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# Chrysler: The First Family of Front-Drive

### Iacocca and crew continue their clever marketing moves

by Jim McCraw

PHOTOGRAPHY BY BOB D'OLIVO

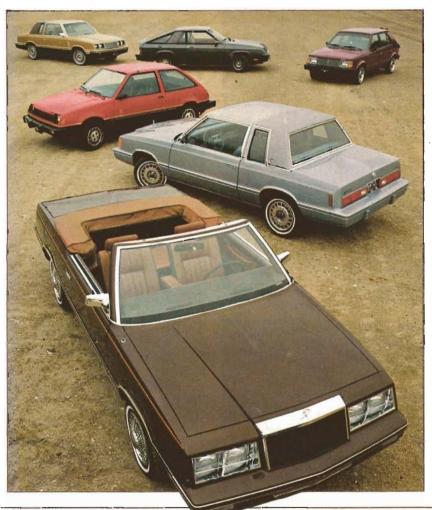
he figures don't lie. Behind the gruff but kindly man with the big cigar, Lido Anthony Iacocca, stands the American car company that builds and sells more front-wheel-drive cars than any other: the Chrysler Corporation. Disregarding all of its past, current, and near-term future financial problems, this Detroit company—with only two car divisions that aren't even divisions anymore—has more front-drive nameplates and body styles for sale than any other domestic manufacturer. And the one aspect of the front-drive car business that Chrysler management enjoys gloating about more than numbers and variety is timing. Everybody at Highland Park headquarters, from the janitors to the chairman, can tell you that Chrysler's first modern front-drive cars, the Plymouth Horizon and Dodge Omni sedans. hit the market three years ahead of No. 2 Ford's Escort/Lynx team, and two years ahead of The General's celebrated X-car series, led by the Chevrolet Citation. And, if the Renault/AMC

program continues on schedule, the Renault 9 will go into production in Kenosha as the AMC Alliance five years after Chrysler's first L-cars. In any other business, a twoto-five-year lead on the competition would be a wedge of fantastic proportions. For Chrysler, it has meant just enough to stay afloat and keep a few key programs on track for the model years to come.

Being first with modern front-drives, and building more of them than the competition, obviously doesn't mean instant supremacy, nor does it guarantee long corporate life. Internationally, there are a number of companies already building 100% front-drives (Volkswagen, Audi, Honda, Subaru, Saab, Renault) that don't have anywhere near the market share that Chrysler has, problems and all. And the all-front-drive companies are based in countries that have always had inferior road sytems and higher fuel prices, coupled with superior mass transit systems and much lower annual driving mileage per car. So, when the international oil supplies were choked off in 1973, it was business as usual for those companies in the small car business. But it meant panic in Motor City, whose history of small, fuel-efficient cars was peppered with forgettables like the Falcon, Corvair, Valiant, Pinto, and Vega. At that point, every car made in America was rear drive, and the average car weight was in excess of 3500 lb. EPA mileage ratings and corporate average fuel economy (CAFE) were yet to come.

In the mid-'70s, when confusion reigned in Detroit, Chrysler made the crucial commitment to its first front-wheel-drive cars, the Plymouth Horizon and Dodge Omni, targeting them for introduction as 1978 models. This decision to be first was made

well before the current corporate administration took office. At that time, the company had already accumulated front-drive car experience in three widely spaced programs reaching back into the mid-'30s. The very first Chrysler front-drive was an experimental program started in 1934 and completed in 1936, in which an Airflow-bodied car was adapted to frontdrive, using the meager technology available at the time and a lot of cast iron. It was rejected for production. The corporation didn't look at front drive again until after World War Two, when, armed with a huge amount of wartime materials and construction technology, it created another experimental front-drive project car called the A-227. The postwar project wasn't simply a pro-



## Chrysler had 18 years of fwd experience before

duction car redone with a front-drive package under the front end, but a more detailed study of total vehicle packaging and vehicle dynamics.

The real key to the development of the Omni/Horizon came 20 years before their introduction on the U.S. market in 1958, when Chrysler bought into Simca of France. In 1961, three years after Chrysler acquired equity in Simca, the French firm started a development program on a small, front-wheel-drive sedan series, and the program started a flow of engineering information back and forth across the Atlantic. U.S. Chrysler engineers actively participated in the development of the Simca 1100, which was a new approach for a company that had for years done a mix of front-engine/rear-drive, rear-engine/rear-drive sedans, sport coupes and roadsters. Simca went on to merge with Rootes, and the two companies operated as Chrysler France and Chrysler UK, respectively, until Chrysler sold both to the Peugeot-Citroën group in 1978. The Simca 1100, 1207,

1307, and 1308 were the forerunners of the current Talbot front-drives, some of which still use the Simca name. Although the Highland Park company has no financial interests left in Europe, it did garner experience in fwd by participating in the design and manufacture of more than 2.5 million fwd cars in Europe. This amounted to 18 years of fwd experience and 12 billion accumulated road miles before the first U.S. front-drives were introduced.

In 1975, Chrysler settled their L-car program. It was to be built on the same 99.2-in. wheelbase platform as the French Simca 1100 and Horizon, as a 5-door hatchback sedan only. None of the French engines was considered strong enough to do the job for American conditions, and Chrysler, faced with a half-billion-dollar investment just to get the first car built, had no additional cash for a completely new engine. Hence the choice of the VW water-cooled four in a large 1715cc displacement (with new intake and exhaust systems, cam drive, water pump, and carburetion, plus emissions equipment). Chrysler contracted with VW for up to 390,000 engine and manual transaxle units per year for the Omni and Horizon, and due to the high American penetration of automatics, was forced to design and build its first front-drive Torqueflite transaxle for the L-car program. The long-wheelbase, short-overhang hatchbacks would use MacPherson-strut front ends with disc brakes, rack-and-pinion steering, semi-independent trailing arm, and beam-axle rear suspension with coil/shock units. At 2200 lb., 165 in. long, and 105 cu. in. of displacement, the L-car was a far cry from the 440-cu.-in. New Yorkers of the time. The Horizon hit the market with 25 city, 39 highway ratings and an enticing base price of \$3700.

In the short '78 model year (January through September), Chrysler sold 157,000 Omnis and Horizons to economy-hungry Americans and garnered the MT Car of the Year award along the way-not for being first out, but for building a solid front-



1936: Chrysler front-drive project vehicle



1963: Simca 1100 front-drive sedan



1978: Plymouth Horizon/Dodge Omni



1979: Horizon TC3/Omni 024 variants



1979: Mitsubishi Colt/Champ 3-doors



1981: Plymouth Reliant/Dodge Aries K-cars

#### the first U.S. front-drives were introduced

drive compact at a reasonably low price and packaging it to appeal to Americans. For that model year, Chrysler jumped from 0% fwd products to 13.6% of all cars sold. The rest of the Big Four remained at 0% fwd market penetration, save for a trickle of Fiestas that Ford had been importing since 1975.

For model year 1979, Chrysler came right back with not one but two additional lines of fwd product, going international once again in the process. The Horizon TC3 and Omni 024 were immediate spinoffs of the L-car platform, shorter in wheelbase at 96.6 in., but longer overall at 174 in., and 2.3 in. lower at 50.8 in., in a much more aerodynamic 3-door hatchback configuration. At the same time, Chrysler lopped off most of the old Dodge Colt sedan line from its Japanese partner, Mitsubishi, and added 1.4- and 1.6-liter Dodge Colt and Plymouth Champ hatchbacks, their smallest fwd cars at 90.5-in. wheelbase, 156 in. overall, and 1900 lb. At the end of its second model year in the fwd

business, Chrysler Corporation had sold 166,000 of its original L-cars, 96,000 of the new sport coupe TC3/024 family, and just under 50,000 of the Mitsubishi imports, for a total of 311,000 fwd cars in three distinct families, or 32.2% of total sales. But by this time, Chrysler was no longer alone in the domestic fwd business, as GM had lauched four new car lines under the X-car umbrella in the spring.

The following year, 1980, saw the beginning of Chrysler's fight for corporate life under the direction of Lee Iacocca and Hal Sperlich. In a year of cutbacks, retrenchment, fears and doubts, the company stayed with its 1979 product lineup and experienced a shift in sales. The original L-cars fell off 21% in sales, the sporty TC3/024 family picked up slightly more than 10%, and the most economical cars in the family, the Mitsubishi Colt/Champ series, surged almost 75% ahead of the 1979 figures. Even in a terrible atmosphere of public doubt about its corporate survival, Chrysler's fwd sales jumped more than

5.7% in 1980 to almost 330,000 units, or 42% of all cars sold. In the spring of 1980, Chrysler stopped production of its full-size cars for good, a move which must be factored into the fwd percentage figures.

For the second year of a new and revolutionary decade in the automobile business, 1981, Chrysler was a very busy company. It got federal loan guarantees, a watchdog board in Washington, UAW president Douglas Fraser as a board member, a \$2 billion reduction in operations costs, and a line of 6-passenger fwd cars, the Aries and Reliant K-cars, added to its product lineup. The K-cars had, and still have, edges that the competition can't answer, like 6-passenger capacity against the 5-seater configuration of the GM X-cars and 4-seater Ford Escorts and Lynxes, and a 6-seat station wagon body style. The Kcars brought with them a brand-newhomegrown 2.2-liter transverse 4-cylinder engine, standard three-box coupe and sedan body designs, and 25/40 EPA economy numbers. In their first year on the mar-





1982-1/2: Chrysler LeBaron/Dodge 400 convertibles



1982-1/2: Chrysler Town & Country wagon



1982: Chrysler LeBaron/Dodge 400 luxury K-cars



1982-1/2: Mitsubishi Colt/Champ 5-doors



1982-1/2: Dodge Rampage FWD pickup

#### Strictly speaking, Chrysler has arrived at 100% fwd in the U.S.

ket, Aries and Reliant each sold more than twice as many cars as did their original Lcar counterparts in their first year-over 317,000 units. The 1981 L-car family sold 144,000 units, the sporty variants 102,000, and the Mitsubishi imports a little more than 82,000. The total Chrysler fwd fleet, eight nameplates in four lines, sold over 485,000 units in 1981-a 47% increase in a vear's time, attributable directly to the largest cars in the line, the 6-passenger Aries and Reliant. At the end of 1981, fully 74% of Chrysler's passenger car sales were front-drives. With plenty of capacity to build its own 2.2-liter engines, in 1981 the company also brought a measure of high performance to the front-drive domestic arena with the Dodge Charger 2.2: an Lcar platform with a K-car engine, lowered gear ratios, and a barely legal, free-breathing exhaust system. A clever marketing move through parts-bin engineering that remains unanswered by the competition.

For the current model year, Chrysler accelerates its fwd barrage with six new products, two thirds of them domestically produced. At the beginning of the model year, the corporation introduced its dressed-up K-cars, the hard-nose Chrysler Le Baron 4-door sedan with formal roofline and vinyl covering, and the soft-nose Dodge 400 luxury 2-door, each with higher interior and exterior trim levels than the basic Aries and Reliant K-cars offer. At that time, C-P dealers were also given a TC3 Turismo, a Plymouth version of the Dodge Charger 2.2 with exactly the same drivetrain, but with quieter, more conservative exterior cosmetics. Then, at midyear, the barrage ensued with the introduction of the Chrysler LeBaron and Dodge 400 convertibles, the Chrysler Town & Country luxury woodie front-drive station wagon, and the Dodge Rampage, a front-drive pickup sport truck based on the Dodge 024 sport hatchback using the same powertrain as the Charger 2.2. The convertibles, the woodie wagon, and the truck are three more lines for which the other domestic manufacturers have no competition. The LeBaron convertible has the distinction of being the highest-priced, lowest-volume car of all domestic front-drives, with only 13,000 units planned, at a starting price just under \$14,000. The last new product in the 19821/2 lineup is a pair of Dodge Colt and Plymouth Champ 4-door front-drives, with two additional doors and slightly more than 3 in. of increased rear seat leg room. These are the first two new Mitsubishi products to be brought in under the terms of an agreement between the Japanese company and Chrysler that will allow independent Mitsubishi dealerships to operate in the U.S., and bring an increase in cooperation and eventually more new product from Japan for Chrysler dealers.

With all of these additions in less than half a model year, Chrysler officials are predicting an inside sales estimate of 82% front-drive/18% rear-drive for model 1982, and under ideal conditions, an outside estimate of 87% front-drive/13% conventional.

A most salient byproduct of Chrysler's determination to get to 100% front-drive within two years is fuel economy. Not only has Chrysler led all domestic manufacturers in corporate average fuel economy in the past model year, but also takes leadership for 1982 at 26.5 mpg.

Strictly speaking, Chrysler has already arrived at the 100% fwd figure in the United States, since the Chrysler New Yorker, Plymouth Gran Fury, Dodge Diplomat, Imperial, Cordoba, and Mirada are all built north of the border in Canada. That leaves the Belvidere (Illinois), St. Louis, Newark, Delaware, and Detroit plants building the L-cars, K-cars, station wagon, truck and convertible variants. The march toward 100% front-drive production in North America continues next year, with the first of six more new products.

The future product plans for Chrysler Corporation are probably more deliberately publicized, and therefore widely known, than those of any other American manufacturer. Model year 1983 will see the first stretch versions of the K platform, currently coded E-cars, to replace the 1982 reardrive New Yorker, Gran Fury, and Diplomat, using the 2.2 Chrysler and 2.6-liter Mitsubishi engines for power. Next year, too, Chrysler's home-built 5-speed manual transaxle will become optional in most of the basic K-car and L-car models. Then around 19831/2, the front-drive sports car (code-named G24) should appear, with a larger displacement version of the 2.2. 5-speed, fuel injection and phased-in turbocharging. The following year, the last three remaining Canadian-built rear-drives—Cordoba, Mirada, and Imperial—will be downsized and converted to front-drive, and the Windsor, Ontario, plant will build what promises to be the U.S. industry's first fwd passenger/cargo van, the Dodge T-115. And in 1985 the whole fwd cycle goes back to square one with the introduction of a brand new Omni/Horizon series.

Chrysler will be picking up new powerplants along the way as well. The corporation will rely on Peugeot for 1.6-liter gasoline engines to replace the VW four in the L-cars, and 1.9-liter Peugeot diesels for a variety of applications, as well as the Mitsubishi 2.6 silent-shaft four and variations of its own 2.2-liter Trans-4. The slant-six engine will be dieselized in both 4- and 6-cylinder sizes, and turbocharged for truck/van applications; Chrysler expects to put a new domestically designed and built 4-speed automatic transaxle behind some of these engines as the market and the competition force higher and higher fuel economy numbers.

Regardless of the fortunes of Chrysler Corporation over the coming years, its accomplishments in downsizing and in frontdrive conversions over the span of five brutally stormy years can't be considered anything other than a succession of modern industrial miracles. In five seasons of defensive combat, Chrysler has gone from 0 to 85% front-wheel-drive, and from being a backmarker to becoming industry leader in the fuel-economy war. When the 20th century history of American industry is chronicled someday, whether or not Chrysler continues as we know it today, it will be deserving of a chapter on its great adventures between 1978 and 1985. And maybe they can get Lee Iacocca to write it.

Introduction Date	Car	1978	1979	1980	1981	1982 (Oct. 1-31 1981)
Jan. 1978	Horizon Omni	90,398 66,851	91,413 75,150	77,372 61,379	83,950 61,018	4,736 3,626
Oct. 1978	TC3 024		51,313 45,068	57,434 49,329	52,959 50,129	3,290 4,098
Oct. 1978	Champ Colt		21,747 26,836	38,941 44,991	41,300 41,288	2,771 2,846
Oct. 1980	Reliant Aries			-	180,080 137,066	18,766 13,571
Oct. 1981	LeBaron 400					1,672 528
Totals		157,249	311,527	329,446	485,790	53,704