

Speed Ventures - B



6-003-21

“Get Pat Edwards for me.” BJ was calling to get the engine mechanic's opinion on whether they should run today. The data Robin put together indicated temperature was not the problem, but BJ wanted to get Pat's direct assessment.

Pat Edwards was a classic “gas station mechanic,” with fingernails permanently blackened by grease and coveralls never clean for more than two minutes on Saturday mornings. Although lacking the sophisticated engineering training that was getting more common in racing, Pat had been knocking around the professional circuit for ten years after dropping out of school at sixteen to follow drag racing – and, without question, knew racing engines as well as anyone in the business.

BJ was calling Pat for more information and, while waiting, thought about their discussion about the gasket problem two days ago. “The way I see it, the turbo-pressure during warm-up, in conjunction with the different expansion rates for the head and block, is doing a number on us,” was about the extent of the analysis. This was Pat's personal opinion about the cause of the problem, and was not represented as anything else.

It was the same story BJ had heard twenty times, but it just did not match Robin's data. “Pat, we've chewed this over before. How do you know this is the problem? When we ran at Riverside the temperature was 75 degrees and we still lost the gasket and engine.”

“I'm not sure what happened at Riverside,” Pat replied. “I'm not sure that temperature is the problem, but it's the only thing I can figure that would lead to the stresses we are seeing. It's definitely the gaskets that are blowing out and causing the engine to go. All of the engines have failed in different ways, and all the failures were

due to loss of cooling or lubrication caused by a gasket failure.”

Part of Speed Venture's success was due to a unique turbo-charging system that Robin and BJ had developed. They had come up with a new head design that allowed them to get more turbo pressure to the engine while maintaining fuel consumption at a fairly constant level. By casting the head and turbo bodies in a high-strength aircraft alloy, they had also saved almost fifty pounds of weight. The alloy they were using was not as temperature sensitive as the material in the engine block, but the head gasket should have been able to handle the different expansion rates.

BJ could hear the sounds of race day in the background as Pat approached the phone. “Hello BJ.” Pat was obviously excited: “The Goodstone coveralls just got here. We are talking some fine threads, and no sew-on patches from these folks. The logo on the back and our names are stitched right into the material. I guess this means we get to keep 'em. Course, I got some grease on mine already, so they probably won't want 'em back anyway.”

“I'm glad you like them,” BJ said. “Look, I need to get some information from you. What are we doing about the gasket failure business?”

“The car is set to go. We have been using a different seating procedure since Slippery Rock and had no problems for two races. Robin says the Goodstone deal is set as long as we finish in the money today. Everyone in the shop wants this bad. Goodstone is a class act; they can make us the number one team on the circuit if we do well.”