



SAM'S DEAD

Some days, engine troubles come in twos...

BY [REDACTED]

Captain's log, Different Drummer, Swansboro, N.C., 6-10-2011: "Well, well, well...limped back into Swansboro, tied up at Casper's Marina. Sam's alive, but sick. Heading back to River Dunes." Sam's our port engine, Dave's our starboard engine; twin Yanmar three-cylinder diesels. Sam had spun number three rod bearing the day before, a crippling injury that would require engine removal. Our plans of cruising south to the Florida Keys for the summer had just changed dramatically.

Every spring, I leave Kansas City a month earlier than my wife, Marlene, and return to River Dunes in North Carolina, our home port. I scrub Different Drummer from top to bot-

tom, try to fix the things that I didn't get fixed last year, and try to find the new things that need to be fixed. This is also when I change Sam and Dave's oil and oil filters, change all of the fuel filters and air filters, check and top off all of the fluid levels, change belts and hoses as needed, and search for any potential problems that can ruin my day in paradise, and repair them before they do. I was a truck mechanic for 40 years in my previous life, and I am therefore suspicious of all things mechanical; if something looks the least bit questionable, it gets rebuilt or replaced.

Marlene and I left Grace Harbor at River Dunes ten days earlier to begin our third season of cruising on Different

Drummer for six months. A shakedown cruise to beautiful Cape Lookout showed all systems functioning; the galley was stocked, water and fuel tanks were full, the solar panels and wind generator were cranking out all the juice we needed, and the beer was cold. What could possibly go wrong?

After a week of anchoring in Cape Lookout Bight, an overnight stay in Beaufort and two nights in Swansboro, we were slugging our way south on the ICW, bucking the current, the tide, and 20 knots of wind on the nose. Marlene was reading and tanning on her beach (the foredeck), I was at the helm, and Sam and Dave were only turning 1,800 rpm. We were just north of Camp Lejeune and only making about four knots when Sam's warning alarm screamed so blood-curdlingly loud I almost died of fright. The port tachometer went to zero before I could pull the fuel shut-off cable, and Different Drummer veered to the left, having lost port-side propulsion. I adjusted the steering, saw that we were now doing less than 2 knots, and I yelled for Marlene, but she was already on her way back to the cockpit, clothes in hand.

Marlene took the helm, and I flew down the companionway stairs just as smoke and the acrid smell of burning oil started pouring out of our cabin. I grabbed a fire extinguisher. Sam and Dave are located inconveniently under the berths in the aft cabins in each hull, accessible only by openings under the mattresses and from the front, neither one as big as needed. I opened the hatch above our berth for ventilation, and then removed the front access cover. Hot, oily smoke billowed out. I flipped the mattress and bedding out of the way and slid the wooden cover off of the opening. More smoke, no fire. But hot diesel engine oil, blacker than sin, was everywhere. It was dripping off hoses and belts and sizzling on the exhaust. I couldn't see through the smoke to see where it was leaking. Oil was everywhere—except in the engine where it belonged. The dipstick was dry, and Sam was dead. I was so thankful we had two engines.

That's when Dave's alarm went off.

When Different Drummer's low oil pressure/high temperature alarms go off, they scare you like you've been caught doing something wrong. The noise is ear-splitting. Marlene killed the key-switch, silencing the hideous alarm, and then pulled Dave's fuel shut-off cable. Things got really, really, quiet. And we immediately started going down the ICW in the opposite direction. Backwards. With no power. "Honey," she said, "we're going the wrong way."

Before I could gather my wits and drop an emergency anchor, Different Drummer, not much for being pushed backwards, did a very graceful 180 degree turn in the middle of the ditch, and we were suddenly heading back towards Swansboro at 3 knots, looking like we planned it.

The smoke that was now pouring out of the starboard cabin was much blacker than the smoke still pouring from the port side cabin, and it smelled like burnt rubber. In deed, the brand new water pump belt had been burned in two by the crankshaft pulley, trying to turn the now locked-up pump. It took only minutes to grab a new belt (I keep several

on board), grab my tools, and disassemble the pump. The brand new impeller had chucked one of its fins, which then wedged itself between the pump housing and another fin, causing the pump to lock up, the belt to burn in two, and Dave to overheat. I re-installed the old impeller that had been working just fine before I replaced it (I save parts that still work), and Dave was back up and running in less than ten minutes. Cool. Marlene loves it when I do that.

Marlene kept following our GPS tracks back to Swansboro, and we didn't say anything for a long while, breathing deeply, pondering what we had just been through, and how quickly life on the water can go from easy to terror. Finally, she asked, "How's Sam?"

"Sam's dead," I said. "That's what I thought," she said.

Dave, our hero, had us safely docked at River Dunes at three p.m., and we were in the pool by four, but I couldn't find any virgins.

The Yanmar 3GM marine diesel utilizes an external oil line that is hidden behind the starter motor, the fuel filter, the exhaust manifold, and the wiring harness, as it sneaks its way around the outside of the engine. There's a place under the exhaust elbow where conditions are especially cruel to the oil line because of temperature extremes and chemical reactions (rust), and this where our disaster began, with a pin hole. A pin hole rusted through the oil line and sprayed a fine mist of pressurized hot oil throughout the engine compartment and onto the exhaust, causing the dense smoke, until there was no oil

left to lubricate with, causing number three rod bearing to seize itself to the crankshaft. When this happens, you're screwed. If you have a Yanmar 3GM (I think the 2GM has them, too), check this external oil line! It's not easy to replace, because everything it is hiding behind has to come off, but it could save you an engine. The steel line is under fifty bucks, a rebuilt 3GM is five grand. If you can find one.

Clean-up came first. Like blood and black paint, a little bit of diesel oil looks like a lot. Roll after roll after roll of paper towels and every rag and tattered t-shirt on board were used to clean up the toxic mess. It took me two days, but when I finished, the engine compartment was spotless, and Sam looked wonderful, like a well-dressed corpse.

From the day we bought Different Drummer, the mechanic in me started a strategy for engine R&R (remove and replace). The hatches directly above the engine access openings are, of course, too small for the engines to fit through, so Sam had to leave via the companionway. Great. This meant I had to somehow raise a three-hundred pound

LIKE BLOOD
AND BLACK
PAINT, A
LITTLE BIT
OF DIESEL
OIL LOOKS
LIKE A LOT

chunk of cold, dead, steel three feet straight up, then carry it through our cabin, through the cabin doorway (doorway 18", engine 15"), make a narrow 90 degree right hand turn, go up two even narrower steps to the saloon, make another 90, go up two more steps, through the companionway, across the cockpit, up a step, make a left, cross the transom to the lifeline, and figure out from there how to get Sam off the boat and onto the dock. No drips, drops, or scratches allowed. No problem. I bought a twenty-dollar come-a-long at the hardware store, and went to Deaton Yachts in Oriental. I was about to get schooled on the Yanmar 3GM.

"The old Yanmar 3GM external oil line failure," Buddy chuckled, "It's been awhile since we heard about one of those. They quit makin' 'em in '96, you know." Buddy and Eric, well-respected service advisors for Deaton Yachts, were much more amused at my misfortune than I. We were standing in the morning coolness of the boatyard, and my options were not looking good. I could send Sam's carcass to the engine rebuild company in New Jersey that Deaton uses, but turnaround time was anywhere from five to seven weeks, AFTER they receive the engine. River Dunes is a beautiful place and we love it when we're there, but we didn't buy Different Drummer to be dock rats. I could try and find a crankshaft and replace it in our bedroom, but I ruled that out immediately. I have replaced diesel engine crankshafts

before, and there's no guarantee that other parts of the engine haven't been damaged, also. I needed a New Sam. "Call Jim," Eric said, and he handed me Jim's card.

"I've got two 3GM's in stock, completely rebuilt, guaranteed ninety days and read to go." Jim said. He was in New Bern, just 25 miles away. I couldn't believe my good fortune. "Comes with a new starter and alternator, new belts and hoses. Guaranteed. I'll bring it to your boat, forty-six hundred dollars, exchanged." Always before, I thought Harley-Davidson's were expensive.

I rigged a cross bar across the hatch for my come-a-long, unbolted and unhooked Sam as needed, and raised him out of the engine compartment. Bob Laverty, River Dunes construction guru, great musician and good friend, brought muscle-bound employee Justin, and they did a flawless job of carrying the dead away. Jim was waiting on the dock with New Sam on a wheeled cart, we switched flywheels, and Bob and Justin reversed what they had done earlier.

The final re-installation went just as smoothly. New Sam started immediately and sounded great. No leaks or vibrations, and all systems were functioning. I was Marlene's hero.

Fifty-three hours later, the crankshaft broke in two. *

_____ and Marlene, along with Sam and Dave, are still cruising the ICW on their Prout 39 Different Drummer.