

1979

OPEL KADETT D

MOTHER TERESA RECEIVES THE NOBEL PEACE PRIZE. CANADIANS SCOTT ABBOTT AND CHRIS HANEY DEVELOP THE BOARD GAME "TRIVIAL PURSUIT." SHIITE RELIGIOUS LEADER AYATOLLAH KHOMEINI RETURNS TO IRAN AFTER 15 YEARS IN EXILE. KIMI RÄIKKONEN, FORMULA 1 WORLD CHAMPION IN 2007, IS BORN. THE US SPACE PROBE "VOYAGER I" GETS TO WITHIN 278,000 KM OF JUPITER. THE "CAP ANAMUR" RESCUE SHIP PICKS UP THE FIRST VIETNAMESE REFUGEES. OPEL LAUNCHES THE KADETT D.

05-001
NEW LAYOUT: THE KADETT WAS
OPEL'S FIRST EVER FRONT-WHEEL
DRIVE MODEL

MODEL GENERATION – FACTS AND FIGURES

SERIES	OPEL KADETT D
PRODUCTION PERIOD	1979–1984
NUMBER	2.1 MILLION
BODY VARIANTS	+ THREE- AND FIVE-DOOR FASTBACK + TWO- AND FOUR-DOOR FASTBACK WITH DECK LID + THREE- AND FIVE-DOOR GTE + THREE- AND FIVE-DOOR SR + THREE- AND FIVE-DOOR STATION WAGON + THREE-DOOR VAN
ENGINES	GASOLINE: 1.2L/53 HP, 1.2L/54 HP, 1.2L/60 HP, 1.3L/60 HP, 1.3L/75 HP, 1.8L/115 HP DIESEL: 1.6L/54 HP
SPECIAL CHARACTERISTICS	FIRST OPEL MODEL WITH FRONT-WHEEL DRIVE. FROM 1980 INTRODUCTION OF “ONS KADETT CUP” FOR 1.3 S MODELS

NEW POWERTRAIN LAYOUT

WITH ITS FRONT-WHEEL DRIVE AND THE NEW OHC ENGINES, THE KADETT D REJUVENATED THE COMPACT CLASS AT OPEL. FROM 1979 TO 1984, A TOTAL OF 2.1 MILLION FAST-BACK AND STATION WAGON MODELS OF THIS SERIES WERE PRODUCED.

Visually, the Kadett D was a soft revolution. Technically, it was a different story. At the 1979 IAA, Opel's first front-wheel drive model debuted as the modern-looking Kadett D. The packaging was truly convincing. Although the newcomer was 126 mm shorter than its predecessor at 3,998 mm, it sported a longer interior and offered significantly more space than many of its rivals.

But it was not only the powertrain layout and the chassis with a torsion-beam axle at the rear that broke with tradition: The Kadett was given a new 1.3-liter OHC engine that generated 60 or 75 hp. The revolution continued with the body variants. In addition to the spacious station wagon with a load volume of up to 1,425 liters, Opel offered only fastback versions. The range of engines grew successively: In spring 1980, the 1.2 S with 60 hp was added to the list of options, and in August 1981, the 90 hp 1.6 S joined the new engine family. The swirl-chamber diesel unit introduced by Opel in 1982 with the same capacity was also based on this gasoline engine. That 1.6 D offered 54 hp.

Power-hungry Kadett drivers needed to be patient a little longer. The SR versions, which were only available as three-door models, made a sporty impression with their spoilers, swish exterior mirrors, black foil on the sills and Recaro seats. Under the hood they initially had the familiar 1.3 S and 1.6 S engines with 75 and 90 hp respectively.

But in January 1983 things changed: “As the youngest offshoot of the Opel family, the Kadett GTE is a member of that happy generation of cars that accelerates like a bullet, sticks to the road like bubblegum at high noon and signals joie de vivre,” gushed Jürgen Reinke in “Start” magazine. The GTE had a top speed of 187 km/h and was equipped with a 1.8-liter four-cylinder engine that developed 115 hp. Other technical modifications included a tighter and lower chassis, new steering dampers and ventilated disk brakes at the front.

05-002
YOUTHFUL: THE KADETT SR COMBINED A SPORTY LOOK WITH MODERN 75 AND 90 HP OHC ENGINES



05-003
LOADS OF SPACE: THERE WAS ROOM FOR MORE THAN JUST A PICNIC BASKET IN THE TRUNK OF THE KADETT HATCHBACK

05-005
SUBTLE DIFFERENCE: THE KADETT D WAS AVAILABLE WITH A TRUNK LID (LEFT) AND A LARGE TAILGATE

05-006
MODERN TIMES: DASHBOARD AND SEAT FABRICS WERE HARMONIZED

05-007
BAGS OF ROOM: THE TRUNK OF THE THREE AND FIVE-DOOR KADETT CARAVAN COULD ACCOMMODATE UP TO 1,425 LITERS OF BAGGAGE

05-004
SPORTSVIEW: THE KADETT GTE WITH 115 HP WAS ADDED TO THE RANGE IN 1983

MILESTONE
IN THE UK, WHERE THE KADETT D WAS LAUNCHED IN SUMMER 1982, THE CAR WAS NAMED THE VAUXHALL ASTRA, ANTICIPATING THE NAME OF LATER MODELS.



05-008
NEW KIDS ON THE BLOCK: TWO HATCHBACKS AND THE CARAVAN STATION WAGON MADE UP THE KADETT D FAMILY

05-010
FRESH INTERIOR DESIGN: FRONT-WHEEL DRIVE AND TRANSVERSE ENGINE ALLOWED A COMPLETELY NEW PACKAGING

05-011
WILD AT HEART: THE KADETT GTE HAD A 1.8-LITER FUEL-INJECTION ENGINE AND 115 HP

05-009
GAMEKEEPER: THE LIMITED EDITION "PIRSCH" (PROWL) WAS IN ITS ELEMENT IN THE COUNTRY

THE MOST IMPORTANT INNOVATIONS

NEW POWERFUL ENGINES WITH LOW FUEL CONSUMPTION FEATURING AN OVERHEAD CAMSHAFT AND MAINTENANCE-FRIENDLY DESIGN WERE JUST SOME OF THE TECHNICAL HIGHLIGHTS OF THIS FRONT WHEEL DRIVE MODEL.

FRONT-WHEEL DRIVE

"The driving performance of the new Opel felt so balanced from the outset that you would think the engineers in Rüsselsheim had been doing nothing but work on front wheel drive cars for years," announced "auto motor und sport" after the launch of the Kadett D, praising the new powertrain layout. Powered front wheels and transversally installed engines – Opel has remained true to this recipe for success in the compact class ever since.

BODY VERSIONS

Unlike its predecessors, the Kadett D was not available as a sedan with a separate trunk. To keep notchback fans interested, Opel offered, as an alternative to its fast-back Kadett with a large rear hatch, a second version with a separately opening trunk lid, recognizable from the external hinges.

GASOLINE ENGINE

From the very beginning, the Kadett D was available with a completely new 1.3-liter engine that sported a light alloy cross-flow cylinder head and overhead camshaft. The unit was available in two versions with 60 hp in the Kadett 1.3 N and 75 hp in the 1.3 S. The letters used in the model names indicated which type of fuel the Kadett needed. The lower powered unit had lower compression and got by with regular-grade gasoline ("normal" in German).

DIESEL ENGINE

The newly developed diesel engine was based on the gasoline engine of the same capacity. Common constructional characteristics were the light alloy cylinder head and the overhead camshaft driven by a toothed belt. The 54 hp 1.6 D was the first European diesel car to have hydraulic valve-clearance compensation.

NICHE MODELS

As an innovative marketing concept, Opel targeted special groups with special models. In January 1982, for instance, Opel took aim at rangers and hunters with its limited "Pirsch" (Prowl) edition. This Kadett was equipped with massive-bar mud and snow tires, limited slip differential and underbody protection. With the shortened front apron and a mechanical ride-height control system at the rear, the ground clearance was 15 cm. Other examples included special editions like the Kadett J (a particularly inexpensive entry-level model, available from the end of 1982) and the Kadett Caravan developed for disabled drivers (from January 1983).

INJECTION

While its more pedestrian brothers used carburetors for preparing the fuel mixture, the top GTE model boasted the Bosch LE-Jetronic injection system. One new feature was the fuel cut-off while coasting, in which consumption was reduced by the injection valves stopping the fuel supply. The system incorporated parameters such as engine temperature, engine speed, throttle position and accelerator pedal position.

SERVICE

In July 1982, Opel extended the service intervals from 10,000 to 15,000 kilometers. The service-friendly design of the Kadett also helped save money by incorporating maintenance-free components such as the automatic compensation of the valve play with hydraulic valve tappets (all OHC engines) and a breakerless transistor ignition system. The 1.6 S engine featured the latter system from the very beginning, and it was later built into the 1.3 S. A clutch disk could be replaced in 65 minutes without taking out the engine and, thanks to a new cylinder head gasket, the service after the first 1,000 km became superfluous.



THE DREAM OF SPACE

PASSENGERS BENEFITED FROM THE NEW POWERTRAIN LAYOUT OF THE KADETT D. NOT ONLY DID THEY GAIN MORE SPACE, SO DID THEIR LUGGAGE.

“The decision to go for a front-wheel drive and transverse installation of the engine was solely a question of getting the largest possible interior with the smallest possible dimensions,” explained Karl Bettmann, chief engineer at the time of the Kadett D. Nowadays, the word “packaging” would be used. According to the Opel definition, packaging is the optimal division of the available space between the car’s technical components, passenger cabin and luggage compartment.

The Kadett D made consistent use of the advantages of the front-wheel drive principle and transversally installed engine. It had the longest interior in its class and offered about 50 liters more trunk volume – namely a total of 402 – than its main competitors. Compared with its notchback predecessor, 24 liters more fit under the large rear flap.

Replacing the old live axle at the back with a torsion beam axle also affected space utilization. The 42-liter tank (station wagon: 50 liters) could be accommodated beneath the rear bench and, because the rear bench could be folded back, provided the versatility that has become typical of the Opel brand. McPherson struts were used on the front axle.

The aerodynamics also benefited from the transversally installed engine and flatter hood. With a drag coefficient of 0.39, the Kadett D was one of the most aerodynamic vehicles in its class, underlining yet another Opel tradition.

05-012
FLOWER POWER: THE TANK BELOW THE REAR SEAT BENCH MEANT EXTRA FLEXIBILITY – NOWADAYS A TYPICAL OPEL CHARACTERISTIC, NOT JUST FOR THE STATION WAGON



TECHNICAL DATA

BODY/CHASSIS

BODY/CHASSIS DESIGN	Monocoque all steel body
FRONT WHEEL SUSPENSION	Independent suspension with McPherson struts
FRONT WHEEL SUSPENSION/DAMPING	Coil springs, telescopic shock absorbers, stabilizer
REAR WHEEL SUSPENSION	Compound control arm rear axle
REAR WHEEL SUSPENSION/DAMPING	Mini-block springs, telescopic shock absorbers, stabilizer
STEERING, TYPE	Maintenance-free rack and pinion steering [safety steering]
WHEELS, TYPE	Steel disk wheels, 4 1/2 J x 13
TIRES, SIZE (BASE)	145 SR 13

DIMENSIONS/WEIGHT

	SEDAN 2-, 3-, 4- AND 5-DOOR AND SR, GTE	STATION WAGON 3-/5-DOOR
LENGTH/WIDTH/HEIGHT (MM)	3998 x 1636 x 1380	4207 x 1636 x 1400
WHEEL BASE (MM)	2514	2520
TRACK WIDTH FRONT/REAR (MM)	1400/1406	1400/1406
EMPTY WEIGHT (KG)	815–1000 [depending on engine]	875/885 3-door, 895/905 5-door [depending on engine]

FRIEDRICH W. “FRITZ” LOHR, BORN 1926, WAS OPEL’S HEAD OF RESEARCH AND DEVELOPMENT FOR MANY YEARS AND RESPONSIBLE FOR CHANGING ALL MIDSIZE AND COMPACT OPEL MODELS TO FRONT-WHEEL DRIVE.

“IN THE INTERNAL BATTLE FOR FRONT-WHEEL DRIVE, I SAID ONE DAY THAT I WOULD LIKE TO SEE TEN PEOPLE WHO CAN DRIVE WELL COME THE NEXT MORNING TO THE PROVING GROUND IN DUDENHOFEN. THERE, I MADE THEM DO A STANDING-START TEST ON THE 30% GRADIENT WITH FRONT- AND REAR-WHEEL DRIVE. THAT PUT AN END TO THE QUESTION. THE GOOD ONES MADE IT WITH BOTH CONCEPTS, THE BAD ONES WITH NEITHER OF THEM. FROM THEN ON FWD STOOD ONLY FOR ‘FRITZ WILL DAS’ (‘FRITZ WANTS THAT’)”.

