Diesel

Mercedes-Benz introduced the world's first diesel passenger car, the 260D, 78 years ago, and since then has proved a leader in the field, with a stream of innovations up to the present day. In this special section, we look three key models from different eras, beginning with the 170D, the model that brought oil-burning cars to the mainstream market in the early 1950s, Richard Truesdell tracking down a rare survivor, a 170Da from the last year of production, 1952



To follow...

30

Page 38 300D Europe's first executive diesel car, it blazed a trail

Page 44 E250 Diesel A favourite mid-sized diesel for familes and taxi drivers

isplayed on the Mercedes-Benź stand at the 1936 International Motor and Motorcycle Show in Berlin, among legendary luxury cars such as the 540K, was a car positioned to appeal to upper middle class, white collar Germans – the all new W136-series $\operatorname{Type} 170.$ It was, then, a thoroughly modern four-door saloon, its body a compact two-box design. You can think of it as the E-Class of its era.

Nine years later, following World War Two, with most of Germany's industrial infrastructure in ruins, and the country divided into four Zones of Occupation, its reconstruction began. The factories of many German car manufacturers, such as BMW, were located in the Soviet zone, and their tools and machinery had been shipped eastwards to the USSR, taken as war reparations.

While most of Daimler-Benz's facilities lay in the Western zone, primarily in the American sector, they were largely heaps of rubble. But the factory and, more importantly, the large presses used to produce the W136 Type 170 Series, were intact. This relative good fortune cannot be underestimated, because the resumption of 170 production would be the foundation of Daimler-Benz's recovery, and would even help kickstart West Germany's noted 'Economic Miracle' of the 1950s.

Production of the 170-series resumed in May 1946 in Stuttgart-Sindelfingen, output consisting of commercial vehicles - pickup trucks, cargo vans and ambulances - for the occupation authorities by the end of the year. But resumption of 170 passenger car production was never far from the thoughts of Daimler-Benz managers and engineers, with a 170V prototype constructed in February 1946, based on the pre-war design of Walter Hacker, and engineered for production by Rudolf Uhlenhaut and Max Sailer.



"Mercedes-Benz had introduced the world's first production diesel car, the six-cylinder 260D, in 1936, but for the post-war market a more miserly diesel was needed"

www.classicmercedesmagazine.com



Their design brief was a car for the middle class, with an economical engine and a spacious interior to accommodate a family of four and their luggage. The first post-war models were powered by the M136 1.7-litre petrol engine, which, like the car itself, was a pre-war design. It produced 37bhp, enough for a top speed of 67mph.

But this was just the start of a production programme that would spin off many different models – the most significant being a diesel engined variant, the 170D. Mercedes-Benz had introduced the world's first production diesel car, the

"The new diesel produced the same 37bhp as the petrol unit, but offered much better fuel economy – 46mpg compared to the pre-war 260D's 26mpg" 2.5-litre 260D, in 1936 (see page 35), but for the post-war market a more miserly diesel was needed. Julius Witzky, the former head of design for Daimler-Benz marine engines, transferred his expertise to small diesels, and the result was the OM636, the existing petrol engine with a new cylinder head. The new diesel produced the same 37bhp as the petrol powered unit, but offered much better fuel economy – a claimed 46mpg, compared to the pre-war 260D's 26mpg, and which until quite recently would still have been an impressive figure. And as things would turn out, the OM636 appeared to be virtually indestructible, setting a standard for all Mercedes-Benz diesels to this day.

The 170D was introduced to an eager public in May 1949, just four years after the end of the war, and would be an unqualified success. The engine was an especially attractive proposition, given that petrol quality in this period was often poor. Taxi companies quickly adopted the 170D as their favoured work vehicle.

In January 1950 an improved 170V appeared, and its advances were applied to the 170D, which then became the 170Da (although the '170D' badging was retained). This included a slight increase in cylinder bore, which raised capacity by 100cc and output to 40bhp. Other changes included a widened track, uprated brakes and the adoption

DIESEL SPECIAL 170Da

Specifications



Mercedes-Benz 170Da (W136) Engine OM636 1,767cc 4-cyl Powe 40bhp@3,200rpm Torque 75lb ft@2,000rpm Transmission 4-speed manual Weight 1,245kg 0-62mph 50sec **Top Speed** 63mph Fuel consumption 46.3mpg Years produced 1950-1952 All figures from Mercedes-Benz

ABOVE LEFT

The 170Da's smart cabin is accessed via rearhinged 'suicide' doors. LEFT

An enormous steering wheel, with a chromed ring horn push, dominat BELOW

Encinitas, California, has been the Mercedes' home for most of its long life.









of telescopic suspension dampers, while the seats were enlarged and improved, the air vents were equipped with covers to prevent draughts, and access to the boot was now from the outside. In 1952, the 170Da's final year of production, the 170s were again updated, receiving a further widened track, one-piece bumpers and a larger windscreen, while the bonnet louvres were now horizontally rather than diagonally aligned.

Unsurprisingly, 64 years on from its build, not much is

ABOVE All diesels had a`170D' badge on the grille but the last cars were the 170Da. ABOVE LEFT Semaphore arm indicators are mounted between the bonnet and the front door.

known of this 170Da's first owner, except that he or she lived near Julian, California, a tourist town best known for its apple pies. In 1965 Walter and Theresa Worsch of the coastal town of Encinitas, north of San Diego, bought the car for \$300 (about £1,400 in today's money).

Walter operated an independent German car repair shop in Encinitas, and for many years the 170Da was his daily driver. In a 1987 article that appeared in the San Diego Union newspaper, Theresa had this to say: "We drove the \Rightarrow





"Driving along California's Pacific Coast Highway, we were astounded at how little of the expected diesel clatter made its way into the passenger compartment"





ABOVE

⇒ kids to school in it, and my husband drove it to work. But we always said one day, *one day*, we would restore it to what it looked like when it was new." The restoration did happen, and took three years to complete, with Walter labouring about an hour a day on the Mercedes after work.

Sadly, Walter died in 2004, which brings us to the car's third and current owners, Charles and Shelly Sougias, also of Encinitas, California. Charlie, who established Charlie's Foreign Car Service in 1978, another independent shop specialising in the repair of German marques, bought the car from Walter's estate. "It was in impeccable condition when I first saw it," says Charlie. "I wanted to buy and maintain it in its perfect condition. It has been driven about 100 miles since its restoration."

When asked what is his favourite story about the Mercedes,

Charlie had this to say: "I was driving the car to a show and my family was following in our 190C, and they watched as an old van nearly side-swiped the 170Da. All they could do was watch and hope that it would miss. Of course, they told me 50 miles later, when I arrived at the show. I was unaware of how close a tragedy could have been."

Charlie has clearly undertaken some detailed research on the development of the OM636 diesel engine during the car's production life. "The throttle body that you see from the passenger side of the engine compartment ⇒ The 170 introduced motorists to the habit of filling up with diesel. ABOVE LEFT You couldn't ask for much more driver information than that provided here. BELOW Skinny 16-inch wheels

Skinny 16-Inch wheels have vintage compound Firestone cross ply tyres.



Discovering oil The 260D that Mercedes launched in 1936 was the original diesel car – just



In 1936 two diesel cars were unveiled in Germany: the Hanomag Rekord, and the Mercedes-Benz W138 260D. The former did not go into production for another two years, hence Mercedes was the first car maker to launch a diesel-engined passenger car.

Following tests with a 3.8-litre, six-cylinder diesel, which vibrated excessively, a four-cylinder, 2.5-litre unit, the OM138, was developed, and in September 1936 the 260D went on sale, offered in long- and short-wheelbase forms, as well as in Convertible B guise. You are, of course forgiven if you laboured under the misapprehension that drop top Mercedes diesels were a recent development.

The first models were almost exclusively six-seaters bought for use as taxis, and just a year after its launch the 260D was updated, the fuel tank moved from the engine compartment to the rear of the car and increased in capacity by five litres to 50 litres, and a smaller radiator grille and revised headlamps fitted. In early 1938 there were further changes, including an overdrive gearbox to replace the original unit with its direct top gear, improved rear suspension, and more robust bumpers. Just under 2,000 were made before the war ended production in 1940.





ABOVE Engine was a 2.5-litre four-cylinder delivering 44bhp and 26mpg.

A 260D kitted out for taxi drivers, who were its biggest customers.

LEF1





on after shut-off."

improving driveability.



"Today, you're much more likely to see a 300SL Gullwing or Roadster offered for sale than any of the 170-series variants"

thumbs ups, and a number of very positive comments.

When asked what is the car's best attribute, Charlie had this to say: "Its history. This vehicle is one of the reasons Mercedes-Benz is a viable company today – because of post-war manufacturing and sales of this particular model."

But while the 170 series was built in large numbers, and thus laying the foundation for the success of diesel powered Mercedes-Benzes that followed, very few have survived the ravages of time. Today, you are much more likely to see a 300SL Gullwing or Roadster offered for sale than any of the 170-series variants. The reason is quite simple – they are





almost as costly to restore, and in most instances when the restoration is complete, the owner will end up financially upside down.

That's why it is so important that enthusiast owners like Charlie and Shelly Sougias take up the responsibility of preserving these significant cars.

Maybe Walter looks down on his 170Da every day (and makes sure it doesn't get side-swiped), knowing that his three years of work restoring the car is fully appreciated by its current caretakers.

ABOVE Later OM636s modified to cure a running on problem that affected early engines

ABOVE RIGHT Then, as now, Bosch made the fuel injection hardware for Mercedes' road cars.

RIGHT Completed 170s at the Sindelfingen factory in Germany, about 1947

ABOVE RIGHT The 170-series saloon was a model pitched at Germany's middle class Driving around Encinitas, Dalong California's famous Pacific Coast Highway, we were astounded at how little of the expected diesel clatter made its way into the passenger compartment. No one would mistake this 170Da's soundtrack for the sophisticated quiet found in a contemporary E-Class turbodiesel, but nonetheless its refinement was a surprise for any car more than 60 years old, especially one that is diesel powered. And of course at every stop light and stop sign, the

car generated admiring glances,

⇒ was added to later cars," he points out. "This addressed

the problem with the earlier models of the engine running

He continues: "It wasn't possible fully to control engine

speed, because the engine was burning its own oil. The

"On the early cars you literally couldn't turn the car

off without throwing a rag against the air intake. You had

throttle body addressed this unintended issue. The

throttle body also served to dampen the air intake,

to take the air intake hose off, and stuff the rag

inside it, starving the engine of air."