The First Hondas.

Any dispassionate account of Honda Motorcycles usually notes that the company has something of a reputation for building bikes that, although excellent in engineering terms, do exactly what they are said to do but somehow without the flair or involvement that other manufacturers build into their bikes in an almost casual fashion. Having said this it must be noted that they remain a hugely successful company that still leads where others don't even know a path exists, and it is this apparent conflict between a reputed prosaic riding experience on the one hand and world leading innovation on the other that perhaps answers the riddle of their success and their desire to head the pack.

If the reason for the prosperity of the company needs be summed up in one word then 'innovation' would be as good as any. To Honda engineers Innovation is an attitude rooted in the very fibre of the company and doubtless goes back to the very first days of Soichiro Honda's excursion into industry and production. The story behind the origins of the Honda Motor Company is oft repeated although most accounts in the general motorcycle press skate over many of the the more pertinent aspects that were to prove the stronger foundations of the company's amazing growth since the Forties.

Born in 1906 Soichiro Honda grew up with his fathers blacksmith business in which he took a keen interest. At 15 he was apprenticed as a car mechanic at which he excelled and was able to involve himself with the motor racing scene, building and competing his own cars until 1936 when a severe accident nearly put an end to his life. By this time he was running his own garage and having recovered from the injuries he decided to move into the manufacture of motor parts rather than the repair of the complete item, so it was that he alighted upon piston rings as being the ideal component in which to specialise for not only were they used in every engine but gram for gram the finished article was more valuable than silver, not quite alchemy but close enough. His early attempts however were miserable failures but with the financial backing of a friend he formed Tokai Seiki, a company dedicated to the production of piston rings, now fully funded and with the promise of work From Toyota he persevered and eventually solved the basic problem through an understanding of metallurgy, this insight, brought to him by a college professor, also saw him start on two year study of engineering in general.

His quest for the perfect piston ring not only involved forming the ideal shape from the ideal material but also the ability to manufacture it in large numbers and by 1941 he had pretty well sorted out how to do it which was just in time for Japan to enter the war against America. The conflict created a large demand for all mechanical components, Tokai Seiki was well placed to prosper and prosper they did with up to 2,000 mainly unskilled workers (many of them POW's) using the new automated machinery to produce rings and other items of advanced quality. His factory was considered important enough to be bombed by the US in 1944 whilst Soichiro was lauded as an industrial hero by the Japanese press for not only his work with engine components but also the development of a high speed propeller milling machine for Nippon Gakki, who later became known to the world as Yamaha. All this a far cry from the little man toiling at his bench as he is so often portrayed.

Encapsulated within those years we have the three keys to the developing Honda philosophy, technology, knowledge and innovation. Another and often overlooked lesson as we have seen

is the importance of mass production, the removal of human error by turning the work over to machines to improve quality and work rates. The ability of his piston ring making machines to eliminate the need for skilled labour yet retain consistent standards is something he did not forget and the reliance upon automation to ensure product superiority and profitability became the foundation upon which the post war Japanese economic miracle as a whole was built, but the war had ended with Japan on the wrong side and America was now fully in control of their economy and industrial strategy.

Honda sold his company to Toyota and effectively took a year off until 1946 when he formed the impressively named Honda Technical Research Institute which has either gained something in translation or it was a statement of his conviction in the need for technology in manufacturing. Whatever the truth it's first successful project was the rebuilding and adapting of 500 ex army generator engines to fit to standard bicycle frames. These were sold as separate power units to attach to an existing bicycle frame and with only a limited number available Honda eventually turned to designing a successor which became known as the chimney, due to the unusual shape of its piston and cylinder. Unfortunately none of these latter engines survive because non were ever built, they were just too far ahead of the available manufacturing ability and materials but when one was reconstructed by the Honda company in 1996 they were found to be far more efficient than Honda's contemporaries would have been at the time. Honda realising that the 'Chimney' was a dream too far set to work producing the A type engine .

The A type engine was just that, a motor that was designed to sit upon standard bicycle frames produced by other companies and although it is often suggested that it was in fact the complete machine it is noted in some sources that Honda at the time did not have the resources to even make the whole engine let alone the complete bike. Instead, it is suggested in Honda's own potted history that dealers and mechanics would wait outside the factory gates for engines to become ready which they would then take away for fitting to their customers bicycles. Either way, such a small machine did not satisfy the ambitions of Honda who immediately set to work on the B type, a three wheeled delivery vehicle which proved troublesome in development and was dropped before production leaving the way clear for the C type.

The C type was much more a proper motorbike with a 98 cc engine sitting where engines still sit today although it still had pedals and the frame construction was more bicycle than motorbike. However, we can see in its shape the direct connection from the fork stem to the rear wheel hub forming a spine upon which the saddle sat and the lower cradle hung which was quite a departure from standard bicycle frame design and was a distinguishing feature of the following D & E models. The motor was mounted asymmetrically with the head and crank to the right of the centre of the frame whilst the belt driven transmission was to the left but otherwise it seemed to be pretty much put together as a bicycle with an engine, although blessed with sprung girder type forks. This too was obviously short of what Soichiro was really determined to produce and it's appearance was swiftly eclipsed by the arrival of the D type or the first of the Dreams.

The D type which came to be known as the Dream is oft described as Honda's first real motorcycle but as has been suggested above it was not such a radical departure from the C type which had established the general frame geometry, had front suspension and an engine of the same capacity. It is also rather nonsensical to suggest that the much later and cruder Diamond Free from Suzuki was a motorcycle if the relatively sophisticated C Type from Honda was not. True, the Dream's frame was of pressed steel and consisted of two lateral halves

forming a cradle with the tank and engine sitting within, it may be argued that this use of a space frame was a great advance upon the spine frame of tube found on the C type but it was an evolution rather than a dramatic reconsideration of how motorbikes should be built and certainly demonstrated Honda's engineering based approach as opposed to a dealers bodging of an engine to a bicycle.

Perhaps it's greatest significance though was that it demonstrated to the world that Honda was a company with ambitions intent on innovation and development rather than just updating old designs to place before weary consumers. The fact that they had come from attaching ex army generator motors to bicycles to manufacturing a product exhibiting advanced design features in three short years was proof enough that the rest of the world should take note of the giant stirring but all this made not a ripple abroad. The great British Motorcycle industry had little more to boast of than the introduction of the Featherbed frame in 1949, the same year that that Honda had leapt from bicycle type tube frames to pressed steel space frames and was looking ahead to installing a four stroke of it's own design in an enlarged frame and calling it the Dream Model E. This bike, although similar in appearance to the D, also boasted plunger type rear suspension and twin carburettors on a single cylinder but most importantly of all they were designed to be made on a production line. The method of assembly was as integral as the styling to Honda's way of thinking with his insistence that the bikes should be put together with the minimum of training, not just in the factory but out in the field where ease of maintenance and reliability were as important considerations as top speed and handling. What the customer bought was a manifestation of the thought and experience that Soichiro Honda had applied to creating his 'dream' machines rather than just another consumer item demanded by the market. The stage was set for the revolution that duly followed.