

## Deal, But No Deal

By Rick Cogbill  
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*This month's technical solution comes from Paul Johnson, head technician and former owner of Cedar Valley Alignment in Mission, BC. Thanks, Paul!*

### **“Mornin’, Slim.”**

I turned away from the stack of used tires I was straightening, only to discover a cloud of cigar smoke hovering above a badly wrinkled business suit. My first thought was to run for the fire extinguisher, but then the cloud spoke again.

“Where do you want Dutchy to drop the car?” The noxious smoke began to dissipate and Dickie Dixon’s beefy round face slowly appeared. The thick stogy clenched in his teeth was a trademark of our local used car lot owner. That and his penchant for pinching pennies. He eyed my stack of old tires. “Hmm; I could use a couple sets of inexpensive rubber. Do they come with a warranty?”



Ignoring him, I looked across the lot to where Dutchy was leaning against his tow truck, waiting to unload the 1996 Ford Mustang perched atop his flat deck. “Right there’s fine, Dickie,” I said. “I’m assuming it doesn’t run?”

Dickie took the cigar out of his teeth and flashed me a smile. “You assume correctly, my good man. My client was driving down the highway when the vehicle suddenly died, never to start again.” He waved the cigar towards the car. “Now that’s a brand new rebuilt engine, Slim, so I’m sure the solution will be simple, and therefore...” – his smile grew even bigger – “...inexpensive.” He waddled back to his Cadillac and drove off to sell yet another mechanical wonder to an unsuspecting customer.

Tooner joined me in the parking lot. “Huh, another one of Dickie’s used car specials.” He shook his head. “So what’s the story this time, Boss?”

I opened the driver’s door and pulled the hood release. “It’s not a ‘used car’, Toon. It’s a ‘D. Dixon Pre-owned Transportation Unit’. And it’s even got a rebuilt engine.”

Tooner peered closely at the 3.8 litre engine. Straightening up, he removed his cap and slicked back his thinning hair. “Well, maybe it do and maybe it don’t, but whoever

installed this thing sure ain't no mechanic. There's brackets missing, pinched hoses, and the wiring harness is a mess." He sighed heavily. "Who knows what we're gonna find."

Calling for Basil and Beanie, we pushed the car into the shop and began diagnosing the problem.

When Beanie turned the key, the engine cranked fine, yet hit hard every third or fourth revolution as if the ignition timing was out of synch. Tooner pulled off the coil wire. "Hey, Beanie; come out here and hold this thing. I want to check for spark."

"Ha!" Beanie glared at him. "Very funny, Toon, but I ain't falling for that trick."

Basil produced some insulated pliers and chuckled. "Why not? You did last week." He held the coil wire near a bracket while Beanie cranked the engine again. "Hmm. We've got spark, Tooner, but it's very erratic."

Further checks revealed an erratic signal from the crank sensor as well, so the boys installed a new one. But that didn't solve the problem; the car still would not start.

Basil stroked his goatee. "I'm beginning to think we've got timing chain problems."

"Timing chain?" questioned Beanie. "But this is supposed to be a rebuilt engine."

"Correction," grunted Tooner. "It's a Dickie Dixon rebuild. I'll pull the coil pack and cam sensor, and take a look inside the timing cover."

It was time to cheer up the gang, so I sent Beanie to the donut store for a dozen of the best. After putting on a fresh pot of coffee, I even wiped off the coffee table with a clean rag.

"My word," said Basil as he entered the lunchroom. "We're going all out today!" He settled into his chair and tucked a napkin under his chin. "Ah, this is just the way I like it."

At that moment, Tooner slouched into his own chair, a smug look on his face. "Time to celebrate," he announced, reaching for an apple fritter. "The ole Toon has solved another one."

Beanie wiped some chocolate frosting off his nose. "Okay, out with it."

"Well, in order to check for slack in the timing chain, I grabbed the crank pulley with both hands and gave it a turn."

We waited as he savored a delicious bite of sugary pastry. "And...?"

Tooner was enjoying himself. “Oh, the pulley turned, all right. But the timing chain didn’t. Whoever installed this engine managed to cross thread the crankshaft bolt. As a result, the pulley wasn’t tight and eventually it broke right ahead of the keyway.”

Beanie’s eyes widened. “So the pulley and reluctor ring are turning separately from the crankshaft?”

“Exactly.” Tooner took a swig of coffee. “I only hope the threads in the crank aren’t ruined, or Dickie’s in for a large repair bill.”

Beanie began to reach for the last donut in the box, a triple-chocolate croissant. “Uh, Bean,” I said, “you’d better leave that one. I’ll need it later.”

“What for?”

“As a pacifier,” explained Basil, catching my drift. “It’ll help calm Dickie down when Slim tells him that his backyard engine deal was really no deal at all.”