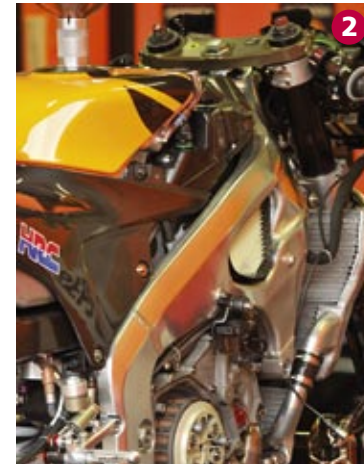
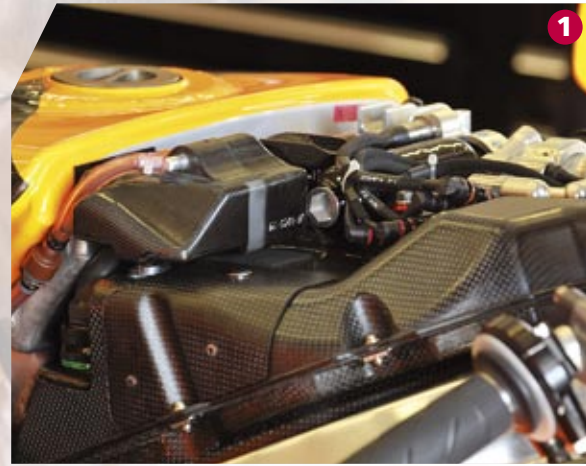


HONDA

RC212V 2009



1 All the Hondas this year used their Pneumatic Valve Recovery System (PVRs), which allowed higher revs to be used reliably. The customer bikes had their peak revs reduced at the start of the year to limit service costs

2 The works bikes had new air intake systems that breathed through the side of the frame. Look carefully and you can see this bike also has the early full-section side beams

3 By mid-season Honda had found out enough about the needs of their new tyres to weaken the main beams by cutting away an area at the bottom of the back of the beam and strengthening the front engine mounts by welding in additional plates

4 From Assen onwards there were new swingarms. Here we see the third type used on Dovizioso's bike during the year, and he was to use one more before the season was over



This year's Honda was another evolution of the 'second half of 2008' pneumatic valve-spring bike. Honda have now tried three times to bring pneumatic valve-spring engines to MotoGP, but all have been too aggressive and difficult to handle. The problem was compounded this season by having to build a bike to suit the Bridgestone control tyres – tyres that wouldn't be developed to suit Honda's preferences. The control tyre for 2009 was a variant of those used in 2008 by the Ducatis and Rossi. It seemed to prefer a pronounced rearwards weight bias to work the very stiff rear tyre carcass, which in turn allowed the bike to accelerate very hard off corners. Honda tried several different swingarms, both shorter and more flexible versions, as well as new rear linkages, but it wasn't until Catalunya that a modified chassis was seen. Over the next few races a motor with more mid-range and two different swingarms started to make a difference.

At Brno Honda surprised everyone by testing Ohlins suspension. The experiment was sufficiently successful to have Honda team Dovizioso with Ohlins for the rest of the year, although it wasn't known whether there was a big performance improvement with the Swedish suspension or if Showa were perhaps withdrawing from racing because of the global financial slowdown.

The fairings and air intake systems on the works bikes were new as well. Last year's chassis had its air intake under the nose, a simple scoop on top of the radiator; this season saw a duct down the side of the bike and through the side of the chassis, requiring a new airbox and fairing upper.

This year the customer bikes were replicas of last year's works pneumatic-valve bikes, albeit with the usual Honda slight detuning for reliability and to cut down servicing costs. The customer bikes, of course, didn't benefit from the chassis development undertaken by the factory team to make the bikes work with the Bridgestone control tyres.