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Silas leaped out at the sight of Gus. "Took you an all-fired time to get here," he sputtered.

Gus Referees a Big

By Martin Bunn

"HEY, Gus!" bawled a raucous voice from the car that had just rolled into the Model Garage. "I want service! Get moving; time's money."

Gus Wilson switched off the grinder he'd been using and walked to the car, a '53 Ford. Its engine was running at an excessively fast idle, with a trace of roughness.

"The squawk's familiar and so is the face," said Gus to Silas Barnstable. "Who'd you deal out of the car?"

"Not bad, eh?" asked Silas smugly. "Old, but clean and pretty sassy on the road. Got to sell it, though. I took it for an overdue mortgage payment."

"Shut it off," ordered Gus, "before you fill the shop with fumes."

"Not till you promise to fix it. Engine keeps stallin' in traffic, and it won't start again until it sets a spell."

Behind Barnstable, Stan Hicks, Gus's assistant, grinned.

"Anything else wrong?" asked Gus.

"It sort of pounds on the turnpike, shakes all over. I had it to a cut-rate wheel-bal-

ancin' place, but they didn't do it right. Anyway, ain't no shake till you hit 50, and I won't drive that fast with a prospective buyer."

"You just want the stalling fixed?"

"Well, sure. Can't sell a car that quits at every light," sniffed Silas virtuously. "It costs, too. Got me a five-dollar ticket for blocking traffic."

"Okay," said Gus. "Leave the car there."

Silas' scrawny face twisted. "Leave it? I got a buyer wants it today. Every minute that car ain't sold costs me interest! You got to fix it right now!"

"Can't," said Gus. "We have some jobs to finish, and another coming in—from a woman who phoned about it yesterday. If you won't leave it, take it away."

Silas glowered at him. "I'll go make them balance them wheels over again. Mebbe I'll be back and mebbe I won't."

He drove out indignantly.

An elderly luxury sedan appeared in the shop shortly after noon. Its driver was a dark young man wearing a scowl.

"You Gus Wilson? I'm Chet Younger.



Deal

My sister wants you to see if anything's wrong with this car. I don't think so."

"She said on the phone that it stalls on warmup, and burns too much gas."

"It only stalled once this morning," said the youth. "Then it ran fine."

"Today's mild," Gus pointed out. "She said it's in cold weather it stalls most."

The boy shrugged. "She just wants to be sure 'cause Aunt Jane wants to buy it. With the money, Sis can get a Ford from the man next door. But she doesn't want to sell Aunt a lemon."

"I'll put my helper right on it."

Stan started work as the boy watched. The ignition analyzer gave the coil and points a clean bill of health. Stan pulled a couple of plugs. They seemed fairly new, but showed signs of carbon fouling. He cleaned and replaced them.

The plug chart showed that they were of the correct heat range for this car in normal driving, yet they had evidently been running cold.

"Does your sister make mostly short trips?" Stan asked.

Chet shook his head. "She teaches at

Gravesend. Drives 40 miles a day."

A call for gas, and then a flat tire, took Stan off the job for a time. When he returned to it, the car had cooled. He found the automatic choke and the manifold heat valve both closed.

Taking the car out, he saw the temperature gauge climb normally within a few blocks, indicating that the water thermostat permitted proper warmup. By the time he drove into the shop again, the choke and heat valve had both swung open.

Stan nudged the heat valve's counterweight. It swung freely. He revved the engine in short bursts. The weight hung steady.

"I checked that," said Chet. "Everybody knows if a heat valve's stuck open you get slow warmup and bum gas mileage."

"Don't use oil on a jammed one," advised Stan. "The heat carbonizes it. There's a special solvent for the job."

He revved the engine again briefly.

"See that? The exhaust flow *should* jiggle the counterweight, but it doesn't. Chances are the valve plate inside is rusted away, and doesn't direct heat to the intake

system. The mixture stays cold and you get stalling or even carburetor icing. Wastes gas, too. I'll pull the valve."

He did so. Exposed, the valve plate resembled a piece of rusty Swiss cheese. By the time Stan had installed a new valve assembly, Chet had mellowed.

"I'd never have spotted that," he admitted. "Glad you did. That Ford will be more fun to drive than this crate."

"You said it's a neighbor's," remarked Stan. "Where do you live?"

"Overhill Road, up on the heights."

Stan paused, wrench in hand.

"That wouldn't be a '53 Ford, from a fellow named Barnstable?" he asked.

"Yeah. How'd you know?"

"Just a guess," mumbled Stan, and hastened to finish the job.

Two hours later a short, smiling man in white dungarees strode in.

"Gus Wilson? I have a message for you."

"I'm Wilson," said Gus.

The man smiled even more. "I'm Jim Paddock. Barnstable got a Ford from me. He took it for a payment I owed, thinking it's worth 50 bucks more."

"And it isn't?" asked Gus.

"Might be, if it didn't have a couple of bugs nobody can cure. I have another car, so I don't mind much, especially after what I went through with that one. Except in cold weather, it stalls every other block and won't start again until it cools off. Glad to be rid of it.

"I tried a new coil, two sets of points, put in new plugs twice, had the carburetor apart three times, and installed four new economizer valves. Nothing helped, but Barnstable tried the car out on a cold day, when the trouble didn't show. There's also a vibration at high speed."

"Uh-huh. You had a message?" asked Gus.

"Oh, yeah. Barnstable's stuck with the car at Main and Grand, smack in the shopping section. He's scared of getting a summons if he goes off to phone, so I promised to tell you to come."

"You sure took your time getting here about it."

"Didn't I, though? It's worth the 50 bucks to think of him sweating it out with that car," concluded Paddock.

The Ford had been nosed into a parking space when Gus arrived in the wrecker. A

pretty young redhead sat beside Silas, who leaped out at the sight of Gus.

"Took you an all-fired time to get here, Gus," he sputtered. "Would have had a ticket for sure if a car hadn't pulled out so I could push mine in here. It's all your fault for not fixin' it."

"Isn't that Miss Younger with you?"

"It is, and she's fixin' to buy the car. Don't you queer the deal, or I'll have the law on you," snapped Silas.

The girl nodded smilingly at Gus as he walked by. On opening the hood over the flathead V-8 engine, he was at once struck by a strong odor of gasoline. Wet seepage showed at the carburetor bowl. It appeared that Silas had pumped

the gas in trying to start the engine, and flooded it.

Gus got into the car, floored the gas pedal, and turned on the key. After a few revolutions the engine caught.

"You could have done that yourself and saved the price of a road call," he told Silas. "It'll probably stall again when it's hot. Want to drive to the shop so we can check it?"

Gus let the Ford precede him to the Model Garage. It made the few blocks without stalling, but died as it rolled inside.

Gus put the hood up at once. What had been seepage was now a steady dribble.



Bulletproof windshield visor

Steel visors on a British armored car slide down to cover windshield and side windows in case of attack. They are operated hydraulically from a control panel in a rear sealed-off compartment containing the vaults.

The sliding door on the side mechanically interlocks with an inside door to the vault compartment. Neither can be opened until the other is closed, and the crew carries no keys.

"Maybe the needle valve's stuck," offered Stan, who had brought a light.

"Carburetor's been checked out," said Gus. "That gas is boiling in the bowl, as if the heat valve's shut."

Stan played the light on both manifolds and their crossover behind the radiator. "Can't be that. This car hasn't got one."

Gus shook his head. "Take out the crossover, Stan."

Mystified, Stan set to work. The girl got out of the car. Silas paced the floor. From a corner of his parts cubby Gus rooted out what he was looking for—a curious V-shaped object a few inches long.

From the car came clanging and mutterings as Stan wrestled with rusty bolts. Finally he straightened up, the smooth crossover pipe in his hands.

"What'll I do with it, Boss?"

"Yank out the heat valve," said Gus.

Surprised, Stan looked into the pipe, then got a pair of long pliers and grappled inside it. With difficulty he withdrew a corroded object like the one Gus held, then shook his head. "Other '53 Fords I've seen had shaft-type heat valves."

"They used both kinds between '49 and '53 or '54, I think," said Gus.

"Expensive folderol," growled Barnstable. "Ough to be left off cars."

"Like other things, heat valves do make trouble if they're neglected," admitted Gus. "But without one, you'd stall often, foul spark plugs, and burn extra gas. If the valve doesn't open once the engine's warm, on the other hand, the overheated carburetor causes stalling and hard, hot starts. That was the trouble with this one."

Inserting the new valve as Gus directed, Stan worked the crossover into position. Barnstable turned to Miss Younger.

"That price I gave you didn't allow for no fancy repair work," he whined. "I'll have to tack on what it costs me . . ."

"About the pounding you said you felt on the pike, Silas," put in Gus. "Want that taken care of, too?"

Silas glared at him.

"If you don't," Gus went on, "I'll only charge for half a road call and replacing the heat valve. You and Miss Younger can sit in my office to sign the car over."

Five minutes later Barnstable stalked out, having paid Gus's bill.

"I bought the car for the price we had agreed on," the girl told Gus. "Is there something else that should be repaired?"

"That pounding I mentioned? I think it will be gone," said Gus. "Let's see."

The car started easily. Driving out, Gus headed for a nearby expressway. On the stretch, the car moved up to 60 effortlessly. There was no vibration or pounding. Gus drove back to the shop.

"That high-speed vibration was due to engine roughness," he told the girl. "The stuck heat valve made one bank run hot and caused back pressure on that side, so the engine ran unbalanced. It's fine now."

"Silas didn't come out of that deal as rich as he hoped," remarked Stan as the girl drove out.

"He still made a few bucks," said Gus. "But we sure had the old tightwad worried."

"Yeah," said Stan, "for a while I thought he was going to pop a valve." ■ ■



Taxi television

Riders in taxicabs of one Chicago company can now follow their favorite television programs as they travel.

The Flash Cab Co. has installed TV receivers on the back of a number of front seats where they are in full view of passengers, can't distract the drivers.

Others are being put in. Drivers of TV cabs report bigger tips.