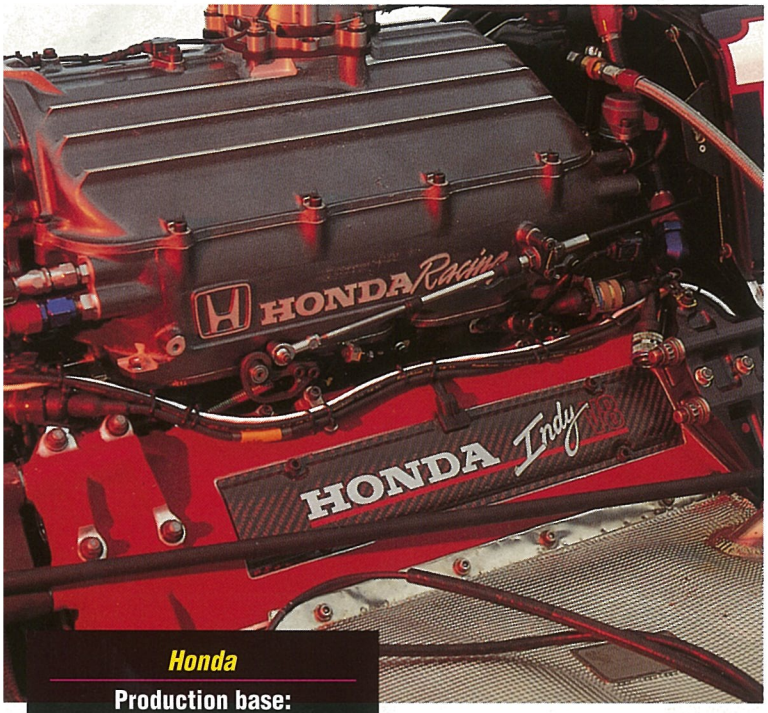
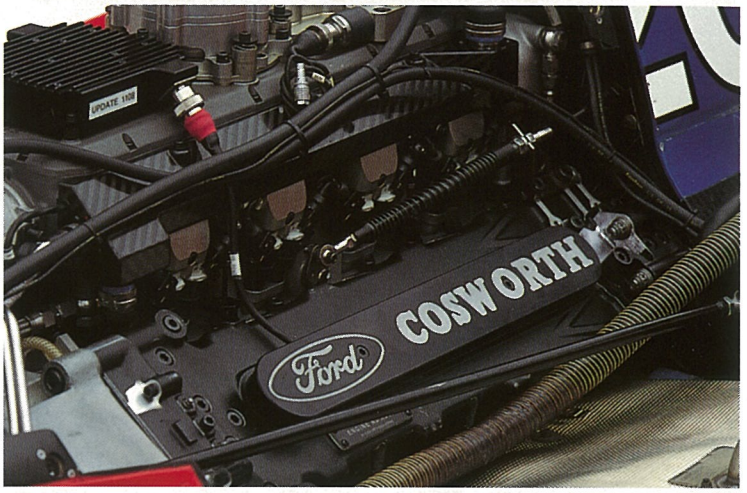
The Honda HRH Indy V8 *(below)* proved dominant in 1996, powering five different drivers to 11 wins in the 16 races.

The only other engine to record a victory was the Ford/Cosworth XD *(below right)*, Michael Andretti scoring five wins for Newman/Haas.





Photos: Michael C. Brown

Honda

Production base: Santa Clarita, Calif.
Wins: 11 (Vasser 4, Zanardi 3, Ribeiro 2, de Ferran and Fernandez 1);
Poles: 12 (Zanardi 6, Vasser 4, de Ferran and Ribeiro 1)

A mere 12 months after Bobby Rahal chose to give up on the fledgling Indy Car engine program at the conclusion of the 1994 season, Honda had made such substantial gains that the aluminum-block HRH engine was very much in demand. Over the winter of 1995/96, indeed, Hall Racing and Target/Chip Ganassi Racing opted to switch to Honda from Mercedes and Ford respectively. Together with Tasman Motorsports and Brix Comptech Racing they blazed the trail for other engine manufacturers to follow.

Incredibly, Alex Zanardi's very public blow-up while leading the U.S. 500 represented the first failure for the HRH during a race since its stunning debut exactly one year earlier at Indianapolis. It was also the first retirement for any Honda due to engine failure since Mid-Ohio in 1994.

Other breakages have occurred since then as the HRH was pushed closer to the edge of the envelope. Nevertheless, by the end of the 1996 season, the Honda was firmly entrenched as the engine of choice.

The bad news for 1997 is that Honda will not expand its customer base. The only change to the lineup will be a switch to Walker Racing following Jim Hall's retirement.

Ford/Cosworth

Production base: Northampton, England; Torrance, Calif.
Wins: 5 (Andretti);
Poles: 1 (Pruett)

The new Ford/Cosworth XD engine, introduced at the beginning of the 1996 season and utilized by four teams – Brahma Sports Team, Newman/Haas Racing, Patrick Racing and Walker Racing – was generally perceived as being inferior to the Honda and Mercedes engines, both in terms of horsepower and reliability.

The smaller, lighter and supposedly more powerful XD certainly did suffer an inordinate amount of failures, but steady gains were made as the season progressed – except, perhaps, in terms of electrical components such as the crank trigger, which continued to break with monotonous regularity, especially on Raul Boesel's car. Nevertheless, the XD boasted five victories through the efforts of Michael Andretti. Christian Fittipaldi and Scott Pruett also were consistent front-runners.

The PacWest team posted some good results with the Series II development version of the older Ford/Cosworth XB, while Payton/Coyne Racing showed there was plenty of life left in the 'standard' XBs, especially at M.I.S. where Roberto Moreno was clocked at better than 230 mph toward the end of the U.S. 500.

The plan for '97 calls for every Ford customer to be equipped with an updated version of the XD.

Mercedes-Benz

Production base: Brixworth, England; U.S. base: Detroit, Mich.
Wins: 0;
Poles: 3 (Tracy)

Toward the end of the year, the common perception was that Ilmor Engineering, charged with development of the Mercedes-Benz IC108C motors, had done such a good job that Honda was under serious threat as the most powerful Indy Car powerplant. Speed trap figures certainly seemed to bear out that suggestion, which only served to heighten the surprise when Mercedes, like Penske, failed to win a race in 1996. It was the first time Ilmor had been shut out since claiming the first of its 104 Indy Car victories at Long Beach in 1987.

Paradoxically, while Ford won five races, Mercedes actually led significantly more laps (454 to 375) and won more poles (three to one) than Ford. Marlboro Team Penske, as already chronicled, might easily have won a handful of races, of which the most obvious was at Road America, where Al Unser Jr.'s engine broke almost within sight of the finish line. Team Rahal, through Bryan Herta, also came agonizingly close at Laguna Seca.

For 1997, production of a new IC108D engine is already in progress, and while Team Rahal has switched to Ford, the Mercedes strength should be maintained by the addition of the emerging PacWest team.

Toyota

Production base: Costa Mesa, Calif.
Wins: 0;
Poles: 0

The folks at Toyota Racing Development knew they faced a tough challenge when they entered the Indy Car fray in 1996. Ford and Mercedes, of course, were already well established as the market leaders, while rival Japanese-based auto giant Honda was making great strides.

The learning curve began in 1993, with a motor designed by John Judd in England, but the definitive RV8A powerplant, developed jointly by teams of engineers in Japan and America, was ready only a few weeks before the start of the 1996 season. The initial signs were not too encouraging. It was clearly down on power in comparison to the opposition, and reliability wasn't anything to write home about either. Gradually, however, progress was made. The Nippondenso engine management underwent extensive development, leading to improved drivability, while rapid advances were made in terms of horsepower and engine longevity.

The first PPG Cup points came in Detroit, thanks to a virtuoso performance in the wet by P.J. Jones. More followed at Road America, where both Juan Fangio and Max Papis finished among the top 10. The tip of the iceberg had been uncovered.