OPEL MANTA



Opel.1862~1978

Advanced Engineering

Adam Opel AG was founded in Russelsheim am Main, Germany, in 1862, several decades before the internal combustion engine was invented. Their first product was sewing machines, which were so successful that the company became the largest producers in Europe. One million machines were produced between 1862 and 1911 when they were discontinued.



1924 Laubfrosch The company next achieved fame as one of the world's

largest producers of bicycles, which it began manufacturing in 1887, and during the 50 years of bicycle production Opel bicycles were purchased by over 2,500,000 customers. Opel's first vehicles, the single cylinder Opel Lutzman, was built in 1898, and from this modest beginning in the industry the company progressed rapidly, developing more

1898 Patent Motorcar "System Lutzmann"

powerful engines, more comfortable, smarter looking body designs and a wider selection of models. Output increased steadily, especially after 1924 when Opel became the first German vehicle manufacturer to adopt mass production methods on its assembly lines. The installation of modern machinery and a high level of customer acceptance helped Opel, in that year, to produce its 100,000th vehicle.

In 1929 Adam Opel became part of General Motors Corporation and began producing integrated steel bodies, a six cylinder engine, and introduced a bigger more powerful luxury model.



1935 Olympia

The one millionth car came off the production lines in 1940, the second millionth followed in 1956.

In 1962 a new small car was introduced from new production facilities at Bochum. With the help of this immediately successful model Opel produced their six millionth car in 1966.



1953 Olympia Rekord

Four years later, the now famous Manta and Ascona models were added to the Opel range. Production capacity was increased at Bochum with an additional plant for engine production and an ultra modern assembly plant was opened in Antwerp to further increase production on the Kadett, Ascona and Manta model lines.

Today the company employs some 58,000 people at its various plants throughout Europe and its annual production of cars now exceeds 900,000 units, almost half of which are exported to countries throughout the world.

It takes years to bring a new car design from the planning stage to volume production. Such a complex task involves the highest level of team work between the more than 3,000 designers, engineers and technicians who work in Opel's styling, engineering and production departments.

The newest and most advanced techniques are exploited to the full. For example, the computer analysis of body shell structure, rigidity, sheet metal thickness, and impact absorbtion for "crushable" safety zones. The result is increased safety with reduced weight to the benefit of running costs.



This advanced engineering is applied to every stage in the development of a new model right up to production. There are innumerable individual tests and long term or destruction test programmes in which vital components such as the steering and brakes are subjected to loads and stresses which are far higher than would ever be encountered normally. These tests are repeated millions of times over.

Hinges, locks and doors are endlessly pulled open and slammed shut until any weak points in the design come to light. Even apparently unimportant items





swung up and down thousands of times, proof enough that Opel really believe that a car is only as reliable as the sum of its individual component parts. It's just not possible to sum up the true value of an Opel in terms of driving pleasure and reliability alone. Every Opel is the result of a composite blend of the two most important resources in industry today; the quest for greater knowledge that is the inspiration of highly qualified designers and engineers and that advanced

technology that is needed to turn their dreams into reality.

It is your guarantee that every Opel is carefully developed — fully coordinated design — as if millions of Opels giving loyal service throughout Europe were not proof enough of Opel's real value.

Proven value

Opel owners expect loyal service and a freedom from faults in their cars, combined with economy and a pleasant, fast and safe journey.

At Opel's extensive proving ground, every possible everyday driving situation can be simulated, either on the road or on far more extreme surfaces than the average motorist would ever encounter.

There are gravel tracks, course and fine cobble stones, dust baths, sand and mud patches that are more than a match for the

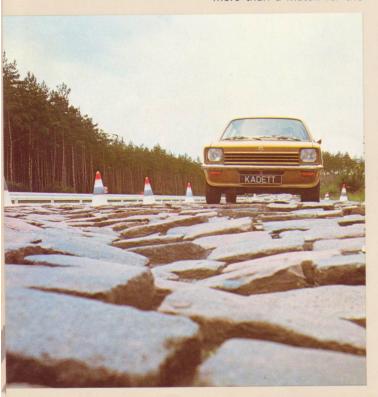
worst African desert or jungle road.

There are specially laid out "killer" routes with the most savage twists and turns. They include road surfaces capable of compressing the working life of a car into a few weeks of concentrated torture.

There are realistic Alpine gradients and hairpin bends where cars are expected to start on gradients of up to 1 in 3. There are special test tracks to measure braking distances, handling under heavy braking and directional stability. A variety of

model's production life. And as if the facilities at the proving ground weren't enough, prototype and pre-production components and systems are further tested under the most rigorous conditions to be found. Brakes are tested on the highest alpine passes.

Suspension and roadholding are checked and rechecked on the rugged Hockenheim and Nurbergring race circuits. Performance in high temperatures is put to the test in Arizona and the low temperature



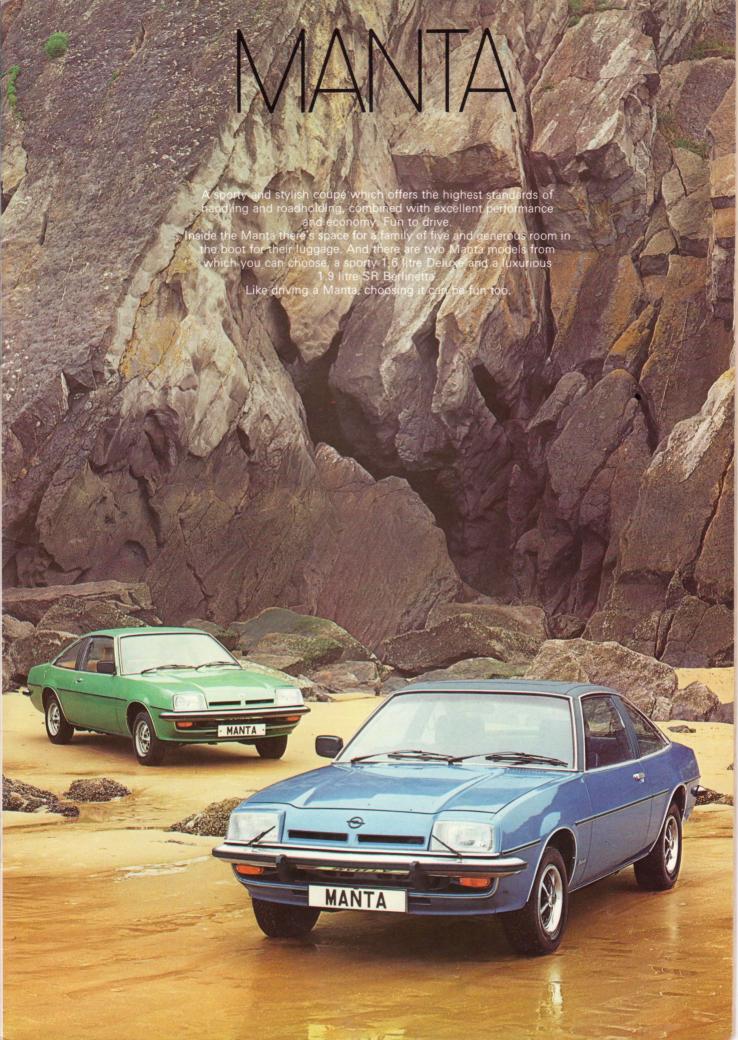


road surfacing materials show up noise or vibration in the body. There is a long handling course and surfaces with basalt blocks and its own "rain" system to collect information on roadholding and grip in a variety of climatic conditions.

Testing starts at the prototype stage and continues right to the end of that checks take place in Northern Lapland beyond the Arctic circle.

This extensive testing both inside and outside the proving ground facilities comthe most bined with modern production and quality control techniques at the plants at Russelsheim, Bochum and Antwerp and the automatic transmission production facility at Strasbourg ensure that you as a prospective Opel owner will get the same loyal reliable and economical service that is experienced by millions of Opel owners throughout Europe.





Manta: elegant & sporty



The Opel Manta — a real solution to the classic dilemma. You've always loved driving and sporty cars but you've a wife and family to think about. You want individual style and performance but the family need space. Look at the Manta Coupe. Opel have the solution. Individual character and high performance combined with space and comfort make it ideal for your needs.

Elegant styling which features a purity of line that makes it outstanding wherever it goes. And its styling is functional too. Its aerodynamic shape was developed in the wind tunnel resulting in excellent economy, very low wind noise at cruising speeds and good high speed stability. Curved, frameless side windows further reduce wind noise and at the same time improve interior space. Glass area is generous with a steeply raked windshield and long sloping rear window, roof pillars are slim providing excellent all round visibility.

The shapely nose incorporates large rectangular headlights and the wrap around bumpers have rubber inserts for added protection. Side moulding with rubber inserts not only

enhance the Manta's graceful lines but protect against minor damage in car parks. The large tail lights incorporate built-in reversing lights. Sports road wheels attest to Manta's sporty nature.

Inside the Manta you'll find everything designed to make travelling at speed a real pleasure. The seats are full foam and exceptionally comfortable, providing just the right amount of support in exactly the right places. The front seats are fully reclinable and are fitted with adjustable headrests giving totally relaxed motoring for the front seat passengers and for you, the driver, a very comfortable driving position. And there's generous space in the rear seats for both children and adults without the cramped



feeling normally associated with coupe models. All the instruments and controls are in just the right place for easy viewing and location and it's quiet too, with engine and road noise carefully reduced by both detailed design and insu-

lation.

But most of this you can see. Much of what makes Manta such an outstanding car is hidden in the car's basic engineering. As soon as you get into the driver's seat it feels right with everything just where you need it. On the road the engine responds quickly to the pressure of your foot on the accelerator, and the gear lever is smooth to operate. It is the superbly engineered chassis that makes Manta such a joy to drive. Not only has the suspension been carefully balanced and tuned for maximum roadholding and ride comfort but also to provide completely predictable and responsive handling. The light rack and pinion steering gives precise control under all driving conditions.

To keep you completely comfortable there is a draught-free heating and ventilation system which can be adjusted to exactly the temperature you want. The fresh air heater has a two speed rotary booster. Facia panel vents improve airflow through the interior keeping side windows mist free at all times.



The Manta de-luxe







The Manta Deluxe is well equipped to provide you and your family with enjoyable all year round motoring.

The reclinable front seats are specially contoured to give maximum support in fast cornering. Front seat headrests are fully adjustable for both height and angle, an important additional feature for both safety and comfort. The wide rear seat offers comfort and space for adults as well as children. The full foam seats are upholstered in hard wearing check cloth trim and colour matched woven carpets cover the floor from wall to wall.

A full length centre console provides plenty of space for oddments. The heated rear window gives clear rear vision even on the coldest days. Two speed electric windshield wipers are supplemented by an inter-

mittent wipe which is ideal on those damp foggy days and the windshield washers with wiper contact operate at the touch of a button at the end of the combination switch which also controls the turn signals, headlight main beam, headlight flasher and windshield wipers.

The large round instruments are grouped immediately in front of the driver and are protected by a non-reflecting cover. All the switches and controls are easy to reach and can be readily identified at night. Finishing touches include a quartz clock, a cigarette lighter, a dipping rear view mirror, a vanity mirror on the passenger sun visor and opening rear quarter windows for improved venti-



lation during hot weather. Comfort and convenience for the whole family that makes the longest journeys seem shorter.

But it is on the road where Manta really excels. The carefully balanced and tuned suspension and tubeless radial ply tyres on 5" rimmed sports road wheels create confidence when driving fast over winding roads and ensures comfort even over rough road surfaces. Stable roadholding, quick and easy handling, roll-free cornering, all combine to give you, the driver, the enjoyment you want and your passengers the comfort they deserve.

The 1.6 litre 'S' 75 DIN hp engine of this Deluxe model is both economical and powerful. Punchy acceleration for town driving, and effortless cruising on the open road makes the Manta a fun car for the whole family.



The Manta boot is a big surprise for this type of car and will hold an enormous amount of luggage, or golf clubs or all manner of bulky items. Just the job for those long weekends away and even the family holiday. And should you get a

puncture, you won't have to take all the luggage out to get at the spare wheel, it is easily accessible, mounted vertically on the left-hand side.

MANTA DELUXE



Model:

1.6S 2-door Deluxe model 59

Dimensions (inches):

Overall length	176.7
Overall width	64.7
Overall height	52,4
Track front & rear	54.1
Wheelbase	99.1
Legroom front (A)	42.9
Headroom front (B)	37.2
Legroom rear (C)	29.5
Headroom rear (D)	36.6

Weights (lbs):

Kerb weight	2254
Gross vehicle weight	3027
Max. load	817
Gross weight of trailer with	
brakes	2873
Max. nose weight of trailer	100
Max. evenly distributed roof	
rack load	130

Wheels & Tyres

165 SR – 13 tubeless radials on 5J x 13 sports wheels.



The Iuxurious Manta Berlinetta



A distinctive yet subtle exterior distinguishes this most luxurious of Mantas. The small Berlinetta emblem behind the front wheel arch points to its exclusiveness. A vinyl roof cover accents its elegant styling and big rubber overriders protect it front and rear from minor parking damage.

The Berlinetta is lavishly equipped. Halogen headlights are kept clean in bad weather by a headlight wash and wipe system. The wide radial ply tyres and sports road wheels ensure sure footed progress even on the roughest roads.

But it is the interior that makes this Manta so outstanding. The soft cut pile carpeting on the floor and lower edge of the door panels is colour matched to the rest of the interior. The full foam seats and door panels are covered in soft velour upholstery and the ventilated vinvl roof lining and centre console are colour matched. The reclinable front seats are fitted with velour covered headrests and there are generous storage compartments in both the driver's and the passenger's doors.

And for the driver there is full instrumentation includ-

ing a tachometer, oil pressure gauge and voltmeter all neatly grouped behind the non-reflecting cover of the instrument panel. The three spoke sports steering wheel is a pleasure to hold, and there's plenty of power from the 1-9 litre 'S' 90 DIN hp engine to match the Berlinetta's outstanding driving characteristics.

MANTA BERLINETTA



Model:

1.9S 2-door Berlinetta model 59 SRB

Dimensions (inches):

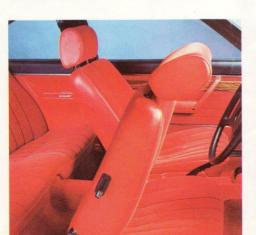
Overall length	176.7
Overall width	64.7
Overall height	52.4
Track front & rear	54.1
Wheelbase	99.1
Legroom front (A)	42.9
Headroom front (B)	37.2
Legroom rear (C)	29.5
Headroom rear (D)	36.6

Weights (lbs)

Kerb weight	2254
Gross vehicle weight	3027
Max. load	817
Gross weight of trailer with	
brakes	2873
Max. nose weight of trailer	100
Max. evenly distributed roof	
rack load	130

Wheels & Tyres

185/70 HR - 13 tubless radials on $5\frac{1}{2}J \times 13 \text{ sports wheels.}$





Manta performance

Powerful, reliable, lively and economical, these characteristics are common to both the Manta engines.

The 75 DIN hp 1.6 litre 'S' engine is fitted to the Manta Deluxe while the Berlinetta model comes with the 90 DIN hp 1.9 litre 'S' unit. Both these engines are modern oversquare units with the cam shaft mounted in the head and a five bearing crankshaft. Maximum power and torque are produced at relatively low revs giving quiet running, good economy and excellent reliability.

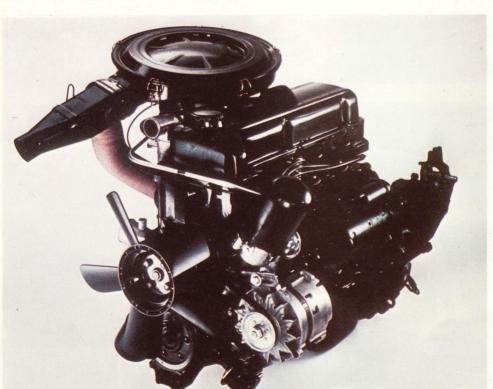
And this reliability has been

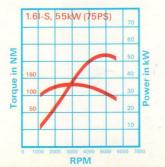
proved over millions of miles in the hands of owners all over Europe, and fitted to the famous Ascona and Kadett GT/E models it has proved successful under the arduous conditions of some of Europe's toughest competition events.

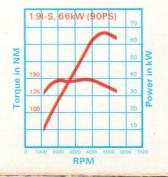
The flexibity of these units makes driving in city traffic a pleasure, their responsive acceleration gives safe and fast overtaking. Their smoothness, combined with excellent body insulation reduces noise in the Manta to a level normally found in far more expen-

sive cars.

A rugged 4 speed fully synchronised manual transmission is standard equipment on both Mantas. Its well balanced ratios are quickly and easily selected by a positive floor mounted gear lever. The famous 3 speed automatic transmission is available as an extra cost option on both models.









MANTA GENERAL DATA

Suspension:

Independent front suspension of unequal length wishbones and coil springs. Direct acting telescopic shock absorbers. Torsion bar stabilizer. Central link rear axle with progressive rate coil springs, located by twin trailing arms and lateral track bar. Vertically mounted telescopic shock absorbers, torsion bar stabilizer.

Steering

Rack and pinion, energy absorbing steering column. Turning circle 32.2 feet.

Rear axle:

Hypoid drive. Axle ratio 3.67:1.

Brakes

Dual circuit, servo-assisted, with 9.6" dia. discs at front, 9.1" dia. drums at rear. Pressure regulator in rear circuit. Mechanical handbrake to rear wheels.

Electrical Equipment:

12 volt negative earth system, incorporating 44AH battery and 45 amp alternator.

Transmission:

Diaphragm spring-type clutch, single dry plate 8.03" dia. 4-speed (all synchromesh) transmission with floormounted gearlever. Ratios: First 3.64:1, Second 2.12:1, Third 1.366:1, Fourth 1.000:1, Reverse 3.522:1. GM 3-speed automatic transmission with floor-mounted selector lever optional extra.

Engine Data		
Eligine Data	1.65	1.98
Capacity cc		
	1584	1897
Type		
	in line 4	in line 4
Bore mm		
	85.0	93.0
Stroke mm		
	69.8	69.8
BHP at RPM		
	75/5000	90/4800
Torque at RF		
	95/4200	123/3400
Compression		
	8.8:1	8.8:1
Normal fuel		
	98 oct	98 oct
	(4 star)	(4 star)

In any modern motor car there are two types of safety, built-in passive safety which minimises the possibility of injury should an accident occur, and most important, active safety, the ability to be able to drive out of a possible accident situation. However, in the final analysis, he has a lot of help from his friends, the engineers who de-

signed and built the Manta. The Manta has rack and pinion steering which is light and responsive and helps to make the Manta so positive in cornering and so easy to park. It has a servo assisted dual circuit braking system with big discs at the front and drums at the rear. Anti-dive front suspension geometry improves stability under heavy braking.

And,most important, it has a highly refined coil spring suspension system which is carefully tuned and balanced to give outstanding roadholding and a very comfortable ride. Progressive coil springs soak up the bumps. Vertically mounted shock absorbers keep the wheels on the road on even the roughest surfaces. Anti-sway bars reduce body

roll in tight corners.

Interior comfort also contributes to active safety, the shape of the front seats that can be adjusted to just the right position for driver comfort, the efficiency of the fresh air heating and ventilation system that keeps the temperature inside the car just right and the windows mist free. The heated rear window and large driver's door mirror are all important factors in reducing fatique for both driver and passenger, particularly on long journeys. And the need to minimise the possibility of injury in case of an accident is constantly in the minds of Opel engineers and in fact is a point of constant research through controlled crash testing and the careful analysis of actual accidents involving both



Opels and other makes in Germany.

Engineers cannot stop an accident happening, that's up to the driver, but they can reduce the possibility of personal injury should one occur.

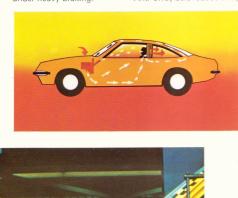
For this reason all Mantas have a rigid steel passenger compartment with impact absorbing front and rear zones. They also feature a built-in roll-over bar for added protection.

The interior features switches and controls of deformable plastic and a breakaway interior rear view mirror. The energy absorbing steering column, padded steering wheel and deeply padded facia panel are designed to protect both driver and passenger. The doors, hinges and locks are designed to resist impact. The front seats lock to pre-

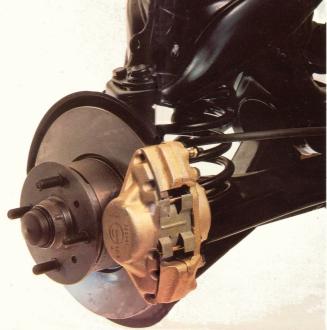
vent jack-knifing and all Mantas are fitted with inertia reel seat belts.

In short, the Manta is designed to make you as safe as possible — the rest is up to you—the driver. And with these numerous safety, comfort and convenience features, you can drive the Manta with confidence.











Manta options

special shade band for the laminated windshield.

Your dealer can cater to your in-car entertainment through a wide selection of radios and radio/cassette combination units which have been specially selected for Opel models. Mudflaps help keep the sides of the car clean and fog lights at front and rear provide far greater comfort and safety during winter

months

And with an Opel automatic transmission you automatically drive better, with both hands on the steering wheel and concentrating on the road conditions and traffic ahead. The Opel 3 speed automatic does all the gear changing for you quickly and very smoothly and the "kick-down" gives you maximum acceleration just when you need it.







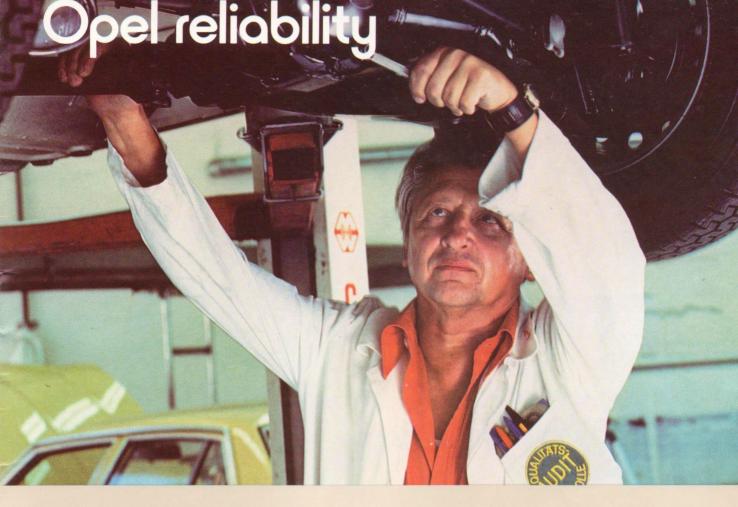
Both the Manta Deluxe and Berlinetta are already very well equipped with many items as standard that frequently cost more on other makes, but you may wish to add that touch of individuality to your Manta. There are a number of factory fitted options available and a wide range of accessories that can be fitted by your Opel dealer to meet your own special requirements.

For example, there are three elegant metallic paint colours that can be ordered at a small extra cost. A sliding steel sun roof can be built in to both models adding a new dimension to summer motoring.

For the more enthusiastic driver there is the SR chassis pack which includes uprated rear springs, front and rear shockabsorbers and a close ratio steering rack, which can be built into the Berlinetta.

And with the Berlinetta you can also order heat absorbing tinted glass with a





It isn't only the rigorous testing of the multitude of components that go into Opel products that results in the outstanding reliability which is a feature of all Opels. It also stems from the care and attention with which the cars are built.

Standard production vehicles are taken straight from the production line and are subjected to long term test programmes. At any given moment, a number of such cars are undergoing the arduous 30,000 miles road test programme and will afterwards be stripped down completely for examination. This provides the engineers with a clear picture of how closely Opel's production cars, the ones that you buy, conform to the company's own stringent quality standards. Opel not only build in reliability through constant checks on quality but also help customers to protect their cars from depreciation. Maintenance of the car's trade-in value is a moral duty, and corrosion proofing goes a long way toward achieving this.

Everything is done to make Opel models less prone to rust, and it starts at the initial design stage. Corners, folds and cavities are avoided as far as possible. Smooth non-porous weld seams, galvanised sheet reinforcement at high risk

areas, positive ventilation to dry out areas where moisture collects — these are just some of the built-in design precautions that are taken. All body sections are treated according to their individual needs before the bodyshell is assembled. It is then primer-coated by dipping and spraying, then given several special purpose all over treatments. Only when all rust prone areas have been thoroughly

protected is the multi-coat finish applied and this is then further protected by a double layer, impact-resistant underseal inside the wheel arches and a water repellent wax coating for the entire underbody.



Opel Euroservice

As a part of the General Motors organisation Opel products are sold and serviced in almost every major European country through a network of over 7,000 dealers. Here in the United Kingdom there are over

200 dealers located in almost every major city and town and these are further supported by an additional 68 service dealers. And the network is increasing in size and strength almost daily. Each of these dealers

is equipped with the most up-to-date service equipment and a selection of special tools that are designed to enable him to provide first-class service for your Opel.

General Motors Ltd. have a fully equipped Service Training Centre where specialist service training is provided for the service personnel of all UK Opel dealers, thus ensuring that your car will be maintained to the high standards set out by Opel.

Each dealer, as a condition of appointment, carries a substantial stock of Opel parts, which in turn is backed by a comprehensive parts stock carried by GM European Parts Organisation. Here, computerised stock control and close liaison with Opel in Germany ensure that every conceivable part can be quickly despatched to dealers throughout the country.







A quality product built in West Germany — backed by General Motors, the world's largest car manufacturers, and marketed in the UK through a network of Quality Dealers.

General Motors reserves the right to change specifications without notice. Every attempt has been made to ensure accuracy of this brochure and specification, but it is for guidance only, no part is intended as an offer, nor shall any statement be considered legally binding.

Customers are advised to enquire of the dealer as to whether there have been any equipment or material alterations since the date of issue of this brochure.

Opel Manta

For the Family Main who loves Driving

Your Opel dealer is

