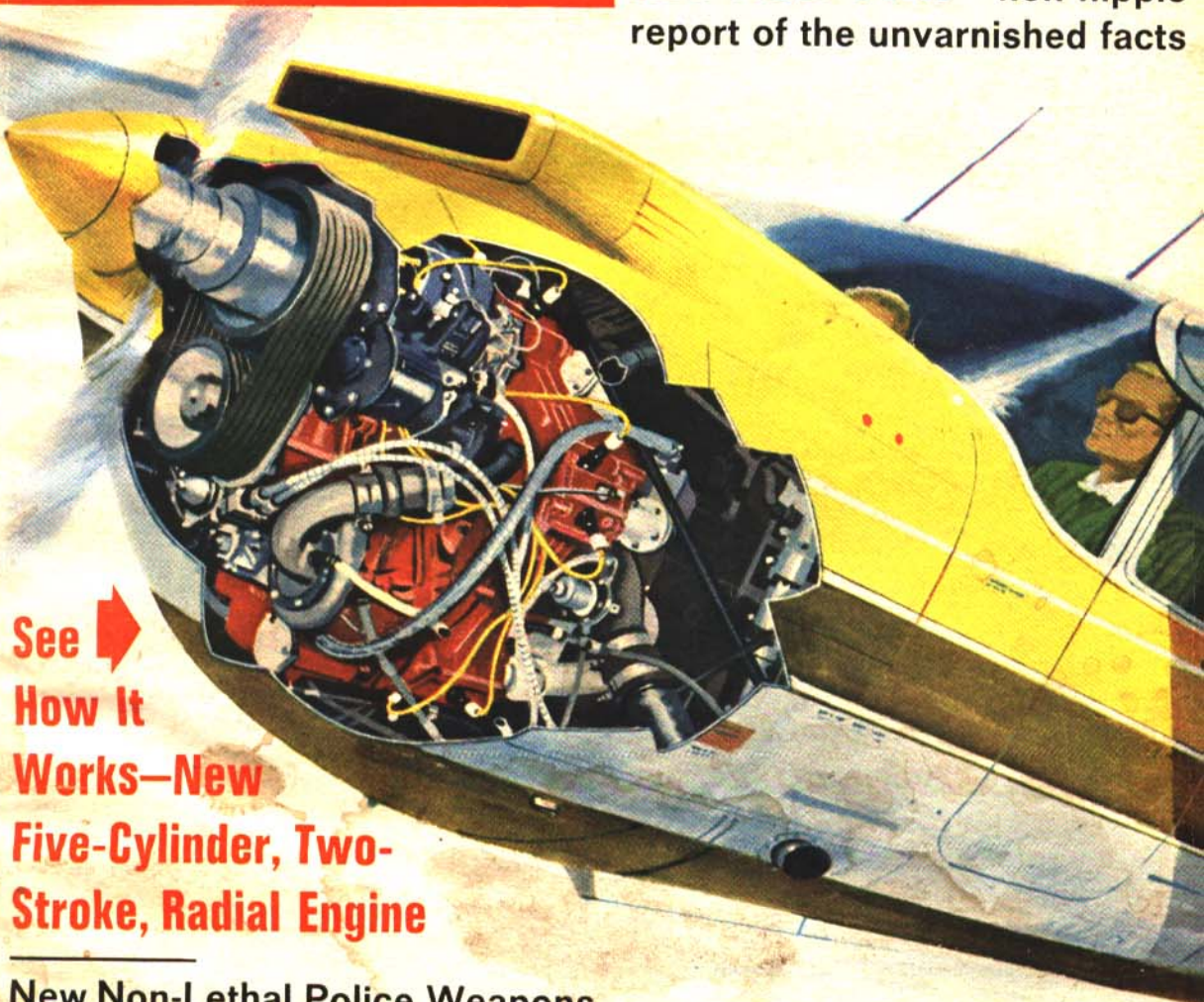
DECEMBER 1967 35 CENTS

Popular Science

MONTHLY

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report of the unvarnished facts



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Gus Meets a Suspicious

The bearded stranger not only looked like an oddball—he acted kind of funny and even his car troubles were peculiar. But the explanation was really quite simple

By MARTIN BUNN

ILLUSTRATION BY RAY QUIGLEY

It was the eyes—small, bright blue, and suspicious—that first made Gus Wilson uneasy. Besides a slim mustache, the man had a goatee that accentuated a jutting chin. He spoke slowly, hesitantly.

"I think it's a miss," he said, gloved fingers tapping the wheel of the Mustang he had driven into the Model Garage. It bore city plates. "The engine shakes running slow, and doesn't accelerate well."

Gus's ear had already told him there was a miss. He brought out his plug scope and connected it. One short trace among seven normal ones promptly identified the culprit as cylinder number five. Gus killed the engine. Carefully detaching the resistor cable from cylinder five, he removed the plug. Apparently it had been dropped, for the side electrode was bent, closing the gap.

"Whoever cleaned your plugs last must have dropped this," Gus remarked. "There's no gap for the spark to jump."

The man licked his lips, nodded.

"You just passing through?" asked Gus as he regapped the plug.

"I'll be around a couple of days. The name's Gabriel West."

Gus tightened in the plug, replaced the cable, and started the engine. It ticked over smoothly.

"That's fine," said West, who had stepped out to watch. "What do I owe..."

A loud brake squeal interrupted him as a Dodge nose-dived to a stop outside the shop. From it tumbled Kenneth Marcy, his 17-year-old face a cloud of doom.

"Hey, am I glad you're in, Mr. Wilson. Can I talk to you right away?"

"Sure, Ken. In about a minute."

"Go ahead," said West, his piercing



eyes flicking from the boy to Gus. "I'm glad to stay out of the cold a while."

"Thanks, Mister." Ken swung back to Gus. "Dad said I could use the car while he's away on business. Ma doesn't drive, so I take her around. But I had the car last night and I—I think maybe I damaged the automatic transmission."

"Why?" asked Gus.

"The engine winds up hard in low," answered the boy, "then jerks into second, but right away upshifts again into high. Maybe the bands are shot."

"What were you doing last night?"

Ken flushed. "Draggin'. On Main Street—but there wasn't any traffic that late. 'Course, I was floorin' the gas in 'drive', but it ran fine. This morning, though, even Ma could tell something was wrong. She said bring it here. You think I really wrecked the box?"

Gus raised the hood. After one quick glance, he pulled out the transmission dipstick, sniffed it, shook his head as he put it back, and closed the hood.

"Too soon to tell, Ken. You know overhauling any automatic transmission comes high. I thought that ticket you got last fall cured you of drag racing."

The boy groaned. "I wish it had. Dad will kill me if this is going to cost. Could I pay it out of my allowance?"

Character



With a loud brake squeal, a Dodge nose-dived to a stop outside the shop. From it tumbled Kenneth Marcy, his face a cloud of doom.

"Not if it's a two-, three-hundred-dollar job, Ken. Will your mother be needing the car today?"

"Not this late. We were out already."

"Then you better leave it overnight, to give me time to figure the cheapest job I can do. See me at 8:30 tomorrow."

"Gee! Well, okay. Thanks, Mr. Wilson."

The boy walked out glumly. Paying Gus the small amount he asked, West got into his Mustang.

"One worried kid you got there."

Gus nodded. "It may do him good. Hope it cures him of stop-light racing."

"Think he ruined the transmission? I

don't know much about auto mechanics."

Again Gus had a flash of intuitive distrust. He shook his head.

"I could have fixed it right away. But it won't hurt him to sweat it out."

West nodded, his eyes more suspicious than ever, and drove out.

Gus wasn't surprised when, just before 8:30 next morning, the Mustang once more rolled into the Model Garage.

"She's missing again," began West. "Sort of galloped when I started up. I know you fixed a bad plug, but there must be something else wrong now." *Continued*

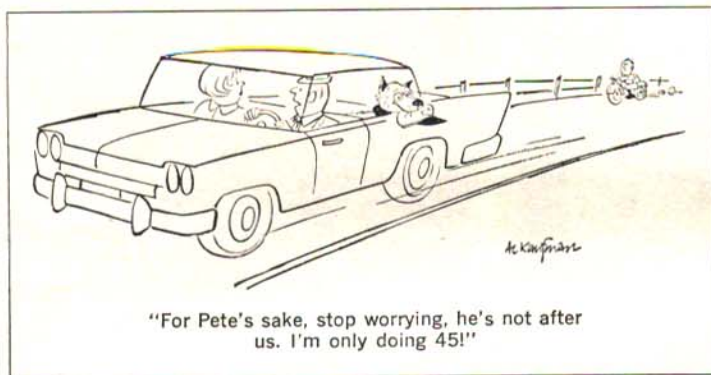
Gus hooked his plug scope to the ignition wiring. As the engine caught, eight traces welled up on the fluorescent screen, all below the red line, yet none so short as to indicate a fouled plug.

"It's idling nicely now," said Gus.

"It wasn't five minutes ago," insisted West. "It even died at a stop sign."

"Hey, Mr. Wilson. How about it? Will it cost much to—" Ken Marcy, face glistening with sweat despite the cold, stared at West in surprise before going on. "Sorry to butt in."

West waved a hand. "I've got time."



"I got to know, Mr. Wilson. Is it bad news?" the boy asked pleadingly.

Gus raised the hood of the Dodge.

"This time you're in luck, Ken. There's your trouble." He pointed to a link rod, its loose end lying atop the manifold. "When you lead-footed the gas, that ball joint on the throttle plate hopped out of this end of the rod, which was set a bit too long. With this disconnected, the shift points are controlled only by the transmission-oil pressure, instead of by the throttle and oil pressure, so they went haywire."

Screwing the adjustable end of the rod down a trifle, Gus put the ball in its socket, squeezed the retaining clip to increase its tension, and slid it on.

"No harm done," said Gus. "But drag racing on a public road could have cost you much more than a big repair bill. My charge for this is a promise from you."

"You've got it, Mr. Wilson," declared the boy. "Never, never again. And thanks. Can I take the car to school?"

"Get it out of here," ordered Gus sternly, "before I charge you storage."

"Good as a TV show!" chuckled West after Ken had gone. "Only you passed up a chance to make a few bucks, didn't you?"

"Don't need 'em that badly," retorted Gus.

Turning back to the Mustang, he inspected the points, cap, and timing advance, and checked the shaft for excess play. Closing up the distributor, he hooked a tachometer in place of the scope and restarted the engine.

Noting the idling r.p.m., Gus shorted out one plug at a time and read the drop in revs as each cylinder cut out. The differences were so alike as to rule out a weak cylinder, whether due to poor compression, a bad valve, or broken rings.

Detaching the tach, he inspected all the spark-plug cables for breaks or chafed spots. There were none.

"The engine's running perfectly. If there's any trouble, it's certainly intermittent."

"Okay. If it happens again, I'll be back," said West, and drove off.

"One thing about him," remarked Stan, Gus's helper. "He's never in a hurry, like everybody else is. You'd think it's his business to hang around."

"No, we won't be likely to see him again. He's strictly a transient," said Gus.

He couldn't have been more wrong.

About the same time next morning, the Marcy Dodge stopped outside, and Ken ran into the Model Garage.

"Mr. Wilson, I—I had to come to see you right off," he blurted breathlessly.

"The car's okay, isn't it?"

"Yeah, it's fine. Thanks for getting me out of that spot. But listen—I—I just remembered who that guy is. The one with the beard. Dad took me to lunch in the city some time back, and there was this same guy, and Dad told me he's a newspaper columnist—Dan Presley!"

The name meant nothing to Gus.

"Don't you read his column, *Pointers*?" Ken went on. "It's in lots of papers. He

Continued

fingers rackets, bunco schemes, crooked businesses. For two months he's exposed garage gyps who pull off a wire and tell a customer he needs a big repair job. He doesn't name names, but writes so local people can spot the crook every time. And he's been in here twice!"

"Mmm. That figures," mused Gus.

"I don't mean you're crooked," added Ken quickly, "or that he can get anything on you. But you've been pretty good to me and—I wanted you to know."

"I appreciate it, Ken. Thanks."

"I read that column," remarked Stan. "Presley is tough on bum mechanics, as well as on crooked ones."

"Well, if he's rigged his car this time," said Gus, "he's done a good job. I can't find the symptoms he's beefing about!"

An hour later, with two cars blocking the shop door inside, a horn sounded. It was Presley's Mustang out front.

"Happened again," said the bearded man. "When I started up at the motel, the engine almost shook me out of the car. It stalled three times getting here."

"It's smooth enough now," said Gus. "Look, I haven't time for games," he declared. "I just heard who you are, Mr. Presley. So you won't find out much more about me than you already know."

The smile that suddenly spread over Presley's face reached even his eyes.

"Okay. But I already know all I need to know about you, seeing you handle that kid with the Dodge. I jimmied that spark plug you fixed, but this car really does run rough mornings. I wish you'd check it again."

"The door's blocked," said Gus after a moment. "Move the car over there."

Getting tools and instruments from the

shop, Gus tried the plug scope with the same result as before, then checked the automatic choke. Fingers numb with cold, he put the ohmmeter prods across each of the plug cables in turn. Their resistance ran from 8,000 to 20,000 ohms. But the last one—number five—was 200,000 ohms.

Gus twisted the cable, seeking a break that might cause intermittent high resistance. The reading stayed the same.

Putting the cable on a fender, Gus rechecked the others, then replaced them. Finally he checked number five again.

The meter didn't budge. Repeated tries showed the cable nonconductive.

"The main trouble with resistor cable, which has carbon instead of metal wire inside," Gus told Presley as he replaced the defective one inside the shop, "is people. Grab a cable too far from the boot, and you can break that carbon string. Bet that's what you did when you yanked it off to take out that plug so you could mash the points together."

"I'll buy that," said Presley. "I didn't know you have to treat resistor cables gently. But why did it miss only mornings, and how come you got that open reading only the second time you tried?"

"The cold," replied Gus. "Overnight, and after I left it on the fender, the conductor contracted, pulling the broken ends so far apart the spark couldn't jump them. When the engine warmed it, the carbon expanded, shoving the ends together enough to let a spark jump."

"Congratulations," said Presley.

"You going to mention the Model Garage in your column?" asked Stan.

Presley answered with a satanic grin.

"Negative! Staying out of Pointers ought to make you happy. I've got no space to waste on an honest garageman!"



Sporty experimental car: How low can you get?

An experimental car that traces its lineage back to the Mustang is being displayed by the Ford Motor Co. It's the Allegro II, with an overall height of only 41¼ inches. To disembark, the driver swings the steering wheel up. On reentry, a "memory" button returns the wheel to the driving position.