## 9. 1965 - The Year the HRD Engine Blew

About eighteen months after buying the Vincent HRD Rapide, I was riding it up a very steep hill close to my home one afternoon. I should have realized that something was wrong when half way up the hill it began to lose power and I had to downshift. Normally, the engine would cruise all the way up in third gear without faltering. As I made the downshift to second and resumed accelerating, a sudden loud ominous bang came from deep inside the engine. It seized solid for a split second, causing me to snatch in the clutch to avoid a rear wheel lock-up. But before I had chance to complete this, the engine suddenly and noisily, sprang back to life. With the clutch disengaged, I braked to a swift halt, the staccato sound of metallic engine clatter was deafening as I swiftly hit the engine kill button. A tell-tale trail of smoke was flowing out of the exhaust pipe and the acrid stench of burning oil filled the air, stinging the nostrils.

My heart sank down to my riding boots as I knew instinctively that this was a very, very serious and expensive situation indeed. I began the long push home of the big and heavy machine, my mind filled with nightmare visions of what was left of the engine internals for them to cause such a torturous sound. Once home, I pulled off the oil cap to inspect the oil level. After the smoke escaped and cleared from the oil tank, I discovered with horror it was completely empty. Its inner sides were completely coated with a thin film of oily fine metal particles that gleamed as a ray of sunshine landed on them. It was a complete mechanical disaster.

The HRD sat untouched in the garage for a whole week as my mind wrestled with how I was going to be able to deal with this calamitous situation. The following Saturday I awoke early, went down to the garage and commenced the heartbreaking task of removing the engine from the motorcycle for a complete bench tear-down. Draining the small remains of oil from the sump confirmed the presence of failed metal parts, ground up into tiny fragments and covered in a satin gray coating of oily aluminum dust. The magnitude of the engine failure became quite apparent as soon as I removed the cylinder heads and barrels. The rear piston of the V-Twin engine had completely lost its skirt yet all the piston rings were still intact. Failure and disintegration of the big-end bearing rollers had been at the cause of a large triangulated portion of the cylinder sleeve was broken away and had been ground up together with the aluminum piston skirt.

Still in my possession was the tiny Vespa motor scooter that was the only vehicle available equipped to carry parts to and from work or the engineering workshop. It had carrying racks fitted both front and rear. Being at the height of the Mods and Rockers era, the natty chrome racks on motor scooters were "all the rage" but were mainly for cosmetic appearance only. Nobody actually used them, other than to bolt spotlights, mirrors or horns to. I think I was one of only a few to discover that when used for transporting heavy goods, the safe handling of the diminutive motor scooter became almost impossible. "Oh how the mighty have fallen" I remember pondering as the mighty Vincent engine, flagship of the Rocker movement, ignominiously made its journey in bits, strapped down to a Mods Vespa scooter.

To help pass the time of almost a year that it took to rebuild the engine, I refurbished all the cycle parts. The main reason for such a protracted time span was saving enough money to order these parts and to cover machining costs. Once complete, to the dismay of my poor, long-suffering wife, such parts found their way back into the house "for safe-keeping and protection from a cold and damp English garage in winter." She sometimes would stumble upon parts in the fridge or in the oven that were awaiting her next shopping trip to utilize shrink fitting into new sub-assemblies. "You and your damned bike parts have no place in my kitchen" was a screamed phrase that my son Russ learned off by heart before he reached two years old. I must have pleased her in some way one day because she actually consented to letting me place, the matching rebuilt cast aluminum cylinder heads, on two cork mats in a place of prominence; namely, the famed English sideboard in the front room.

With the rebuild well under way after almost a year, I was working late in my garage one evening, re-assembling the freshly rebuilt engine back into the frame. Having replaced the remaining engine mounting bolts it was time to make the fine final set up for the correct gear shift operational clearance.

To my astonishment, I discovered at this late stage that it was impossible to select all four gears. I back-tracked in my mind all steps I had previously taken to determine what had gone wrong. At last it dawned on me that I had misinterpreted an assembly instruction in the workshop manual and inadvertently reversed a component deep inside the box itself. Confounded and enraged by my own stupidity and recognizing all the work that now would be necessary to rectify my error, I completely lost my temper. A large wrench ricocheted off the brick wall of the garage and an empty steel container soared noisily skyward, striking the underside of the roof with a crash before plummeting earthward once more. All of this of course was accompanied by the longest, loudest and foulest string of oaths that probably have not been atoned for to this very day.

As flying objects came to settle down, there followed a strange quiet calm. I sensed that I was not alone and shifting my focus from the machine to the garage door, was startled to see that it was now ajar and two strange faces were peering at me. All I could see of the owners was from the heads down to the waist as, one above the other; they leaned through the partially opened door in a highly comical manner. Both wore dark Homburg style hats with buttoned dark jackets, white shirts and neckties. "Didn't mean to startle you", called one of them in a strong American accent, "We were passing by on our bicycles when we overhead what sounded like a soul in torment" he continued with the widest grin that threatened to split his face. Puzzled, I approached the two and asked them who they were, it was close to 10 o'clock at night and dark outside. "My name is William Shakespeare Jr. and this is my brother Richard" said the older looking one of the two. "But you can call me Bill" he continued. Intrigued, I questioned them about what they were doing cycling around the suburban streets on a chilly fall night dressed in conservative dress suits complete with bicycle clips around their ankles.

They went on to explain that they were from Salt Lake City in Utah and were on a one year mission in England for the Mormon Church. During such missions the Church rulings were such that missionaries were not allowed to use any form of motorized transportation such as cars and all local travel was conducted using a bicycle or on foot. Bill Shakespeare Jr. went on further to explain that back in the States, he too was a motorcycle enthusiast with several motorcycles of his own. He told me that he had seen my collection of motorcycles frequently in the driveway over a period of several months but that this had been the first opportunity to actually make my acquaintance. He also told me that he had never seen the likes of anything quite like the HRD Vincent I was working on.

I quickly asserted that I was not very receptive to any discussion about religion but as long as the conversation remained focused on our mutual interests, then they were welcome to drop by and see how the project was progressing whenever they were in the area. We went on to become good friends and they dropped by quite frequently, we even shared the odd little non-denominational prayer together from time to time. Although they saw the machine 99% completed, their mission in England came to an end a few months later and they returned to the US without ever hearing it fired up. We lost touch completely when we moved home the following year.

The rebuild project was finally completed in early 1966, the cost and the time spent were very expensive but the finished article looked absolutely splendid. There were a few "teething problems" encountered in the early days of getting the bike back into regular road-going commission but nothing too serious that could not be overcome. The only part of the machine that I did not need to touch was the famous Vincent "Girdraulic" front suspension. With no trace of wear and the proof of prior rebuild by its former owner, it was simply re-fitted as a sub-assembly. One lovely day in early spring I fired her up and took her out for her first major road test. The engine sounded beautiful and did not miss a bit. With the engine internals having been totally rebuilt it was critical to restrict the rpm's, but despite this, the 60bhp and gearing still enabled 70 mph to be achieved within the safe running-in rev band.

Cruising effortlessly along at about 70mph, the front wheel suddenly and unavoidably hit a deep pothole in the road. It wasn't very wide but it stretched almost across the entire width of the lane I was in. I had experienced high-speed wobbles (or "Tank Slappers" as they were known over in England) where the front wheel deforms and deflects after taking a sudden blow from the road surface. An oscillation sets in that turns the front wheel into a gyroscope, pivoting about the steering head. In its most violent form, namely "The Tank Slapper", the handlebars can be wrenched clean out of the

rider's hands while they articulate from one steering lock to the other at blinding speed, causing them to be slapping the gas tank from side to side. If the rider can somehow hold onto or regain his grip of the handlebars, the throttle can be opened hard to induce the front wheel to lift. This momentary shift of weight is usually enough permit the front wheel rim to "un-flex" and regain its prior true running condition. Usually, braking is not an acceptable option.

A split second after hitting the pothole, the handlebars started to shake and vibrate at a terrifying rate, I was unable to hold on to them as the force of the oscillations ripped them right out of both of my hands. As I struggled to catch hold of them I was aware that I was still traveling at around 65 to 70 mph with no steering control whatsoever. I did come close to grasping them a couple of times, only to be thwarted by getting my fingers rapped by the back of the clutch and front brake levers. Fortune was smiling on me though because there was hardly any other traffic and the road was as straight as an arrow. As the engine gradually slowed the machine down the oscillations diminished sufficiently for me to at last grab and hold on to the handlebars. Grabbing a handful of throttle I relieved some weight from the front wheel and a few seconds later we back fully under control. Off the road I pulled, up onto the stand went the bike and I reached for my trusty tobacco tin and rolled a cigarette with trembling fingers, offering a silent prayer for having come through this. As I sat on the curb inspecting the front end for damage, I noticed a tiny tell-tale streak of rust staining one of the lower front fork legs.

Having made the trip home safely at the slowest speed the bike had probably ever been ridden at, I later commenced to strip down the front suspension. The tell-tale rust stain was seeping from under a rubber fork gaiter, fitted to prevent the entry of water and to avoid the accumulation of rust in the spring chambers. Further dismantling of both fork legs brought the answer to the puzzle. Because the machine had lain idle for a year in a damp garage, rust from condensation had formed, beyond sight, within the spring casings inside. I was entirely to blame; I should have checked this out before reinstalling the front forks. As the forks had compressed under the impact of hitting the pothole, the corrosion on one side had caused a split second delay to the rebound timing and this was what caused the speed wobble.

However, this was to be the last time I seriously rode this wonderful machine, in that brief period of time when one's life flashes before one's eyes, my family and my young son's lives flashed before mine. Soon after I also learned that I was to become a dad once more and that was it! It was time to say goodbye to the HRD Vincent and move on to three wheels. And that's another story.

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