The New VAUXHALLS

INDEX

Complete Specifications covering both models are given at the back of this catalogue on pages 18 and 19. The following index therefore refers to the general descriptions and related illustrations.

Two Fine New Vauxhalls

THE VELOX 6-CYLINDER SALOON

THE WYVERN 4-CYLINDER SALOON

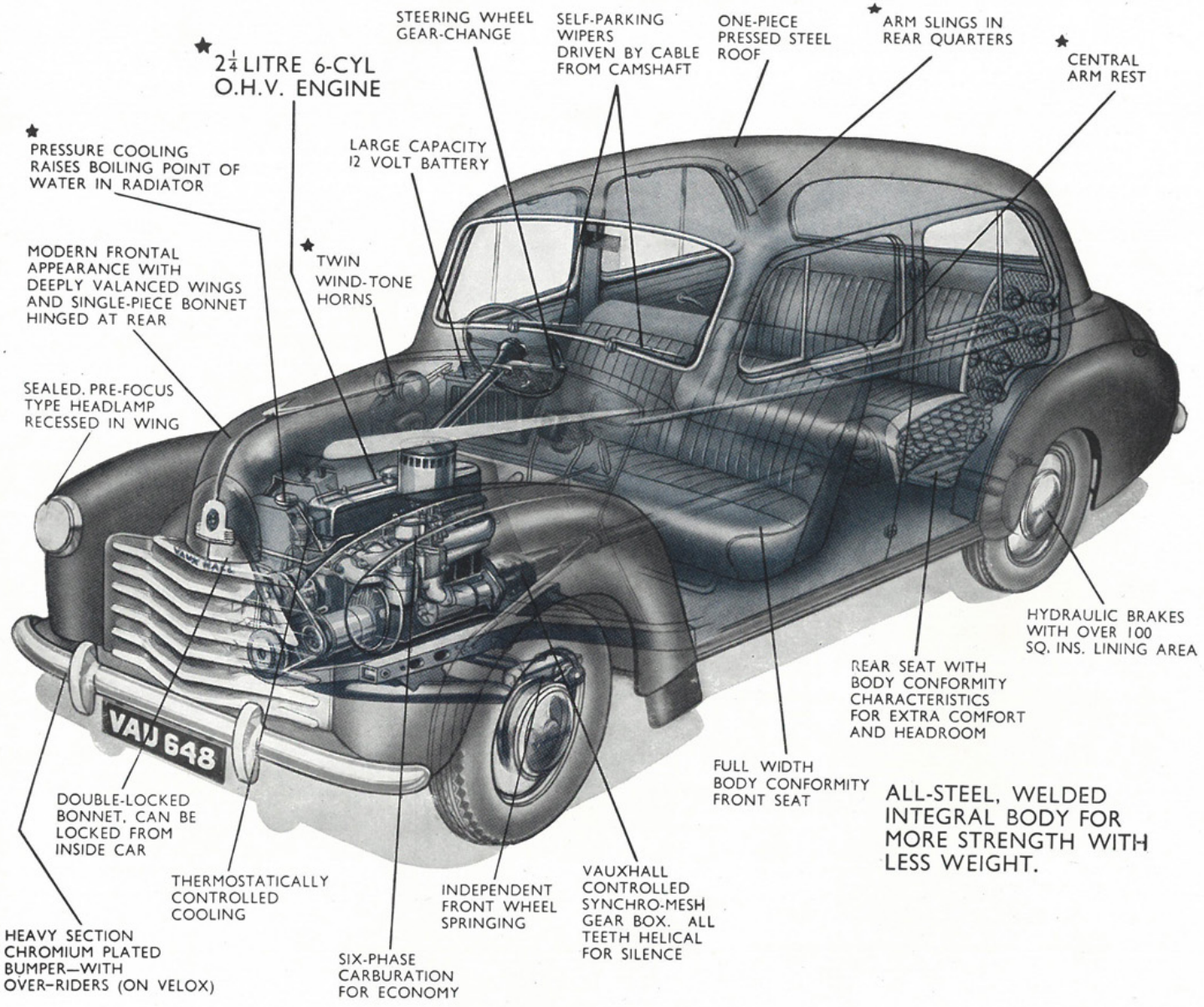
The new Vauxhall Velox and Wyvern saloons provide motoring at its best in every sense of the word. Alike in distinctive appearance and general dimensions, they have a new look from every angle . . . elegantly styled, harmoniously balanced in proportions, and as traditionally well-bred as they are modern in line and finish. Both carry, as the hall-mark of engineering leadership, the characteristic bonnet flutes of the true Vauxhall.

Outwardly, the two new models are almost identical. Each has been designed to accommodate four really outsize adult passengers and a large load of luggage. They are *full four-seater cars*, with the head, leg, elbow and *stretching* room that make for genuine comfort.

The main differences between the new models are in character of performance and degree of luxury. The 6-cylinder, 2¼ litre Velox model is designed for outstanding performance with unusual economy. It has a genuine 75 m.p.h. (120 km.p.h.) maximum speed, and yet is capable of a fuel consumption as economical as 25–28 m.p.g. (9–10 km./litre) when driven at more normal speeds.

The 4-cylinder, 1½ litre Wyvern model is designed for outstanding economy with unusual performance. With normal driving (at an average speed of 30 m.p.h.—50 km.p.h.) it is capable of from 33–35 m.p.g. (11.5–12.2 km./litre), and it offers scope for still lower fuel consumption to the owner who is prepared to drive for economy.

The Velox and the Wyvern are new cars which set new standards. The designs embody a number of new features and ingenious ideas devised to make motoring more comfortable and driving easier and safer. The Velox is the luxury model and has extra refinements in keeping with this claim; the Wyvern is the economy model, not only in running costs but in initial price. In both there is evidence of fine finish and meticulous attention to detail . . . the inherent *quality* one expects of a factory which has been building fine cars for more than forty years.



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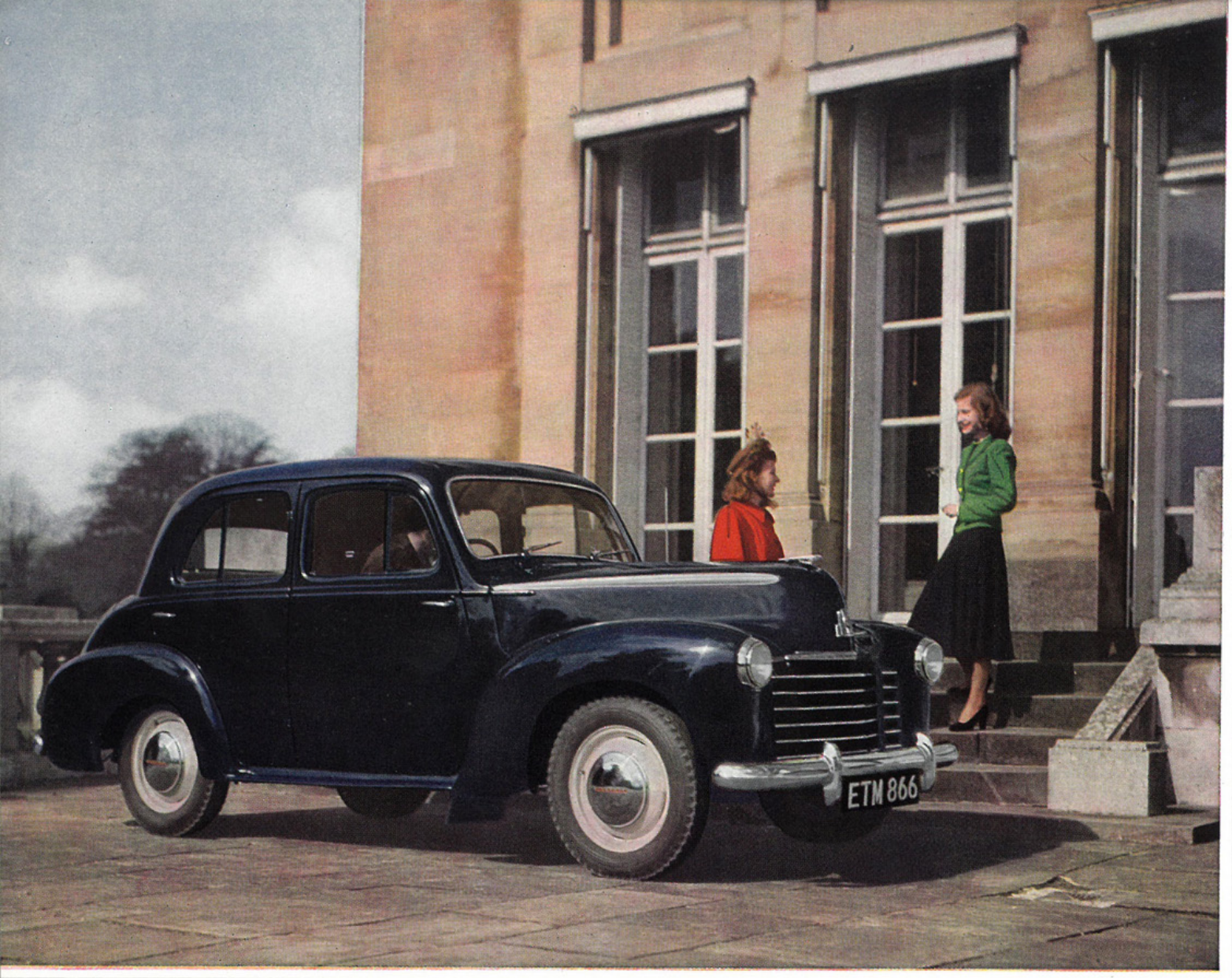
FEATURES OF THE NEW VAUXHALLS

This illustration shows some of the outstanding features of the new Vauxhall Velox 6-cylinder saloon. A similar type of illustration, but from the rear, is shown on page 20.

Features exclusive to the Velox are marked ★. All other features apply equally to the Wyvern 4-cylinder model.



This colour photograph is of the Velox 6-cylinder saloon. The Wyvern 4-cylinder model is similar in appearance except that it has different badges and hub caps, the wheels are painted to match the body colour and bumper over-riders are not fitted.

There's true distinction in the handsome frontal appearance of the new models with the graceful, rounded bonnet flanked by deeply valanced wings. The proportions are excellent with front and rear overhangs exactly right in relation to wheelbase so that the cars look long, lithe and sleek. And on the bonnet are the famous chromium flutes as a mark that they are true Vauxhalls with all that that implies.

How the New Models Compare

The colour photographs in this catalogue are of the Velox 6-cylinder saloon. The Wyvern 4-cylinder model is similar in size and appearance and differs externally only in the detail finish of the wheels, hub-caps and bumpers. The fundamental differences are under the bonnet and in the character of the performance, as the following comparison shows.

THE VELOX

2¼ LITRE 6-CYLINDER SALOON

For the motorist who covers long distances and to whom time is precious the Velox is the ideal car. It is one of the fastest cars on the road in terms of average speed or journey time from door to door. This celerity is based not so much on sheer maximum speed (it will do a genuine 75 m.p.h.—120 km.p.h.), as on fine acceleration, excellent road holding and safe, sure braking.

An especially pleasing characteristic of the Velox comes from the high axle ratio of 4.125 to 1—which permits effortless mile-a-minute cruising speeds at comfortably low engine "revs.".

The Velox, as a high performance car, has a larger clutch than the Wyvern, a larger radiator with a special *pressure* cooling system and 5.25×16 tyres.

The same system of independent front wheel springing is used on both models, but the Velox has double-acting shock absorbers at the rear to suit its high performance rôle.

It also has extra luxury features, with seats upholstered in hide, a folding central arm rest in the rear seat and arm slings in the rear quarters.

THE WYVERN

1½ LITRE 4-CYLINDER SALOON

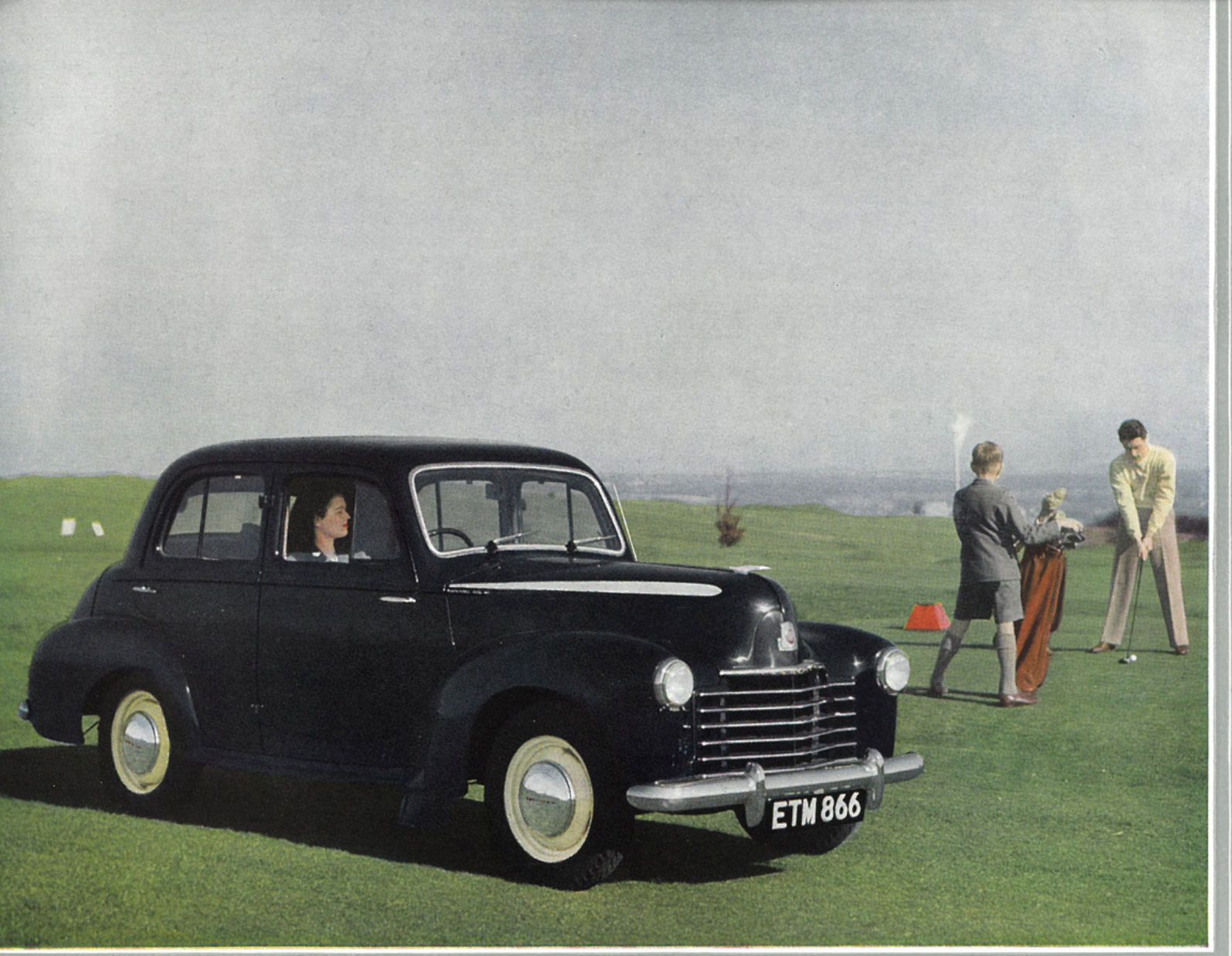
For the pleasure motorist, for every motorist to whom fuel is precious, this is *the* car. The Wyvern gives outstanding economy—from 33 to 35 m.p.g. (11.5–12.2 km./litre), with normal driving at an average speed of 30 m.p.h. (50 km.p.h.), and still more for the motorist who chooses to drive for economy. Withal, it has a lively performance, with excellent acceleration and a fine turn of speed on the open road.

Judged by ordinary standards, the Wyvern has a high axle ratio—4.625 to 1—so that, even at comparatively high speeds, the engine is always taking things easily.

Although similar in size it is a lighter car than the Velox by some 200 lb., and is fitted with 5.00×16 tyres.

It has the same well-proved independent front wheel springing, but is fitted with single-acting hydraulic rear shock absorbers.

The Wyvern has also the same well-finished appearance and the same distinctive, horizontally fluted upholstery—in cloth instead of leather. As the economy model, it costs less to buy and less to run.



This colour photograph is of the Velox 6-cylinder saloon. The Wyvern 4-cylinder model is similar in appearance except that it has different badges and hub caps, the wheels are painted to match the body colour and bumper over-riders are not fitted.

There's a fresh, clean feeling to the lines of the new models—an impression of graceful, rounded curves which sweep elegantly from the new horizontal radiator grille to the large luggage trunk. The deep section, chromium plated front bumper forms an integral part of the design and the headlamps are neatly recessed in the front wings, out of the way, yet arranged so that the angle of the beam can be easily adjusted.

Performance

The 6-cylinder Velox is, by any standards, a high-performance car. The figures on this page show that in acceleration, top gear performance and maximum speed it is altogether outstanding.

But figures tell only part of the story; they cannot show how easily the Velox attains and sustains its speed, nor can they convey the beautiful feel of the car.

These characteristics come from a combination of three factors.

1. *High Power-to-Weight Ratio.* The big, powerful engine in a car of moderate weight produces the remarkable acceleration and fine turn of speed. In the Velox, there is almost exactly 1 c.c. of engine capacity for each pound of car weight, a power-to-weight formula which many engineers consider to be the ideal.

2. *High Rear Axle Ratio.* The axle ratio is 4.125 to 1, so that at 50 m.p.h. (80 km.p.h.), the Velox engine is turning over at fewer than 3,000 r.p.m. At mile-a-minute speeds the quiet hum of the engine is scarcely audible inside the car, indicating that the engine is operating comfortably within its capacity and capable of sustaining such speeds as long as the driver desires.

3. *High Torque at Low Engine Speeds.* The maximum torque or twisting power of the Velox engine is developed at the low engine speed of 1,200 r.p.m. It is this characteristic that gives the excellent pick-up in top gear and makes the Velox a true top-gear car in traffic driving.

And, of course, the Velox has the excellent braking, steering and suspension necessary to sustain high speeds easily, comfortably and safely.

The 4-cylinder Wyvern has many of these special Velox characteristics yet, obviously, to a less marked degree. It has lively acceleration and a comfortable cruising speed of from 50 to 55 m.p.h. (80 to 90 km.p.h.), with a maximum speed some 10 miles an hour (15 km.p.h.) faster. In general liveliness it compares very favourably with other 1½ litre cars and, like the Velox, has beautifully balanced braking, steering and suspension systems.

ACCELERATION

Swift acceleration is the key to high average speeds on the congested roads of to-day. And swift acceleration is as valuable a safety factor as good braking when passing sluggish traffic. The new Vauxhalls respond instantly to the throttle and accelerate up to mile-a-minute speeds swiftly, smoothly and silently. The Velox, with its high power-to-weight ratio, is particularly outstanding in these respects.

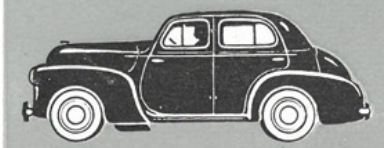
TOP GEAR PERFORMANCE

One of the most pleasant characteristics of the new Vauxhalls is their ability to glide along at low speeds in top gear and then, still in top, to accelerate away smoothly and silently. The Velox is a true top gear car. It can comfortably hold its position *in top gear* in a slow stream of traffic; the driver need seldom change down except when the lights change to red. And, as the figures indicate, the Wyvern has a better-than-average top gear performance.

MAXIMUM SPEED

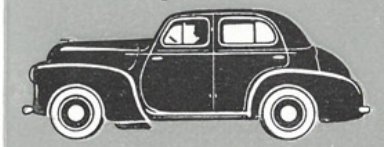
Both the Velox and the Wyvern have a fine turn of speed on the open road. And they have braking, steering and general road holding so that their high speeds can be sustained in comfort and safety. Their high axle ratios (and hence low engine "revs") give a new character to fast motoring. Even at high road speeds their engines are "revving" relatively slowly with consequent benefits in smoothness, silence and long life.

VELOX 6



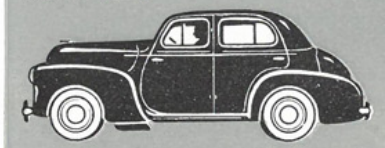
REST TO 50 M.P.H. (80 KM.P.H.) THRO' GEARS IN 15.5 SECONDS.

WYVERN 4



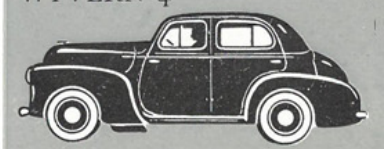
REST TO 50 M.P.H. (80 KM.P.H.) THRO' GEARS IN 25 SECONDS.

VELOX 6



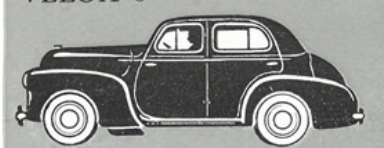
10 to 30 M.P.H. (16 to 48 KM.P.H.) IN TOP GEAR IN 8 SECONDS.

WYVERN 4



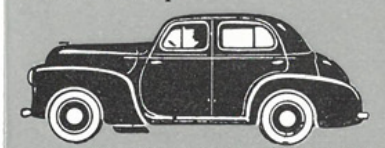
10 to 30 M.P.H. (16 to 48 KM.P.H.) IN TOP GEAR IN 13 SECONDS.

VELOX 6



MAX. 75 M.P.H. (120 KM.P.H.).

WYVERN 4



MAX. 62–64 M.P.H. (100–103 KM.P.H.).

This colour photograph is of the Velox 6-cylinder saloon. The Wyvern 4-cylinder model is similar in appearance except that it has different badges and hub caps, the wheels are painted to match the body colour and bumper over-riders are not fitted.

The New Vauxhalls look impressive from any angle. The curves of the roof merge pleasingly into those of the luggage trunk. The large rear window itself is curved. And the rear wings have deep side valances. As with the lines at the front, the impression is one of modern, graceful curves. The attractive new emblem on the lid of the luggage trunk and the recessed central number plate are elegant finishing touches.

Economy

The Wyvern is a car of outstanding economy. With normal driving (at an average speed of 30 m.p.h.—50 km.p.h.) it is capable of from 33 to 35 miles per gallon (11.5–12.2 km./litre).

The more powerful Velox offers comparable economy in its class—up to 28 m.p.g. (10 km./litre) with normal driving; well over 20 m.p.g. (7 km./litre) when driven hard.

And both cars offer scope for even lower fuel consumption to the owner who is prepared to take things leisurely and drive for economy. The choice rests with the driver; the design does the rest.

No single factor accounts for the economy of these modern Vauxhalls. It is the result of many engineering features, each contributing to the handsome total saving. The saving in car weight, for instance, made possible by the Vauxhall system of integral construction. The modern engine design, with overhead valves and controlled flame combustion. The double thermostatic control of the cooling system and inlet manifold, which ensures that the engine quickly reaches and holds the most efficient working temperature. And the automatic ignition control, with separate centrifugal and vacuum governors, which ensures that the spark is just right to fire lean, economy mixtures.

Probably the most important factor, however, is the special Vauxhall system of six-phase carburation with automatic part-throttle economy device and accelerator pump. The economy device allows extra air to bleed in on part throttle when the engine can profitably use a leaner mixture. The accelerator pump, by enriching the mixture when *extra* power is required, permits a leaner and hence more economical mixture ratio to be used for *general* running conditions. The first feature shows a direct saving in fuel; the second an indirect saving; in combination they achieve really remarkable economy.

ECONOMY WITH AVERAGE DRIVING

With normal driving at an average speed of 30 m.p.h. (50 km.p.h.) the Wyvern will do between 33 and 35 miles to the gallon (11.5–12.2 km./litre) and the Velox between 25 and 28 m.p.g. (9–10 km./litre). It is difficult to be more specific as fuel consumption figures are affected by many variables—traffic conditions, hilly country, individual driving techniques and so on. But definitely, compared with other cars of the same size and power, both Wyvern and Velox give greater economy.

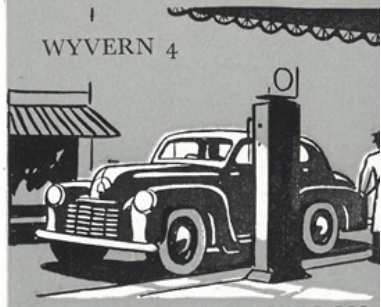
SIX PHASE CARBURATION

The Vauxhall six phase carburettor provides six different phases or mixture ratios of fuel to air. Besides the normal (1) starting and (2) idling mixtures, there are (3) part throttle steady running, (4) part throttle accelerating, (5) full throttle steady running and (6) full throttle accelerating. By providing lean economy mixtures when the engine can profitably use a weak mixture, the six phase carburettor gives far greater economy. And it does all this quite *automatically*, the driver drives in the normal way, six phase carburation does the rest.

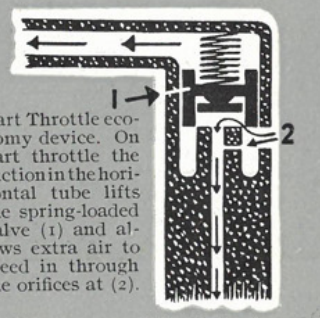
VELOX 6

25–28 MILES PER GALLON (9–10 km./litre) WITH AVERAGE DRIVING

WYVERN 4

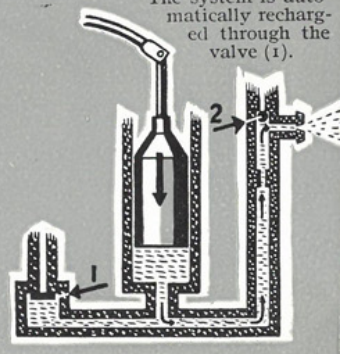


33–35 MILES PER GALLON (11.5 – 12.2 km./litre) WITH AVERAGE DRIVING



Part Throttle economy device. On part throttle the suction in the horizontal tube lifts the spring-loaded valve (1) and allows extra air to bleed in through the orifices at (2).

Accelerator pump fitted to six phase carburettor. When the throttle is suddenly depressed the central piston causes an extra spurt of fuel to be delivered through the orifice (2). The system is automatically recharged through the valve (1).



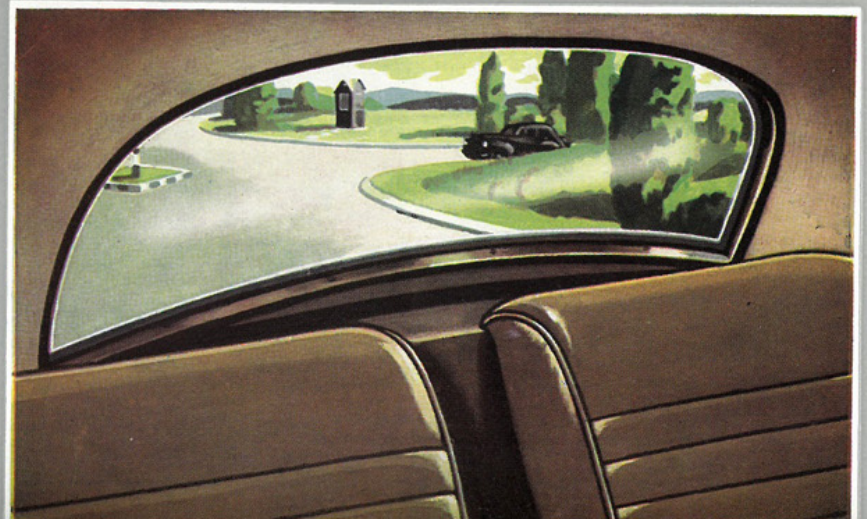
THE CONTROLS AND INSTRUMENTS

Below the central grille are, at the left, the starter and choke controls, and, at the right, the scuttle ventilator control and the lighting switch. When car radio is fitted as an extra the radio controls are in the centre. The instrument panel carries the speedometer in the centre which is flanked by the fuel gauge, oil warning light and headlamp beam indicator light at the left, and ammeter and ignition switch at the right.

To the left and within finger span of the steering wheel is the new gear change. The direction indicator switch is just above the horn button. The switch which controls the self-parking wipers is above the centre panel. The headlamps are dipped by a convenient foot switch.

For left-hand drive the instrument panel is mounted on the left, and the glove box at the right of the dash, and the gear lever is on the right of the steering column.

As this artist's impression shows, the dash has a pleasant, colourful appearance which is neither garish nor drab. It is divided into three sections. At the left is the glove box. In the centre is the loud speaker grille of the car radio, which is available at extra charge (when car radio is not fitted as an extra, this grille is replaced by a cover plate with similar embossed design). At the right is the instrument panel. The attractive, spring-spoke steering wheel adds a special note of elegance. The top of the car heater unit (available at extra charge) can be seen below the radio controls in this sketch.



The rear window is curved to the contours of the body. It is a very wide window which gives excellent visibility when backing into confined spaces. Its size makes the rear compartment light and airy. And, like all other windows it is made of toughened safety glass.

Driving Ease

Ease of handling has been a notable feature of Vauxhalls for many years. The new models will enhance this reputation.

A special feature is the steering wheel gear-change. *It is easier*, because the driver quickly acquires the knack of keeping his thumb on the steering wheel and making a finger-tip gear-change. *It is slightly quicker*, because a finger movement replaces an arm movement. *It is safer* in traffic, because the driver can keep both hands on the wheel when changing gear. *It is more convenient*, because the driver can just as easily leave by the nearside front door. And *it is a big advantage* when a third passenger is carried in the front seat.

The steering wheel gear control, coupled with Vauxhall synchro-mesh, provides gear-changing at its very easiest. With Vauxhall controlled synchro-mesh, no matter how quickly or slowly the lever is moved, the gears always slip into mesh smoothly and silently. It is impossible to make a bad change.

The hydraulic brakes are smooth and powerful, with just the right degree of servo action. The hand-brake lever is mounted in an inverted position under the dash, convenient to the driver's hand, yet out of his way when he wishes to get out or in.

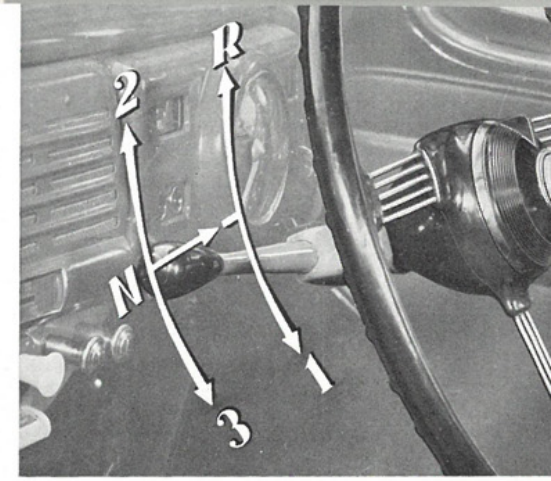
Due partly to the shock-absorbing qualities of independent springing, the steering is particularly light and positive in action. The steering wheel itself is of pleasing modern design with chromium plated spring spokes.

A number of ingenious and novel features also contribute to driving ease. The windscreen wiper blades automatically move to the parked position when the wiper control is switched off. A warning lamp on the instrument panel glows when the headlamp beams are in the straight ahead position, and goes out when the beams are dipped. And a simple checking device enables the driver to determine whether the side or pilot lamps are switched on when driving along well-lit roads.

These and other useful detail features are described in the following pages.

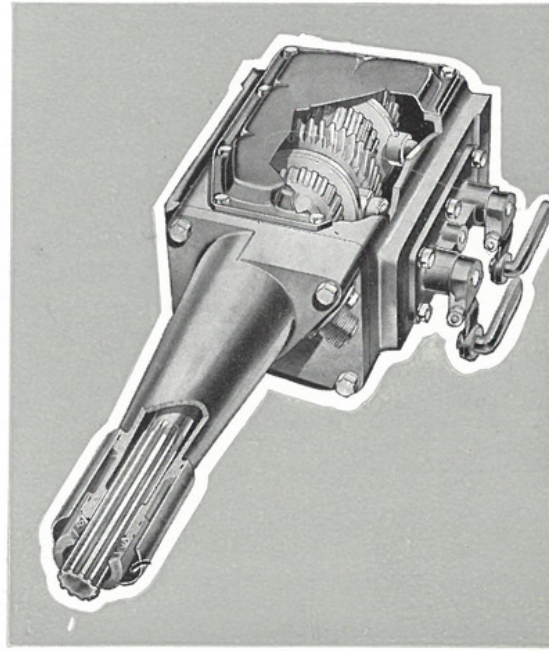
STEERING WHEEL GEAR CHANGE

On the new Vauxhalls gear changing is simplified from an arm movement to an easy flick of the fingers. It is both easier and quicker, and much more convenient as the driver can enter or leave by either front door. The gear lever and linkage have been carefully engineered to give a precise and positive feel so that gear changes are expertly slick and silent.



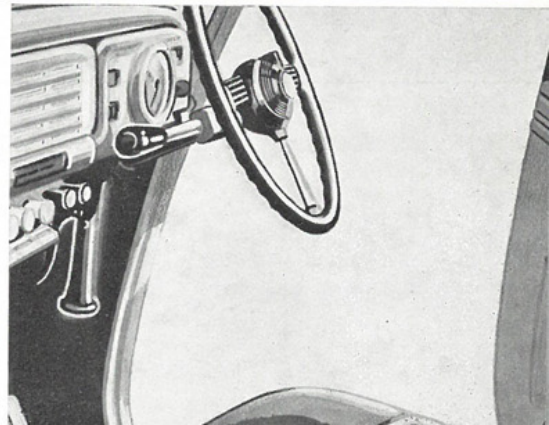
CONTROLLED SYNCHRO-MESH

The gearbox has Vauxhall controlled synchro-mesh on top and second speeds. With Vauxhall—the better type of synchro-mesh—it is impossible to clash gears no matter how quickly or slowly the lever is moved. And all gears are helically cut for quiet operation. The gearbox has an extended rear cover which permits the fitment of a short and stiff propellor shaft and thus ensures smooth, vibrationless transference of power. The splined sliding joint is fully enclosed within the gearbox extension and adequately lubricated.



HYDRAULIC BRAKES

With over 100 sq. inches of lining area the hydraulic brakes on the new models are powerful and certain in action and smooth and responsive to light pedal pressure. The handbrake lever is inverted under the dash (as shown at right); it is convenient to the driver's hand yet positioned so that it does not impede entrance. For left-hand drive the handbrake is at the left of the dash.



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Luggage accommodation in the Velox and Wyvern is unusually generous, everything the normal family needs for a holiday can be stowed away easily, safely and under cover from the weather. And there is no need to lean over mud-spattered wings to load or unload. The trunk is easy to get at and the aperture big enough for the largest of outsize suitcases. The spare wheel and tool box are readily accessible and everything is under lock and key.

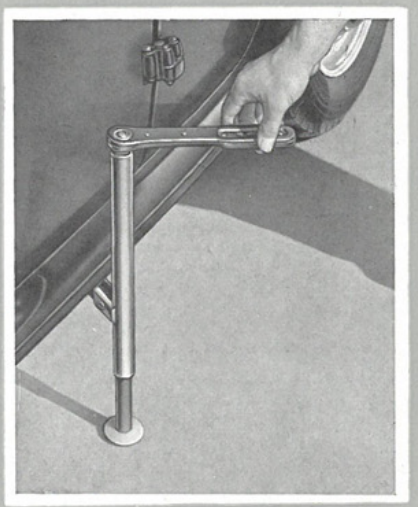
Functional Design

While the graceful lines of the new models can be appraised at a glance, the practical convenience of the sound, functional design is fully appreciated only with ownership.

First, it is very easy to get in or out of the new models; the doors are wide and, with the front seat unobstructed by either gear or hand brake lever, the driver can just as conveniently use either front door. Windows and doors are, of course, lockable, as also is the luggage trunk and spare wheel, but an extra safeguard comes with the new bonnet which can be locked from inside the car. Visibility is excellent and the extra wide rear window is a big convenience when backing into a confined space. The ground clearance is good, as also are the clearances at the front and tail, so that there is little risk of the tail "bottoming" on uneven ground. With the new alligator bonnet, hinged at the rear, the engine is readily accessible from either side; and owners who prefer to do their own "valeting" will be interested to learn that there are only 11 grease nipples (10 for left-hand drive).

EASY JACKING

The new Vauxhalls have the simplest of easy jacking systems. Special fitments to take the head of the jack are located under the centre of the body sill at each side of the car. The head of the jack can easily be inserted in position—no need to grope or kneel—and, once inserted, it is positively located so that the car cannot slip off the jack. The simple ratchet lever is easy to use—very little effort is required to raise the car. And there are no complicated fittings, nothing whatever to go wrong.

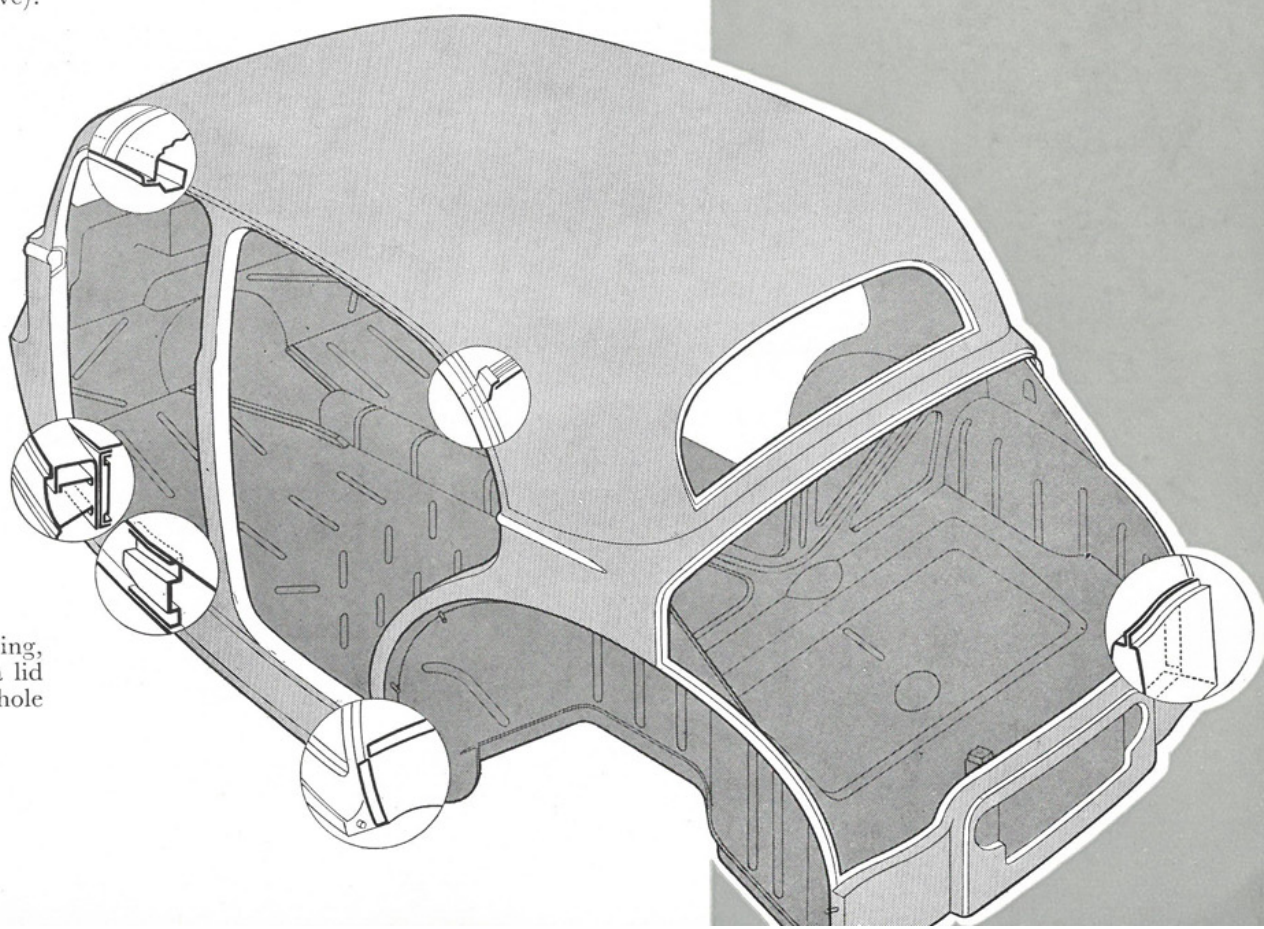


INTEGRAL CONSTRUCTION

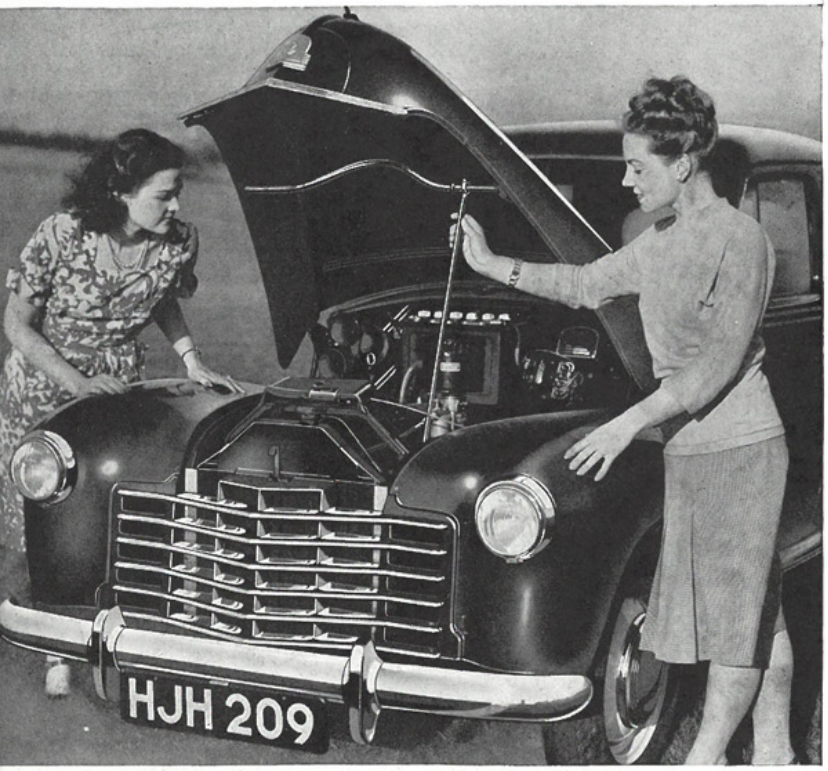
A special feature of Vauxhall functional design is the integral system of body construction. Body and chassis are designed as one unit so that each strengthens the other. The illustration at the right shows the principle of integral design. This all-steel welded construction provides greater strength with less weight as one structure does the work of two. There are no bolts to loosen, therefore it is squeak-proof and rattle free. And accidental damage can quickly be repaired by cutting away damaged portions and welding in new sections.

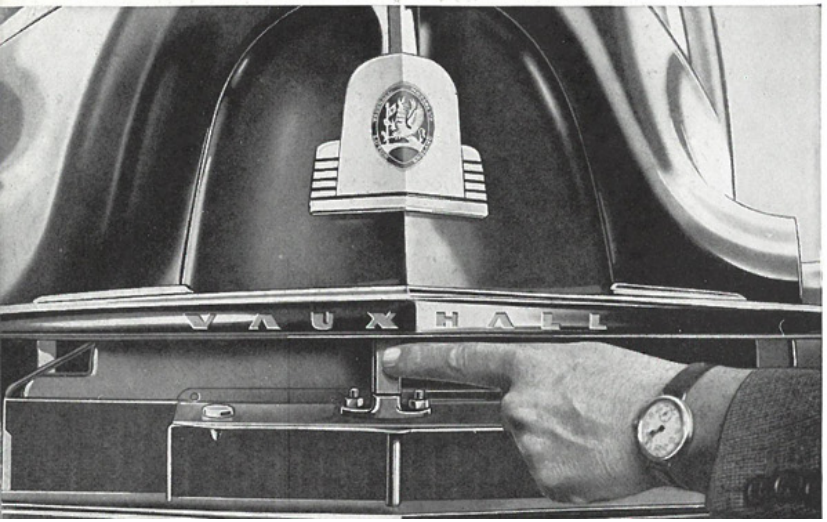
Two important developments of the integral principle are introduced in the new models. A steel bulkhead between body and luggage trunk is used to stiffen the rear of the structure and, with special extension members along the rear wings, strengthens the sturdy platform for luggage.

The one-piece, all-steel roof, made from a single pressing, stiffens up the top of the structure. As the addition of a lid strengthens a box, so this roof strengthens and braces the whole structure.



DETAIL POINTS OF





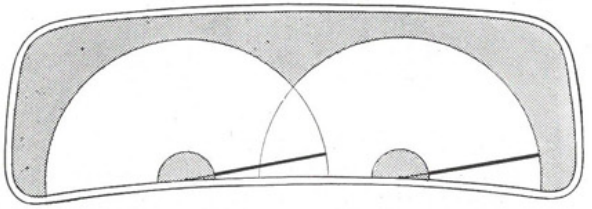
DOUBLE LOCKED BONNET

Locked from inside the car with additional safety lock.

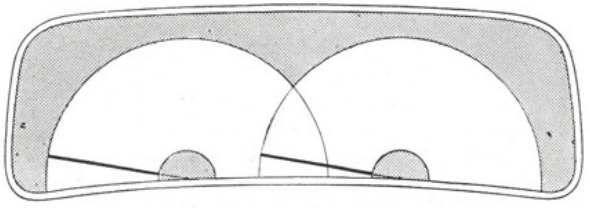
There is excellent all-round access to the engine. Both sides and front of the engine are readily accessible, when the single-piece, alligator type bonnet is raised. The bonnet is then held securely in the up position by a tubular stay rod.

A special feature of the design is the double bonnet lock. As a safeguard against theft and tampering with components the bonnet is locked from *inside* the car. A pull knob under the left-hand side of the panel operates a cable which releases a spring lock at the front of the bonnet. This allows the bonnet to be raised an inch or so—the extent permitted by the second "safety lock". The safety lock is released by hand from the front of the car (as shown in the lower illustration at the left); it can only be reached when the spring lock has been released. This "safety lock" obviates the possibility of the bonnet flying open when the car is in motion, an important safeguard should the spring lock be released accidentally.

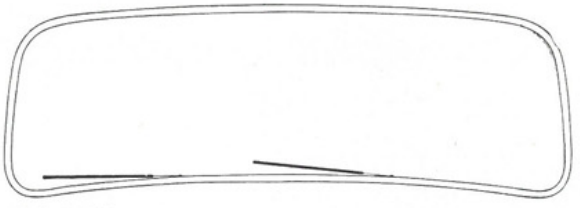
SELF PARKING WIPERS



WIPE This shows the right-hand limit of travel of the wipers when wiping.

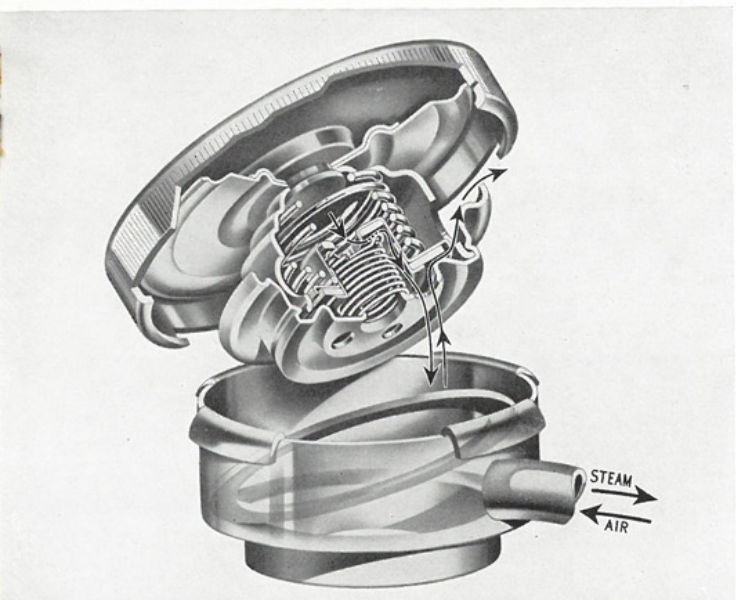


WIPE This shows the left-hand limit of travel of the wipers when wiping. Note the wide arc of travel.



PARK This shows how the wipers automatically park themselves when the wiper lever is moved to the off position. It does not matter at what stage in their travel the wipers are switched off—they automatically continue until they reach the parked position. The windscreen wiper motor is driven by flexible cable from the camshaft—a powerful and reliable method which has been used on Vauxhalls for many years.

THE NEW MODELS



(*Left*) BALANCED DIRECT-LIFT WINDOWS

There is a neat, chromium-plated "finger pull" fitted to the centre of the top edge of each window. Pull downwards and the window stays open in the selected position; push upwards and it stays shut. With the windows closed, the action of locking the doors also *locks* all windows except the right-hand front window which is locked by a separate thumb-lever.

(*Right*) PRESS-BUTTON FILLER CAP

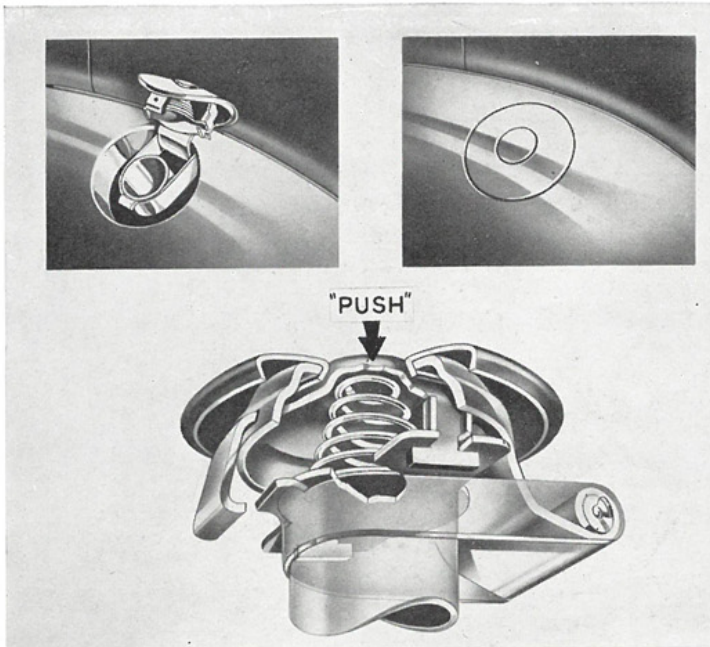
The press-button filler cap is an ingenious new device. The cap is hinged to the filler pipe. The press-button in the centre of the cap actuates a spring which causes the cap to open. After filling, the cap is pressed down and it locks itself in position flush with the wing contour. The fuel tank under the rear of the body has a capacity of 10 imperial gallons (45.45 litres) which, on one filling, means 280 miles (450 km.) in the Velox (340 miles—550 km. in the Wyvern).

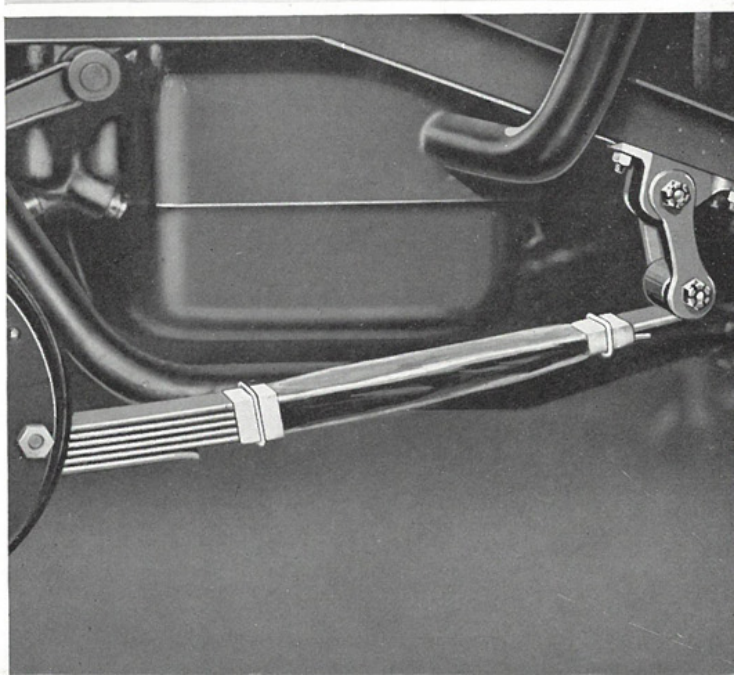
(*Left*) PRESSURE COOLING

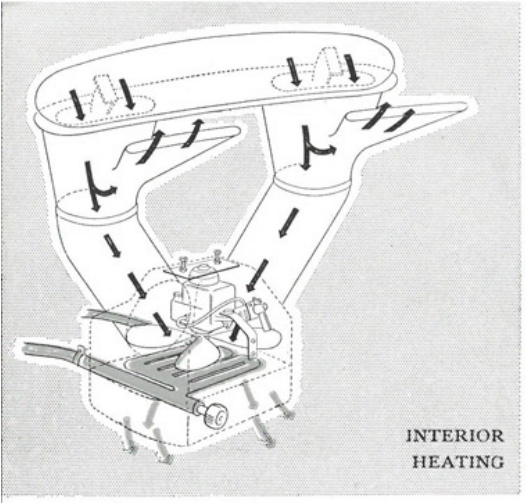
As a high performance car it is certain that the Velox will be driven much harder than the Wyvern. And so the Velox has a special cooling system of greater capacity and a larger radiator and fan. In addition, it has *pressure cooling*. The entire system has been designed to operate under a pressure of $3\frac{3}{4}$ lb. per sq. inch (.246 kg. per sq. cm.), so raising the temperature at which water boils in the system to 223 degrees F. (106.11 degrees C.). The special radiator cap (shown bottom left) has two spring loaded valves to the air vent; one valve only opens when the pressure has reached $3\frac{3}{4}$ lb. per sq. inch, the other opens to release vacuum in the system.

(*Right*) REAR SPRING GAITERS

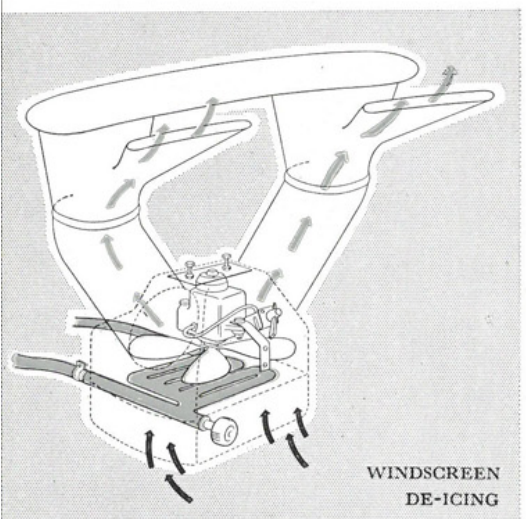
Both ends of the upper leaves of the rear springs are enclosed in gaiters *and lubricated*. Squeaks and grunts are banished, the ride is smooth, shock-free and ever silent.



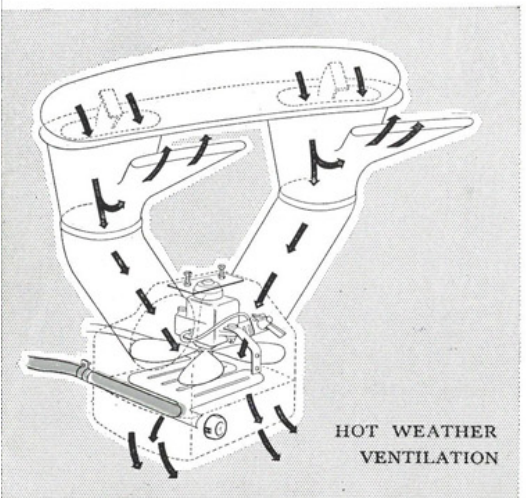




INTERIOR HEATING



WINDSCREEN DE-ICING



HOT WEATHER VENTILATION

INTERIOR HEATING

The controls are set with the scuttle ventilator lid open, the water control cock on the heater open, and the fan switch in the "Off" position. This gives hot fresh air ventilation with adequate windscreen de-misting at normal speeds. At lower speeds the switch can be turned to "Boost" to bring the fan into operation.

WINDSCREEN DE-ICING

The controls are set with the scuttle ventilator lid closed, the water control cock open, and the fan switch in the "Ice" position. With the fan reversed, air from the interior of the car is drawn through the heater radiator, is heated and discharged through the slots in the windscreen bottom rail on the inner face of the screen.

HOT WEATHER VENTILATION

The controls are set with the scuttle ventilator lid open, the water control cock closed and the fan switch in the "Off" position. This provides cool air ventilation at normal speeds. When extra ventilation is required at slow speeds in traffic the fan switch can be moved to the "Boost" position to provide a refreshing breeze.

CAR RADIO

This good looking and efficient car radio is in every sense a made-to-measure set. It has been designed specially to suit the electrical characteristics of the new Vauxhalls. And the front cover of the radio is styled in the same way as the centre cover of the instrument panel so that, when installed, the radio is an integral part of the car. It is available at extra charge.

The radio is designed for reception on the Medium and Long wave broadcast bands covering medium wavelengths from 560 m. to 200 m. (535 kc. to 1500 kc.) and long wavelengths from 2000 m. to 1000 m. (150 kc. to 300 kc.).

Optional Luxury Features

CAR HEATER

This new A.C. heater (available at extra charge) has been specially designed and developed for the new Vauxhalls. It has heating, ventilating and de-icing characteristics ideally suited to the Velox and Wyvern which embody the necessary ventilator and windscreen ducts.

The volume of heat is distributed evenly so that rear passengers don't shiver while those in front bake. Fresh air enters through the ducts leading from the scuttle ventilator, is heated and then distributed throughout the car.

A slight back-flow of air through the branch pipes leading to the slots behind the windscreen is sufficient to keep the windscreen clear on a misty day. Rapid de-icing can be effected by diverting the entire flow of heated air on to the windscreen. In hot weather the unit can be used as a ventilator to provide a refreshing breeze.

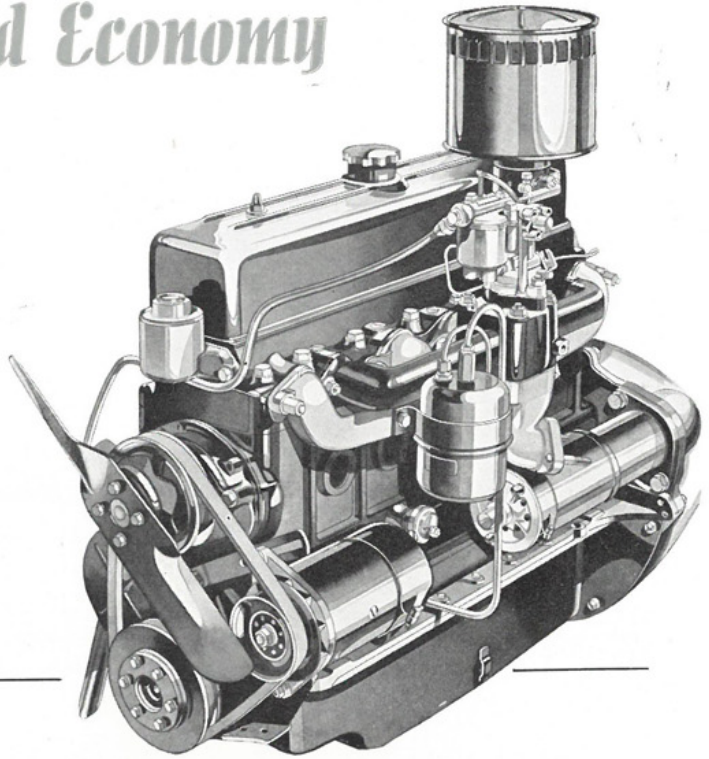
Outstanding Performance with Good Economy

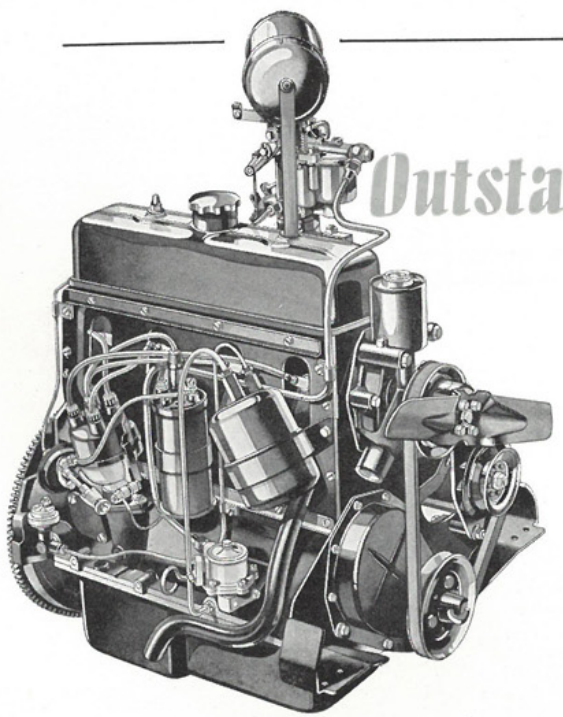
THE VELOX 6-CYLINDER ENGINE

As the power unit for the high performance Velox model the new 2¼ litre engine has been designed to give extremely high efficiency in the lower speed range and develops maximum torque at 1,200 r.p.m. This gives an outstanding top gear performance and, by cutting down low gear work, makes an important contribution to economy and to reduced wear and tear.

The highly successful features of the modern line of Vauxhall engines contribute to high efficiency combined with economy in fuel consumption and long engine life. The features include push rod operated overhead valves, aluminium alloy pistons with high pressure rings, steel shell main and big end bearings, high-pressure lubrication with positive feed to the cylinder bores, thermostatic control of cooling and exhaust-heated vapouriser, and six-phase carburation. An interesting new feature is pressure cooling which raises the boiling point of the water in the system to 225° F. (106.11° C.).

S.A.E. Rating	17.96 h.p.
Bore	69.5 mm.
Stroke ..	100 mm.
Displacement	2275 c.c.
Compression Ratio ..	6.75 : 1.
Max. B.H.P.	54.75 at 3,300 r.p.m.
Max. Torque	106 lb. ft. at 1,200 r.p.m.





Outstanding Economy with Good Performance

S.A.E. Rating	12 h.p.
Bore ..	69.5 mm.
Stroke ..	95 mm.
Displacement	1442 c.c.
Compression Ratio ..	6.4 : 1.
Max. B.H.P.	35 at 3,600 r.p.m.
Max. Torque	68 lb. ft. at 2,000 r.p.m

THE WYVERN 4-CYLINDER ENGINE

Well proved all over the world for its remarkable economy and high performance, the four-cylinder Vauxhall engine remains basically unchanged. In the new Wyvern it still gives the exceptionally low fuel consumption made possible by the combination of features which characterise Vauxhall design. Six-phase carburation automatically adjusts the mixture of fuel and air to suit the needs of the engine under any running conditions, and the engine is designed to extract maximum power from every drop of fuel it receives.

It does 33–35 m.p.g. (11.5–12.2 km./litre) with normal driving at an average speed of 30 m.p.h. (50 km.p.h.) and performance is well above average in the 1½ litre class.

New features include, a 12-volt electrical system, a new air filter and intake silencer, and repositioning of the ignition coil which is now accessibly placed on the right hand side of the engine.

Specification

THE VELOX 6-CYLINDER SALOON

ENGINE. Six cylinders. Overhead valves in detachable head. Gearbox built as unit with engine; complete assembly mounted in frame at three points on rubber insulators; angular mountings at front, horizontal at rear.

Number of Cylinders ..	6.
R.A.C. & S.A.E. Rating	17.96 h.p.
Bore	2.736 in. (69.5 mm.).
Stroke	3.94 in. (100 mm.).
Displacement	138.8 cu. in. (2275 cc.).
Compression Ratio ..	6.75 to 1.
Maximum B.H.P. ..	54¾ at 3300 r.p.m.
Maximum Torque ..	106 lb. ft. (14.6 kg.m.) at 1200 r.p.m.

Cylinder block cast integrally with crankcase. Four bearing crankshaft with steel shell white metal lined main bearings.
Shaped crown aluminium alloy B.H.B. pistons with split, oval-ground, tin plated skirts. Big-ends split diagonally with serrated joint faces; steel shell, white metal lined bearings. Hole in big-end allows jet of oil to emerge which lubricates cylinder walls.
High pressure lubrication system with submerged gear type pump. Gauze strainer protects oil pump intake. Crankcase ventilation.

COOLING SYSTEM. Pressurized system designed to operate at a pressure of 3¾ lb. per sq. in. (.246 kg. per sq. cm.) so raising boiling point of water in system to 223° F. (106.11°C.). Special radiator cap incorporating pressure and vacuum spring release valves. Centrifugal pump located at front of cylinder block. Two bladed fan, 15¾ in. (400 mm.) diameter. Radiator frontal area, 300 sq. ins. (1940 sq. cm.). Capacity of cooling system 16½ pints (9.38 litres).

FUEL SYSTEM. By A.C. mechanical pump driven by eccentric on camshaft. Zenith model 30 VIG–5 carburettor fitted with acceleration pump and part throttle economy valve. Vertically mounted air filter silencer and flame arrester. Fuel tank capacity, 10 imperial gallons (45.45 litres).

CLUTCH. Single dry plate with spring-loaded centre. Diameter of friction facing, 8 in. (203.2 mm.).

GEARBOX. Three forward speeds and one reverse. Vauxhall controlled synchro-mesh on top and second speeds. All gears of helical tooth form. Horizontal gear control lever mounted on bracket secured to steering column immediately below steering wheel. Gearbox ratios: First 3.43 to 1; Second 1.64 to 1; Top, Direct; Reverse 3.43 to 1.

DRIVE LINE. Single open propeller shaft with Hardy Spicer needle roller bearing universal joint at each end.

REAR AXLE. Spiral bevel gears with bevel pinion straddle mounted. Four pinion differential assembly. Axle ratio 4.125 to 1.

FRONT SUSPENSION. Independent front wheel springing of torsion bar and tube type which automatically adjusts itself for varying road surfaces. Built-in double acting hydraulic shock absorbers. No lubrication nipples.

REAR SUSPENSION. Long semi-elliptic underslung rear springs. Spring leaves are of graduated thickness; outer ends of the springs are protected by gaiters; spring eyes and shackles are fitted with rubber bushes. Springs shackled at rear end. Double-acting hydraulic shock absorbers.

BRAKES. Foot brake, Vauxhall designed brake shoes with Lockheed hydraulic operation. Total lining area 100.6 sq. ins. (649.4 sq. cm.). Hand brake lever, inverted under dash, operates rear brake shoes by separate system of cables.

STEERING. Screw and nut type. Attractive spring spoke steering wheel. Diameter of wheel 16¾ in. (425 mm.). Ratio of steering gear 15¼ to 1.

WHEELS AND TYRES. Detachable steel disc wheels with wellbase rims. Size 3.00×16. Tyres 5.25×16.

ELECTRICAL SYSTEM. 12–volt positive earth return with single pole wiring. Dynamo output regulated by Compensated Voltage Control system.
Distributor mounted on right-hand side of engine. Automatic timing controlled by centrifugal governor and a vacuum advance unit. Coil mounted on engine push rod cover adjacent to distributor.
Twin wind-tone horns.
Combined head and pilot lamps flush mounted in the front wings. Sealed front, pre-focus light units. Pilot lamps, which act as side lamps, fitted on backs of reflectors. Foot-operated dipper switch.
Twin tail and stop lamps mounted each side of number plate recess. Interior lamp in centre of roof. Two instrument panel lamps. Flush fitting, self-return direction indicators.
Battery, 12 volt 53 amp. hr. at 20 hr. rate.

BODY. Four door, four window design with solid top, single-piece roof. All-steel welded integral construction extended by a light sub-frame which projects at front and extends rearwards under the body alongside the sills.
All doors fitted with balanced, direct-lift windows. In addition, front doors have Vauxhall No-Draught ventilation. All doors and windows lockable.
Fixed single-panel windscreen with twin self-parking wipers driven by flexible cable from camshaft. Large area curved rear window. Windscreen and all windows fitted with toughened safety glass.
Large capacity luggage trunk. Lid locked by ignition key. Spare wheel carried in trunk.

SEATING AND FITTINGS. Full width, body conformity front seat, easily adjustable for leg room. Ashtray recessed in back of seat. Rear seat, with body conformity characteristics, has centre armrest. Foot rests for rear passengers under front seat, arm slings in rear quarters, map pockets in front doors.
Upholstery in bronze hide on seat cushions and front of seat squabs; bronze leather cloth on back of front seat; mottled-grey leather cloth on door panels.

DIMENSIONS AND WEIGHTS. See inside back cover.

Specification

THE WYVERN 4-CYLINDER SALOON

ENGINE. Four cylinders. Overhead valves in detachable head. Gearbox built as unit with engine; complete assembly mounted in frame at three points on rubber insulators; horizontal mountings front and rear.

Number of cylinders ..	4.
R.A.C. & S.A.E. Rating	12 h.p.
Bore	2.736 in. (69.5 mm.).
Stroke	3.74 in. (95 mm.).
Displacement	88 cu. in. (1442 cc.).
Compression Ratio ..	6.4 to 1.
Maximum B.H.P. ..	35 at 3600 r.p.m.
Maximum Torque ..	68 lb. ft. (9.4 kg.m.) at 2000 r.p.m.

Cylinder block cast integrally with crankcase. Three bearing crankshaft with steel shell white metal lined main bearings.
Domed crown aluminium alloy B.H.B. pistons with split, oval-ground, tin plated skirts. Big-ends split diagonally with serrated joint faces; steel shell, white metal lined bearings. Hole in big-end allows jet of oil to emerge which lubricates cylinder walls.
High pressure lubrication system with submerged gear type pump. Gauze strainer protects oil pump intake. Crankcase ventilation.

COOLING SYSTEM. Orthodox system designed to operate at atmospheric pressure. Centrifugal pump located at front of cylinder head. Two bladed fan, 14 in. (355.6 mm.) diameter. Radiator frontal area, 208 sq. ins. (1340 sq. cm.). Capacity of cooling system 10 pints (5.6 litres).

FUEL SYSTEM. By A.C. mechanical pump driven by eccentric on camshaft. Zenith model 30 VIG–5 carburettor fitted with acceleration pump and part throttle economy valve. Horizontally mounted air filter, silencer and flame arrester. Fuel tank capacity, 10 imperial gallons (45.45 litres).

CLUTCH. Single dry plate with spring-loaded centre. Diameter of friction facing $7\frac{1}{4}$ in. (184 mm.).

GEARBOX. Three forward speeds and one reverse. Vauxhall controlled synchromesh on top and second speeds. All gears of helical tooth form. Horizontal gear control lever mounted on bracket secured to steering column immediately below steering wheel.
Gear box ratios: First 3.43 to 1; Second 1.64 to 1; Top, Direct; Reverse 3.43 to 1.

DRIVE LINE. Single open propeller shaft with Hardy Spicer needle roller bearing universal joint at each end.

REAR AXLE. Spiral bevel gears with bevel pinion straddle mounted. Four pinion differential assembly. Axle ratio 4.625 to 1.

FRONT SUSPENSION. Independent front wheel springing of torsion bar and tube type which automatically adjusts itself for varying road surfaces. Built-in double acting hydraulic shock absorbers. No lubrication nipples.

REAR SUSPENSION. Long semi-elliptic underslung rear springs. Spring leaves are of graduated thickness; outer ends of the springs are protected by gaiters; spring eyes and shackles are fitted with rubber bushes. Springs shackled at rear end. Single-acting hydraulic shock absorbers.

BRAKES. Foot brake, Vauxhall designed brake shoes with Lockheed hydraulic operation. Total lining area 100.6 sq. ins. (649.4 sq. cm.). Hand brake lever, inverted under dash, operates rear brake shoes by separate system of cables.

STEERING. Screw and nut type. Attractive spring spoke steering wheel. Diameter of wheel $16\frac{3}{4}$ in. (425 mm.). Ratio of steering gear $15\frac{1}{4}$ to 1.

WHEELS AND TYRES. Detachable steel disc wheels with wellbase rims. Size 3.00×16. Tyres 5.00×16.

ELECTRICAL SYSTEM. 12 volt positive earth return with single pole wiring. Dynamo output regulated by Compensated Voltage Control system.
Distributor mounted on right-hand side of engine. Automatic timing controlled by centrifugal governor and a vacuum advance unit. Ignition coil mounted on engine push rod cover adjacent to distributor.
Single high-frequency horn.
Combined head and pilot lamps flush mounted in the front wings. Sealed front, pre-focus light units. Pilot lamps, which act as side lamps, fitted on backs of reflectors. Foot-operated dipper switch.
Twin tail and stop lamps mounted each side of number plate recess. Interior lamp in centre of roof. Two instrument panel lamps. Flush fitting, self-return direction indicators.
Battery, 12 volt 44 or 43 amp. hr. at 20 hr. rate.

BODY. Four door, four window design with solid top, single-piece roof. All-steel welded integral construction extended by a light sub-frame which projects at front and extends rearwards under the body alongside the sills.
All doors fitted with balanced, direct-lift windows; in addition, front doors have Vauxhall No Draught ventilation. All doors and windows lockable.
Fixed single-panel windscreen with twin self-parking wipers driven by flexible cable from camshaft. Large area curved rear window. Windscreen and all windows fitted with toughened safety glass.
Large capacity luggage trunk. Lid locked by ignition key. Spare wheel carried in trunk.

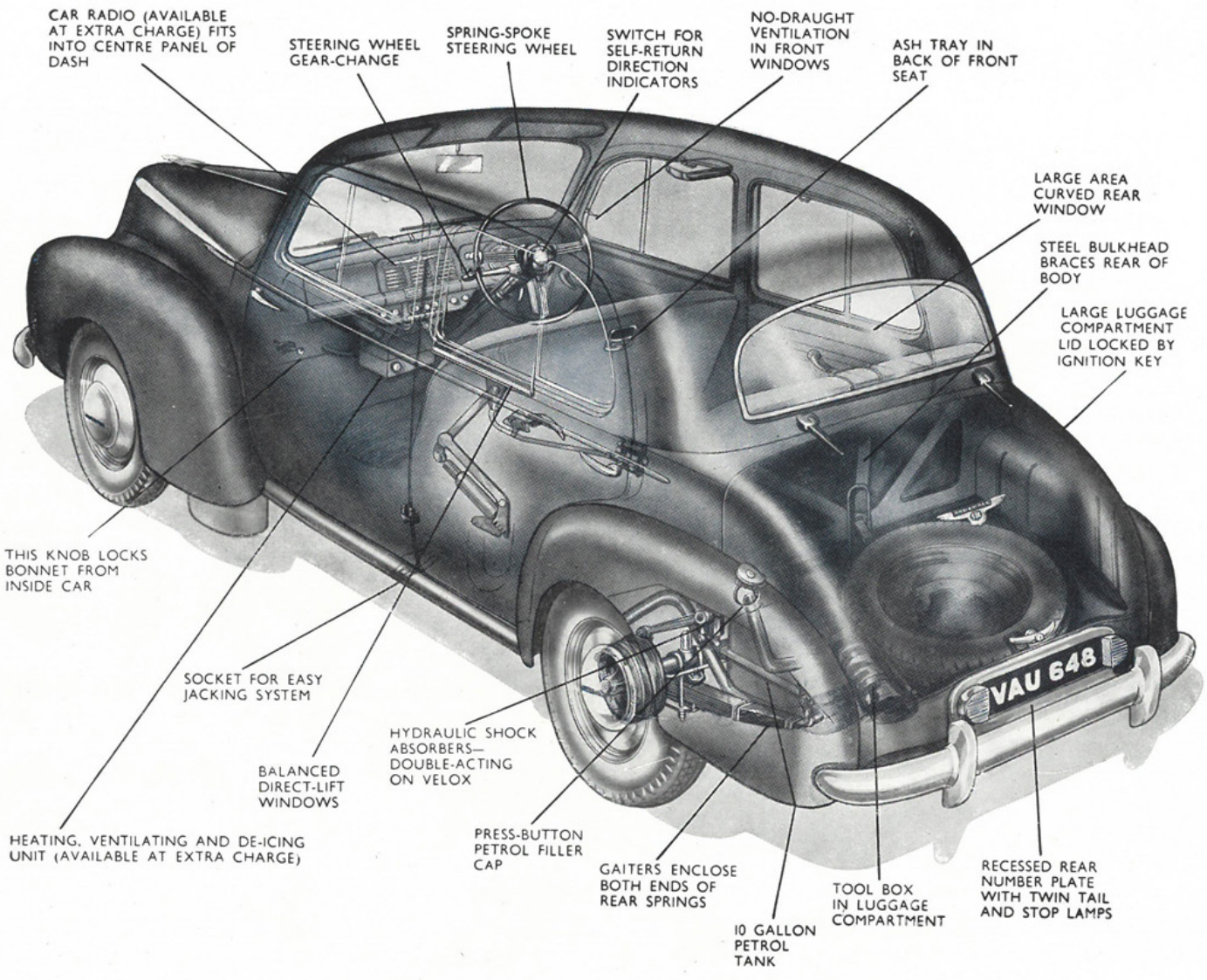
SEATING AND FITTINGS. Full width, body conformity front seat, easily adjustable for leg room. Ashtray recessed in back of seat. Rear seat has body conformity characteristics. Foot rests for rear passengers under front seat. Map pockets in front doors. Upholstery in dove grey cloth on seat cushions and front of seat squabs; mottled grey leather cloth on back of front seat and on door panels.

DIMENSIONS AND WEIGHTS. See inside back cover.

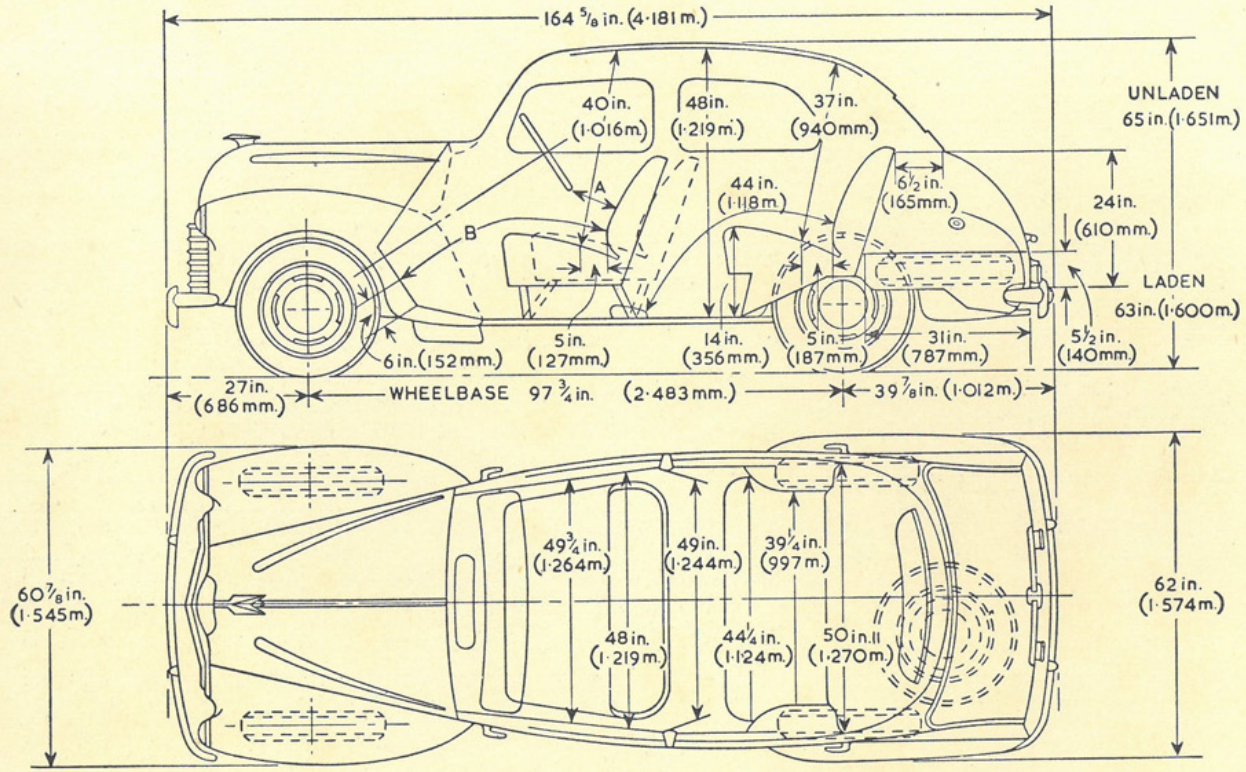
FEATURES OF THE NEW VAUXHALLS

This illustration shows some of the outstanding features of the new Vauxhall Velox 6-cylinder saloon. A similar type of illustration, but from the front, is shown on page one.

All features shown in this drawing apply equally to the Wyvern 4-cylinder model, with the single exception of the shock absorbers which are of the single-acting type on the Wyvern.



Dimensions



FRONT SEAT DIMENSIONS INDICATED BY LETTER IN TOP DIAGRAM

Dimension A { Maximum 17 in. (432 mm.) / Minimum 12 in. (305 mm.) } Dimension B { Maximum 46½ in. (1.18 m.) / Minimum 41½ in. (1.06 m.) }

GROUND CLEARANCES

	VAUXHALL VELOX	VAUXHALL WYVERN
Ground Clearance (Laden)	7 1/16 in. (179 mm.)	6 7/8 in. (175 mm.)
Front Overhang Angle	25½ degrees	31½ degrees
Rear Overhang Angle	14¾ degrees	14½ degrees

WEIGHTS

Unladen, with fuel, oil, water, tool kit, spare wheel and tyre.
Velox, 1 ton 1¼ cwt. (2390 lb.—1084 kg.) Wyvern, 19½ cwt. (2190 lb.—993 kg.).

COLOUR OPTIONS AND UPHOLSTERY

Both Velox and Wyvern models are available in the following colours:

1. Black
2. Gulf Blue
3. Nickel Grey
4. Alpine Green

In all cases the wheels of the Velox are in cream, whereas the Wyvern wheels are painted to match the body colour.

UPHOLSTERY

All Velox models are upholstered in bronze hide. The back of the front seat is in bronze leather cloth and the doors are trimmed in mottled grey leather cloth. The bottom of doors and the floor have brown carpeting.

All Wyvern models are upholstered in dove grey cloth. The back of the front seat and the doors are trimmed in mottled grey leather cloth. The bottom of the doors and the floor have brown carpeting.

OPTIONAL EQUIPMENT

Without extra charge—left or right-hand drive, speedometer in miles or kilometres, four-bladed fan in place of the normal two-bladed fan.

At extra charge—Oil Bath Air Cleaner (available for the Velox only).

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