The cocksure colonel told Gus exactly how to fix his car, but Gus was not taking orders

By MARTIN BUNN
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Gus slammed the hood of an early-morning repair job at the Model Garage.

"Man, if I ever closed a hood like that ..." Stan Hicks, his assistant, complained, poking his bony legs into his coveralls.

"Get my car down and let me out of here," snapped the colonel, "before I make real trouble."

"Car troubles getting you down, Boss?"
"Not car troubles, customer troubles," corrected Gus.

"I thought that was Harry Baxter's old clunker," chuckled Stan.

"It's his, all right. How many times has that stubborn character tried to tell us how to fix his car? Well, he's at it again. Bring my car and follow me back to Baxter's house. We'll have to shut up shop for a few minutes."

Riding with Gus on the way back, Stan asked about the Baxter car. "What was he complaining about now?"

"Claimed the valve job we did last winter was making his car hard to start. He even talked me into wasting time on
a compression check.” “Compression was okay, huh?”

“The trouble was that Baxter put on a new coil himself after we’d told him he needed one. He got the battery and distributor leads to the new coil switched. With the low-voltage juice flowing the wrong way through the coil, the high-voltage current flowed the wrong way through the spark plugs. That way it takes about 30 percent more juice to jump the gaps. Made the car hard to start.”

“Next time Baxter needs a valve job,” said Stan, “you’ll send him packing to some other shop, I’ll bet.”

“Next time I’ll look for the trouble logically instead of listening to him—or any customer,” vowed Gus, holding up one hand.

As they drove up to the Model Garage, Gus spied a neatly uniformed Army officer standing in the drive beside a well-kept ’64 Ford sedan.

The officer strode over to Gus as soon as he stepped out of the car. “You look as though you’re in charge,” he said.

Gus grinned. “I hope so.”

“I’m Colonel John T. Wayland of the Ordnance Ammunition Command. I’ll be stationed at the base for a while and I need someone to fix the front brake on my car. It makes a funny noise. Comes every time I use the brakes hard in the opposite direction they were used hard the last time.”

“Let’s go for a ride and listen to it,” suggested Gus.

“No need to. I already know what the trouble is. I had to slam the brakes on hard trying to avoid a chuckhole in the road a few weeks ago. The self-adjusting mechanism broke. It lets the brake shoes move around too much.”

“I’d still like to hear the noise myself,” said Gus.

“Just take off the right front wheel,” the colonel insisted, “and put on a new self-adjusting setup. You’ll save us both time.”

“If it’s just the same to you,” said Gus, moving toward the car, “I’d like to hear the sound before I fix it.”

“Very well, if you insist. But I can produce the noise right here in your driveway. I’ll show you,” the colonel said, climbing into his car.

“It’s the right front brake,” he called out. “Stand over on that side and you’ll hear it when I stop.”

Colonel Wayland backed up the car and braked hard. Sure enough, a pronounced clunk came from the right front. He shot the car forward a few feet, jammed on the brakes again. The same clunk.

“Now, watch,” said Wayland. “I’ll go forward again and stop, but there won’t be any noise this time. Only happens in the opposite direction to the time before.” The car jerked forward; the colonel braked. As he had said, there was no sound other than that of normal hard braking.

“Satisfied?” Wayland asked.

“Let me try it once,” said Gus. The colonel tightened his lips and banged the steering wheel hard with his fist. Then he slid over.

When Gus put on the brakes going backward, the clunk seemed even louder than it had outside the car.

“I have a hunch,” said Gus. He got out, opened the big shop door, then drove the car in. The colonel watched as Gus jacked up the front end and rolled under the center of the car on a creeper.

“Now, wait a minute,” the colonel snapped. “You can’t fix a broken brake-adjusting mechanism from there.”

“I don’t think the trouble is in your brakes,” said Gus. “It sounds more like the suspension.”

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“Hold it right there,” Wayland commanded. “I know it’s the brakes. Just take off that front wheel and you’ll see.”

Gus remembered his vow made only half an hour before. He rolled out from under the car and got up.

“Tell me this, Colonel,” he asked. “Did you miss that chuckhole?”

“No, as a matter of fact I hit it quite hard,” admitted the officer. “That’s when the ratchet let go.”

Gus plunged ahead: “When you hit that chuckhole, the front suspension took an awful jolt. The wheels were locked. And the weight shift from braking was toward the front end. I think it damaged your front suspension.”

For several weeks the unhappy incident plagued Gus. “I know I’m right about that car,” he told Stan one day, “but maybe I should have pulled that wheel off, anyway.”

“Cheer up, Boss,” said Stan. “You may have lost a colonel, but you’ve gained a corporal.” Stan gestured toward a familiar car as it pulled up in front of the Model Garage. It was Colonel Wayland’s, but a youthful corporal sat at the wheel.

“Are you Gus Wilson?” the corporal asked as he climbed out of the Ford.

“What can I do for you?” Gus asked warily.

“I’m Corporal Jannings from the motor pool over at the base. And I’m in real trouble unless you can help me.”

“Well, Colonel Wayland—that’s his car there—ordered us to stop a noise in his brakes. We aren’t supposed to work on private cars, but the colonel was madger’n heck and he pulled some strings. Guess who got the job? I tried everything in the manual, but the noise is still there. Unless I find it, the colonel will have me busted before I can wash the grease off my hands.”

“What makes you think I can help?” Gus asked.

“Colonel Wayland told the officer in charge of the motor pool that you’d tried to gyp him on fixing his car. But we guys figure you probably know just what’s wrong with it.”

“I think I do,” agreed Gus. “Drive it in and I’ll show you.”

A few minutes later, Gus rolled out from under the jack-ed Ford, stood up and opened the hood.

“I found your noise,” he said. “Look down between the engine and radiator, and you’ll see the forward part of the lower suspension arm. What most people call the A frame. See that small bell-crank affair the A frame pivots on?” Gus pointed with the hook on his drop light. “One end of the crank is locked to a sleeve that’s bonded in rubber, and the rubber is fastened firmly through the car’s frame. Besides the pivoting action you find in the suspension of all cars, the crank end that
holds the A frame is free to swing as much as the rubber around it will allow. The bell crank was a suspension-softening system used by Ford in 1963 and '64."

Jannings peered closer.

"Keep watching that right bell crank," Gus instructed, "while I push back on the front wheel." Gus kicked his heel hard against the right front tire. It bounced back half an inch.

"The crank moved," said Corporal Jannings in amazement.

"I have the bell crank loosened now so it's easy to move, but even when it's tight, the rubber-mounted crank gives slightly when the tire hits a bump. That lets the outer end of the A frame move back. Probably when the colonel hit a chuckhole he tore the bond between the rubber mount and the bell crank. Now the crank slips too far one way and the other."

"You mean that's what the noise is?" The corporal grinned with delight.

"That's it. When I first heard it I had a hunch it was too loud to be coming from a brake."

"What's the fix?" the corporal asked.

"A new rubber mount?"

"There are two ways," said Gus. "You can put in a new bushing in place of the unbonded one, or leave the old setup in and put a special stabilizer bar across the front end between the right and left bell cranks. The bar will hold the cranks from moving independently. It won't matter if their bushings are bonded or not. They can't turn."

Jannings nodded. "Which way would you recommend?"

"I recommend the stabilizer," Gus said, rolling under the car to tighten the bolts he'd loosened. "It costs about five bucks and should beef up the handling quite a bit. It holds that caster from moving all over the map. The car will need a wheel alignment, too."

"I sure appreciate your help, Mr. Wilson," Jannings said. "You've saved my life. I'll pick up a stabilizer bar and install it. How much do I owe?"

"Forget it. Glad to help," Gus said as he lowered the car to the floor.

Gus had forgotten the incident by the time Colonel Wayland confronted him again. Gus was under the dashboard of a car removing a radio and speaker.

"Mr. Wilson," the colonel said hesitantly as he peered down at Gus, "I'm not very good at apologies, but—well, I sure owe you one."

"Forget it," said Gus, unwinding himself and getting out of the car.

"I can't forget it," Wayland went on. "I said some pretty rotten things. I can say I'm sorry but that doesn't seem enough. I want to pay you for what the job would have cost."

"Can't accept pay for a job I didn't do," said Gus.

"I figured you'd say that. Well, I'll tell you this. I'm through telling mechanics how to do their work." With that, Colonel Wayland shook Gus's hand warmly, smiled for the first time that Gus could recall.

"You're pretty good at stabilizing things, Boss," Stan commented as the colonel strode off down the street.

"Yeah," Gus said, "that stabilizer bar should do the trick, all right."

"I don't mean the car, I mean the colonel," Stan chuckled. "He sure has cooled down. I'll bet life will be a lot less jumpy for the guys in his outfit from now on."

Dune buggy delivers instant roads

Towed by a bulldozer that smooths the way in loose soil or sand, this "dune buggy" lays down an 11-foot-wide fiberglass mat. This is sprayed with a resin solution to form a durable roadway that can be used in 30-45 minutes. The machine, developed by the Boeing Co. under contract for the U.S. Marine Corps, is shown at work on a test tract in Seattle.