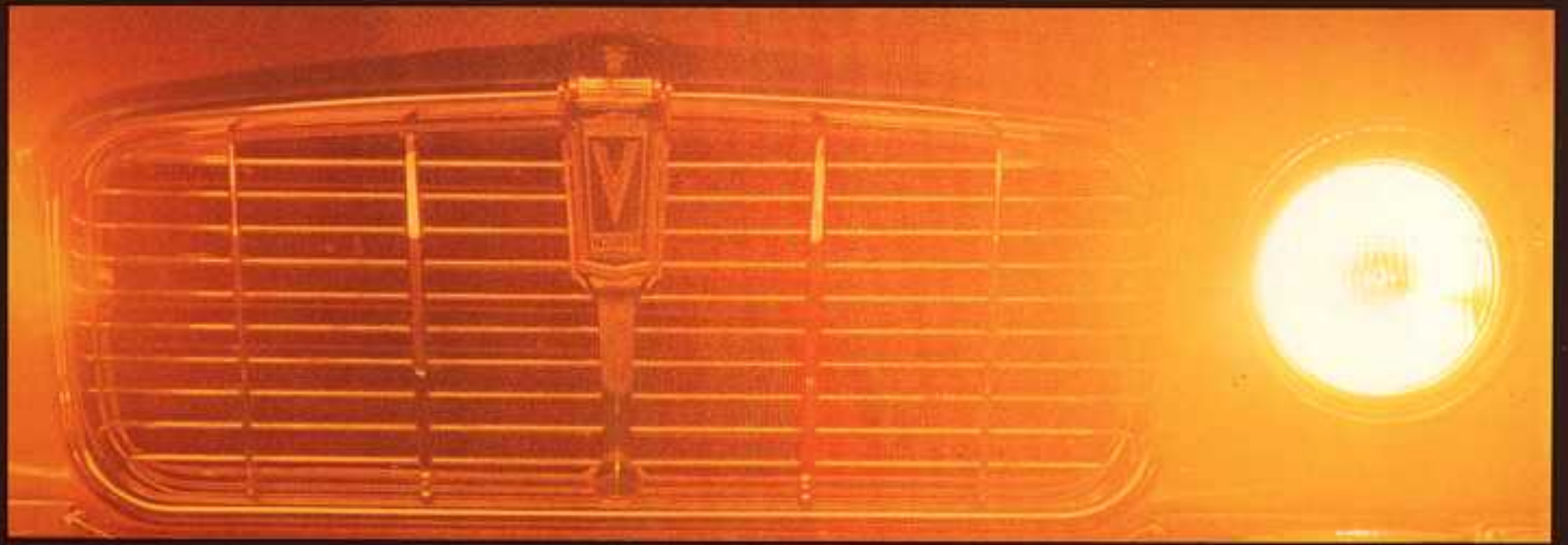




# THE JAGUAR XJ RANGE



# THE MAGIC FORMULA

## XJ

One of the most acclaimed ranges of cars in the history of the motor industry.

The formula that enabled Jaguar to set new standards of performance, luxury and sophistication.

But then, staying ahead has always been part of the Jaguar "magic".

At a time when legislative demands on car manufacturers are more stringent than ever, it might be thought that there would be a general levelling off in design and engineering standards.

It might also be thought that the requirements of recent safety and environmental legislation would

neutralise the Jaguar "magic".

Not so.

As this brochure amply demonstrates, the XJ treats these requirements as challenges rather than limitations.

That is something you will appreciate more when you have studied the facts in this brochure.

In the XJ12 and the XJ6, Jaguar have again produced a formula which meets world wide safety and environmental standards, and at the same time more than satisfies the most discerning motorist.

XJ – the magic formula.





# XJ12L

The fluent, easy surge of power from the famous V12 engine ; smooth acceleration ; effortless driving in town or on the motorway.

The quietness of the luxurious interior ; the deep, comfortable seats with leather facings ; the elegant fascia ; the delicate design of the controls.

These are the features that spell out Jaguar.

But for many the enduring impression of the XJ12L is of spaciousness – a scarce commodity in most modern cars.

Jaguar have created spacious luxury for driver and passengers alike.

For relaxation, for confident driving.

The XJ12L – a magic formula for effortless, safe, luxurious motoring.

# THE SPACIOUS LUXURY OF THE REAR INTERIOR

The aura of opulence, and deep comfort, is characteristic of Jaguar and the XJ range.

Deep, luxurious seats with leather facings, together with central and side armrests, make for exquisite passenger comfort.

Full floor carpeting, over special sound-deadening materials help produce that famous XJ quietness.

It's a Jaguar tradition.

And so is that oft-neglected aspect of motor car design : spaciousness.

Passengers travelling in the rear seats of an XJ Jaguar have the space they need to relax.

The gentleman in the picture is over 6ft tall, well above average height.

In the Jaguar he has room to spare.

Proof, if proof were needed, that XJ is the magic formula for spacious, luxurious travelling.









# THE REFINED SIMPLICITY OF THE FRONT INTERIOR



Luxurious seats with leather facings ; natural wood facia ; comprehensive instrumentation.

These are characteristic features of the XJ family.

Another is staying ahead in design and development work. In comfort, in safety, Jaguar strive for continuous improvement.

The most significant feature is the layout for the driver's controls. Two control stalks, one on either side of the adjustable steering column provide, on one side, a two-speed wiper control, single wipe, park and wash ; on the other, headlamp flash, headlamp dip, and direction indicator.

All primary controls are within easy reach of the driver, and the switches for fuel tank changeover, heated rear window, map reading light and interior light are "push-push" type, with "tell-tale" illuminations.

Instruments, too, have been carefully positioned : all dials are grouped in front of the driver and clearly visible through the two-spoke steering wheel.

The whole facia has that simplicity which is the result of constant refinement.

It is stylish, yet supremely functional.

And that is the essence of the magic formula – XJ.









# XJ6L

The XJ6L shares the distinctive lines and luxury of the XJ12L.

Inside and out, the special refinements which distinguish the Jaguar XJ range are very much in evidence.

The flowing contours, the characteristic grille ; the interior spaciousness ; the sumptuous luxury.

Power for the XJ6L is from the world-famous 6 cylinder 'XK' engine ; and there's stopping power to match with servo-assisted disc brakes all round.

In the XJ6L, the magic formula has produced a car of exceptional virtues.





# XJ12C & XJ6C

XJ12C an elegant coupe with effortless power from the smooth-running 5.3 litre, V12 engine.

It is a two-door, but with interior spaciousness which Jaguar owners have come to expect in a genuine four-seater.

The addition of black vinyl to the roof, wider doors and tinted glass with the absence of central pillars, give the XJ12C a rakish elegance. Side windows which completely retract enhance this.

The XJ6C has a similar specification but is powered by the renowned 4.2 litre 6-cylinder Jaguar engine.



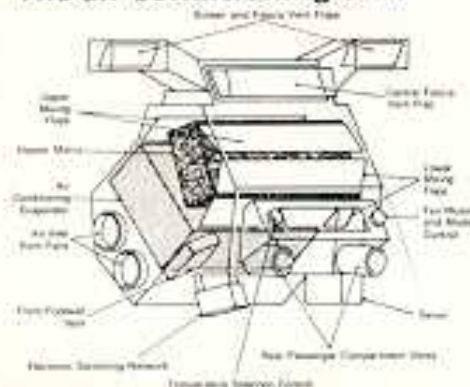
REAR INTERIOR OF THE XJ12C/XJ6C.



# HEATING, VENTILATION AND AIR CONDITIONING

The heating and ventilation system is standard on all Series Two models. The incorporation of automatic air conditioning is standard on the XJ12C, optional on other models in the range. Whether your Series Two Jaguar has standard heating and ventilation only or is fitted with full air conditioning, selection of temperature and control of the system is by two rotary switches, one on each side of the central radio housing.

## The air conditioning unit



## Standard heating and ventilation control

The temperature selector (labelled TEMP) provides the following settings: 'DEF' when, apart from a small bleed to the footwells, most of the hot air is directed to the windscreen for high speed

demisting. The vents at each end of the fascia can be opened and swivelled to demist the side windows, or kept closed for maximum windscreen demist. 'HI' when most of the hot air (approx. 75%) is directed to the footwells and a small amount to the face level. 'HEAT' which is a medium temperature blend of heated and ambient air, directed to face and foot levels. 'LO' when blended air at a warm temperature is directed mostly to face level. 'VENT' which supplies air at its ambient temperature.

The air flow control (labelled 'AIR-FLO') can be rotated from 'OFF' through 'RAM' which depends on the pace of the car to force air in, or any one of three fan speeds - 'LO', 'MED', 'HI'.

Whichever operating mode the heating system is set at, the rear seat passengers have a central multi-directional vent with an OFF ON position. They also have individual 'volume' controls for left- and right hand footwell supplies.

(Quite separate from the main system, there is an additional fresh air supply to the front footwells.)

## Air conditioning controls

For cars fitted with fully automatic

air conditioning, the two rotary switches are as follows: The *temperature selector* 'TEMP' can be set to the required interior temperature in a range of 20 deg. F. (11 deg.C.).

The *operational control* 'AIR FLOW' can be set to 'OFF' - the system is switched off and the main fresh air intake closed; 'AUTO' - the system operates automatically to achieve and maintain the selected temperature, with no further adjustment required; 'HI' and 'LO' - these positions provide a fixed high or low fan speed independently from that selected by the automatic control, although the chosen temperature is still maintained; 'DEF' - this overrides the set temperature and directs full heating mostly to the windscreen for rapid demisting. For maximum defrost the vents at each end of the fascia can be closed.

## Sophisticated operation

All air entering the main air inlet is ducted to the unit and passes through the evaporator matrix where it is cooled and de-humidified. A series of flaps then control the direction of air through the system and into the car, and govern the proportions of cooled air passing through or

around the heater matrix, depending on the temperature selected for the car's interior.

**Full Cooling:** On full cooling the air by-passes the heater matrix, the greater part then being distributed through the central and side fascia vents and the remainder to the footwells. When maximum cooling is required the system cuts off intake of air and works on recirculated air.

**Full Heating:** On full heating the flaps direct the cooled air through the heater matrix and from there to the footwell vents, with a smaller proportion to the outer fascia and screen vents. The central fascia vent is closed in the heating mode.

**Regulated Air:** Intermediate temperatures are obtained when the system's flaps vary the mixture of cooled and heated air before directing it to the interior at face and foot levels. In this mode all vents emit the blended air. All these various modes of operation and automatic control require very little of the driver who merely turns the rotary switches to the required setting. From there on the system is entirely automatic. In all cars, the used air is extracted by a vent situated neatly below the rear window.



# ONE OF THE SAFEST CARS IN THE WORLD

The original XJ won Britain's top automotive safety award in its first year of production.

Since then, the XJ has undergone a series of engineering refinements, and a number of new safety features have been added.

Little wonder, then, that the XJ family is generally, and rightly, regarded as one of the safest cars in the world.

The agility and performance of the car, combined with exceptional road holding, handling and braking, constitute an inherent level of safety, a capacity to keep out of trouble in the first place.

But the XJ range carries a full complement of safety features which can be divided into two basic elements.

**Primary Safety**, the way the car is designed to minimise the possibility of an accident situation; and

**Secondary Safety**, the way the car is equipped to protect the occupants in the event of an accident.

We list below the most significant safety features.

## Primary Safety Features

1. Very wide section low profile

radial-ply tyres with "anti-aquaplaning" tread pattern for maximum grip in all weather conditions.

2. Servo-assisted disc brakes all-round, with ventilated discs at the front and separate hydraulic circuits to front and rear.

3. Brake pressure differential warning actuator indicating, through a warning light, any failure in either the front or rear system.

4. Wide track and low centre of gravity for greatest possible overall stability.

5. Anti-dive front suspension geometry for longitudinal stability, particularly when heavy braking is called for.

6. Power-assisted rack and pinion steering for ease and precision of control.

7. The mounting of the steering rack on the rear face of the suspension beam in a position of maximum protection.

8. Combined ignition and steering lock incorporating accessory and engine starting positions.

9. On automatic transmission models, engine cannot be started unless gear selector is in "Park" or "Neutral".

10. Large window area with slim pillars for good all-round visibility.

11. Electrically heated rear window.

12. Centrally controlled door locking.

13. A central master switch isolates all window controls.

14. Child-proof safety catches concealed in rear doors.

15. Large area side lamps and direction flashers.

16. Large area rear view mirror with anti-dazzle secondary position.

## Secondary Safety Features

1. An immensely strong body centre section.

2. Front and rear ends designed to provide progressive deformation characteristics to absorb the energy of impact.

3. All doors have a W-section barrier welded into them for best possible passenger protection in the event of side impact.

4. Burst-proof door locks on all doors.

5. Interior door panels have recessed, smooth-contoured door levers and locking tabs.

6. Impact absorbing surround to

instrument panel.

7. Energy absorption device on steering column to cushion impact of body on steering wheel under severe impact loads.

8. Fuel lines located in the structure in such a way as to minimise the chance of rupture.

9. Universal joint between upper and lower steering columns and collapsible mountings allow displacement in a collision.

10. Specially padded tops to front seats help protect rear passengers' heads in event of frontal collision.

11. Spring loaded break-away holder for rear view mirror.

12. Reinforced seat belt anchorages front and rear.

13. Inertia-reel front seat belts of the one-hand-operation type fitted to all models.

14. Recessed petrol filler flaps, opening inwards, concealed beneath separate flush fitting caps, prevent loss of fuel in event of roll over.

15. Twin fuel tanks, each isolated in a steel compartment, one in each rear wing.

16. All interior trim material treated for fire retardation.

17. Hazard warning system, utilising all four direction flashers.



# XJ FEATURES

## Outside the car

The Series Two family is clearly recognisable by its attractive front end styling. The traditional low, wide (and surefooted) look of the XJ remains and is enhanced by the shallower version of the XJ radiator grille, which surmounts the wrap-round front bumper, and the rectangular lower grille which fits neatly between the underriders. The side lamps and front direction flashers are situated below the bumper which is raised to meet safety regulations. The side lamp units (including the base and aluminised surround) are of all-plastic construction, anti-corrosive, easy to replace, and give improved safety under impact. A central V12 motif distinguishes the XJ12 from the XJ6, both of which display the Jaguar head plaque. The rear number plate is illuminated from above and the boot lid lock release is recessed into the lamp casing. Two-door models have a true four seater capacity, but have a rakish elegance of their own. Wider doors, absence of central door pillars, slightly increased rear quarter panel thickness and the use of black Vinyl over the roof section gives a different

proportional effect – that of a distinctive modern coupé that has all the accommodation of a luxury saloon yet completely individual and unmistakably "Jaguar."

## Inside the car

Inside there is a characteristic aura of opulence. Deep comfortable seats with leather facings. Natural wood facia. Comprehensive instrumentation. It's a Jaguar tradition. But it is also Jaguar's tradition to stay ahead in design and development. So there are new features, and improvements of course. Some for comfort, some for safety, some for both.

## Control layout

All dials are grouped in front of the driver and clearly visible through the two-spoke steering wheel. Two control stalks, one each side of the steering column, provide (left) 2-speed wiper control, single wipe, park and wash, (right) headlamp flash, headlamp dip, LH and RH direction indicator control. (These stalk functions change sides for left-hand drive cars.) Main lighting control is by a rotary switch on the facia adjacent to the steering

column casing.

The hazard warning switch is situated in the side of the steering column casing and, like all the other primary controls, is within easy reach.

There are switches for fuel tank changeover, heated rear window, map reading lamp and interior lamp. These are "push-push" type switches and have "tell-tale" illumination. The heating and ventilation or air conditioning system (optional on all except the XJ12C) controls are simplified to just two rotary selector switches.

## Fibre optic feature

Jaguar have introduced, for the first time in a British car, fibre optic light-conducting cables to illuminate certain control areas from just one light source. The light from a single bulb is conducted to the heating and ventilation (or air conditioning) switch panel, to the main lighting panel and to the ignition panel for their illumination via separate cables each consisting of several hundred fine glass fibres protected by a PVC sleeve, quite small in diameter. These cables cannot only conduct light over distances but also around corners. The

advantages in a car are space-saving (no need for numerous bulbs for various illuminated controls) and ease of bulb replacement at one readily accessible point.

## Other features

Many of the features to be found in the XJ interior relate to safety. These include driver controlled central door locking and central isolation switch for the electrically operated windows. Impact absorbing materials are used wherever possible and there are recessed door levers. Inertia reel front seat safety belts are standard on all models. (In the Two Door models the reel is cleverly tucked away behind the side trim panel, reducing the possibility of rear passengers kicking or tripping over them.) Other features and refinements include luxurious side arm rests, convenient door pulls and individual left and right ashtrays front and rear. A vanity mirror fits flush inside the glove compartment lid and opens by a spring catch. The deletion of opening quarterlights has been made possible by a new heating and ventilating system.

# SPECIFICATIONS

## XJ12L XJ12C

## XJ6L XJ6C

<b>Engines</b>		
Type name:	V12	XK
Configuration:	60° "vee" 12 cylinder	in-line, 6-cylinder
Bore:	90 mm (3.54 in)	92 mm (3.625 in)
Stroke:	70 mm (2.76 in)	106 mm (4.17 in)
Capacity:	5343 cc (326 cu in)	4235 cc (258.4 cu in)
Compression ratio:	9.0 : 1	7.8 : 1
Performance:		
Power DIN	250 bhp at 6000 rpm	170 bhp at 4500 rpm
Torque DIN	301 lb ft at 3500 rpm	231 lb ft at 3000 rpm
BMEP	139 psi at 3500 rpm	136 psi at 3500 rpm
Cylinder heads:	Two aluminium cylinder heads each with separate die-cast aluminium alloy tappet block carrying a single camshaft. In-line inlet and exhaust valves, set in flat cylinder head face	Straight port aluminium cylinder head with two overhead camshafts, 70° included angle inlet and exhaust valves set in hemispherical combustion chambers
Cylinder block:	"Open deck" aluminium alloy block with slip-fit cast iron cylinder liners	Chromium cast iron block with interference fit of cast iron liners
Crankshaft:	Three-plane, seven main bearing, Tufftrided manganese molybdenum steel forging	Three-plane, seven main bearing, manganese molybdenum steel forging
Pistons:	Aluminium alloy, solid skirt, with dished top forming part of combustion chamber	Aluminium alloy, solid skirt, with domed top
Lubrication:	Jaguar epicyclic crescent-type oil pump; drive concentric with crankshaft	Jaguar rotary vane pump, crankshaft driven by skew gear
<b>Ignition</b>	Lucas Opus fully transistorised, electronically triggered ignition system	Lucas conventional contact-breaker system
<b>Carburation</b>		
Carburettors:	Four Zenith 175CDSE	Two SU HS8
Enrichment:	Manually-operated choke	Automatic enrichment device
Pumps:	Two SU electric AUF 406. Inertia actuated fuel cut-off	Two SU electric AUF 303. Inertia actuated fuel cut-off
Fuel specification:	97 octane four star	97 octane four-star
<b>Electrical Equipment</b>		
Battery:	Negative earth Lucas CP 13/11 Pacemaker	Negative earth Lucas CP 11 Pacemaker
Capacity:	68 amp at 20-hour rate	66 amp at 20-hour rate
Alternator:	Lucas 20ACR	Lucas 20ACR (air-conditioned cars), Lucas 18ACR (6 cylinder cars without air conditioning)
Starter:	Lucas pre-engaged M45G	Lucas pre-engaged 3M100



**XJ12L XJ12C (cont.)****XJ6L XJ6C (cont.)**

<b>Cooling System</b>	Water, pressurised. Impeller pump belt driven off crankshaft damper	Water, pressurised. Impeller pump belt driven off crankshaft damper
Fans:	12-bladed 17" steel fan with torque control viscous coupling. Also Bosch electric 4-bladed 11" fan, thermostatically controlled to 90°C (in) and 88°C (out)	12-bladed 17" steel fan with torque control viscous coupling
<b>Transmission:</b>	Borg-Warner Model 12 three-speed fully automatic with 2.0 : 1 torque converter	Four-speed manual transmission with overdrive on top gear or Borg-Warner automatic Model 65 3 speed
<b>Suspension</b>		
<i>Front layout:</i>	Fully independent semi-trailing wishbones and coil springs. Anti-dive geometry. Girling Monotube hydraulic dampers. Anti-roll bar	Fully independent semi-trailing wishbones and coil springs. Anti-dive geometry. Girling Monotube hydraulic dampers. Anti-roll bar
<i>Rear layout:</i>	Lower transverse wishbones with drive shafts acting as upper links. Radius arms. Twin coil spring and damper units. Girling Monotube dampers.	Lower transverse wishbones with drive shafts acting as upper links. Radius arms. Twin coil spring and damper units. Girling Monotube dampers
<b>Wheels and Tyres</b>		
Wheel type:	Dunlop silver-painted sculptured steel wheels (chromium plated optional)	Dunlop silver-plated sculptured steel wheels (chromium plated optional)
Size:	6 JK rim 15" diameter	6JK rim 15" diameter
Tyres:	Dunlop SP Sport with steel breaker	Dunlop SP Sport with rayon breaker
Size:	205/70VR15	E70VR15

**Specification common to 12 and 6 cylinder models**

<b>Brakes</b>	Servo-assisted disc all round. Ventilated front discs. Separate front and rear hydraulic circuits incorporating pressure differential warning actuator	
<b>Steering</b>	Adwest "Pow-a-tek" power assisted rack and pinion with energy absorbing column. Steering column lock	
<b>Body</b>	Two integral-construction styles of steel bodywork: (a) 4-door model (b) 2-door model	
	Wrap-around chromium-plated bumpers with rubber inserts and underriders at front. Overriders at rear. Forward-hinged bonnet. Sealed fuel tank accommodation in rear wing panels. Black grained vinyl roof on 2-door models. Laminated windscreen. Toughened glass for rear and side windows. Tinted glass available (standard on XJ12C). Electrically-heated rear window (standard). Full air conditioning available (standard on XJ12C). Individual front seats with armrests combined with door pulls. Cubby box with lid as central armrest at front; rear seat with central fold-away armrest. Seat facings in Connolly leather. Deep pile carpeting throughout. One-piece roof lining in glass fibre (faced with foam-backed nylon cloth). Fully instrumented fascia finished in polished walnut veneer. Two steering-column mounted control stalks. Provision for radio/tape player mounted in central console. Central console with gear lever, electric window controls, central locking switch, cigar lighter, individual ashtrays. Door pulls and pockets for maps, etc. Courtesy lights operated by all doors; boot interior light. One-handed operation inertia reel seat belts. Tip-forward front seats with top-side-mounted release catch (two-door models only). Spacious rear parcel shelf.	
<b>Instruments</b>	Speedometer, tachometer, fuel gauge, water temperature gauge, oil pressure gauge (psi), battery condition indicator (volts), electrically rewound mechanical clock.	
<b>Controls</b>	Steering column stalk controls - (left side) two-speed wipers, single wipe, park, screen wash. (right side) direction indicator, headlamp flash, dip, full beam. Rotary switch for main lighting. Rotary switches for heating and ventilating (or optional air conditioning). Hazard warning light switch. Combined ignition switch and steering column lock. "Push-push" switches for fuel tank change-over, interior light, map reading light, heated rear window. Horn push in padded steering wheel boss.	
<b>Warning Lights</b>	Main beam, hazard warning, ignition, handbrake, brake hydraulic failure, oil pressure, direction flashers. (XJ12 models also have reminder lights for choke)	

**Dimensions**

<b>Overall Length</b>	190.7 in (484.3 cm) XJ6C, XJ12C 194.7 in (494.5 cm) XJ6L, XJ12L	<b>Wheelbase</b>	108.8 in (276.3 cm) XJ6C, XJ12C 112.8 in (286.5 cm) XJ6L, XJ12L	<b>Front Track</b>	58.0 in (147.3 cm) all models
<b>Overall Height</b>	54.1 in (137.5 cm) all models	<b>Front Overhang</b>	32.1 in (81.5 cm) all models	<b>Rear Track</b>	58.6 in (148.8 cm) all models
<b>Overall Width</b>	69.7 in (177.0 cm) all models	<b>Rear Overhang</b>	49.8 in (126.5 cm) all models	<b>Ground Clearance</b>	7.0 in (17.8 cm) all models (unladen)