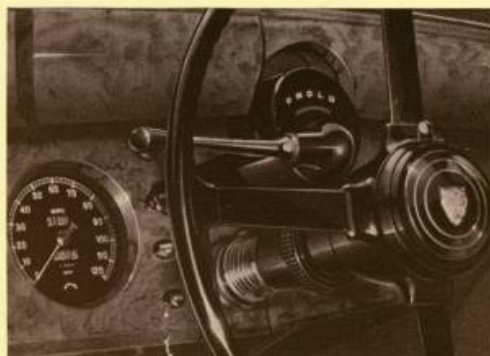




THE JAGUAR MARK VII AUTOMATIC TRANSMISSION MODEL

HOW THE JAGUAR AUTOMATIC TRANSMISSION SYSTEM OPERATES



The operation of the automatic transmission is controlled by the position of the selector lever which is indicated by the quadrant pointer. The quadrant is situated in front of the steering wheel and is marked "P," "N," "D," "L," and "R."

"P" or (Park) provides a safe, positive lock on the rear wheels when the car is stopped. Movement of the selector lever to the "P" position actuates a mechanical locking device in the transmission which prevents the rear wheels from turning in either direction. The fact that the engine may be started with the selector in "P" position is convenient when parked on an incline. "N" or (Neutral) position permits idling the engine without possibility of setting the car into motion by pressure on the accelerator and may be used when starting the engine.

"D" or (Drive) provides the normal forward driving range and includes automatic shifting between the low, intermediate and direct drive ranges. Virtually all forward driving, accelerating and stopping can be done with the lever in the "D" position. Once the engine is started the lever is moved to "D" it can be left in this position for all normal driving. When accelerating, the transmission shifts automatically from low to intermediate between 10 and 35 m.p.h. and from intermediate to direct between 18 and 55 m.p.h., depending on the position of the accelerator pedal. On deceleration, it will shift automatically from direct drive to intermediate at approximately 12 m.p.h. and from intermediate to low at approximately 3 m.p.h.

"L" or (Low) is an emergency engine power range for use on unusually long and steep grades or for braking on descents, for extra heavy pulling, and for rocking the car out of mud, sand or snow.

"R" or (Reverse) position of the selector lever provides reverse driving range.

ADDITIONAL POWER AND ACCELERATION in "D" range can be obtained as follows:—

- Below 45 m.p.h. depress the accelerator pedal to the full throttle position to effect a change into the intermediate range; the drive will continue in the intermediate range until the release of the accelerator or approximately 55 m.p.h. is reached.
- Between 45 m.p.h. and 60 m.p.h. depress the accelerator pedal all the way to the floorboard to effect a "kickdown" change into intermediate range; the drive will continue in intermediate range until release of the accelerator or approximately 68 m.p.h. is reached.

HARD PULLING, such as encountered in deep snow, mud or other adverse driving conditions, is best accomplished in the "L" range.

ROCKING OUT OF MUD, SAND, OR SNOW is accomplished with the accelerator pedal slightly depressed and held steady while making quick alternate selections of "L" and "R" ranges.

ANTI-CREEP is a special braking feature which prevents the car from creeping forward when stopped on level ground or slight grades, as long as the ignition key is turned on. Apply the footbrake to stop the car and then remove the foot from the brake pedal. The car will not creep forward or backward. Any movement of the accelerator pedal, or turning off the ignition key, releases the anti-creep action.

ENGINE BRAKING, for descending long mountainous grades, is easily secured by bringing the car speed below 40 m.p.h. and momentarily depressing the accelerator while placing the selector lever in the "L" position.

ABRIDGED SPECIFICATION

ENGINE. Six cylinder $3\frac{1}{2}$ litre Jaguar engine with twin overhead high-lift camshafts. 83 mm. bore \times 106 mm. stroke; 3442 c.c. developing 190 B.H.P. Compression ratio 8:1. Cooling by pump with by-pass thermostat control. Cylinder head of high tensile aluminium alloy hemispherical combustion chambers. Aluminium alloy pistons. Steel connecting rods. Forced lubrication throughout. Twin S.U. horizontal carburettors with electrically controlled automatic choke. 2 $\frac{1}{2}$ ins. diameter counterweighted crankshaft carried in seven large steel backed precision bearings.

TRANSMISSION. Borg Warner Automatic Transmission unit. Ratios: Low range from 21.2 to 9.86, Intermediate range from 13.2 to 6.14, Top (direct drive) 4.27 to 1.

SUSPENSION. Independent front suspension by wishbones and torsion bars with telescopic shock absorbers. Rear suspension by half elliptic springs controlled by telescopic shock absorbers.

BRAKES. Girling Dewandre vacuum servo-assisted, self-adjusting hydraulic. Brake drum diameter 12 ins., friction lining area 179 sq. in.

STEERING. Burman re-circulating ball type steering with 18 ins. diameter adjustable steering wheel.

WHEELS AND TYRES. Pressed steel bolt-on disc wheels with wide base rims fitted with Rimblishers and Dunlop 6.70 \times 16 in. super comfort, low pressure tyres.

FUEL SUPPLY. Twin S.U. electric fuel pumps. Fuel capacity 17 imperial gallons in two separate tanks of nine and eight gallons.

ELECTRICAL EQUIPMENT AND INSTRUMENTS. Lucas 12 volt 64 amp/hour battery with constant voltage controlled ventilated dynamo, 10 hour discharge. Flush fitting headlamps and wing lamps, twin adjustable fog lamps, integral stop/tail lamps with built-in reflectors, reverse

lamp, self cancelling flashing direction indicators with warning light, panel lights, automatic and manually controlled interior lights, twin blended note horns, twin blade two speed screen wipers, cigar lighter, starter motor, vacuum and centrifugal automatic ignition advance, oil coil ignition, 5 in. diameter 120 m.p.h. speedometer, 5 in. diameter revolution counter, ammeter, oil pressure gauge, water thermometer gauge, fuel gauge, electric clock, windscreen washers.

HEATER AND AIR CONDITIONING. Built-in heater with controlled warm air flow and incorporating windscreen de-froster. Large scuttle vent for additional cooling in hot weather.

BODY. All steel full six seater with sliding roof. Bench type front seat. Four doors. Wrap round bumpers. Special security locks to rear doors for child safety. Seats upholstered in finest quality Vaumol leather over full length Dunlopillo. Polished walnut instrument panel and interior garnishings. Two glove compartments with locks. Three ashtrays. Padded armrests. Deep pile carpets over thick felt underlay. Map pockets to both front doors.

LUGGAGE ACCOMMODATION. The extraordinarily capacious luggage locker has an area of 17 cubic feet.

SPARE WHEEL AND TOOLS. Wheel fitted with tyre and tube and carried in luggage compartment with necessary tools for wheel changing. A complete set of hand tools and small replacement items are carried in special flush fitting compartments concealed in the front doors.

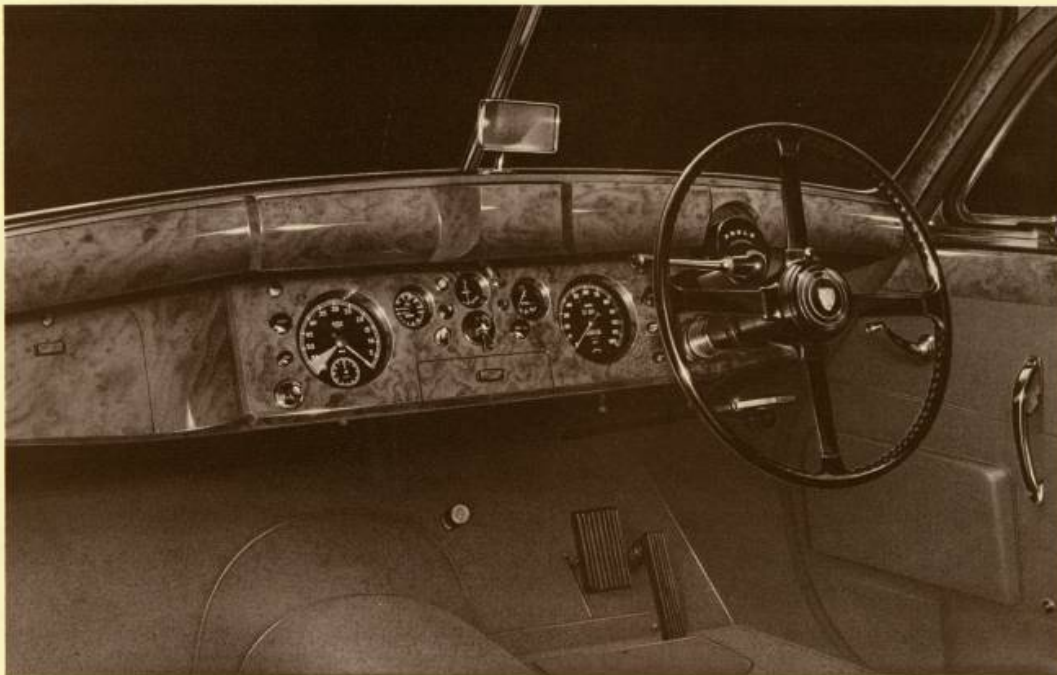
EASY JACKING. Exterior jack slots, conveniently placed, enable the car to be lifted with minimum effort by means of the jack provided.

PRINCIPAL DIMENSIONS. Wheelbase 10 ft. 0 ins.; track front 4 ft. 8 $\frac{1}{2}$ ins.; overall width 6 ft. 1 in.; overall height 5 ft. 3 ins.; ground clearance 7 $\frac{1}{2}$ ins.; turning circle 36 ft. 0 ins.; dry weight 33 cwt.

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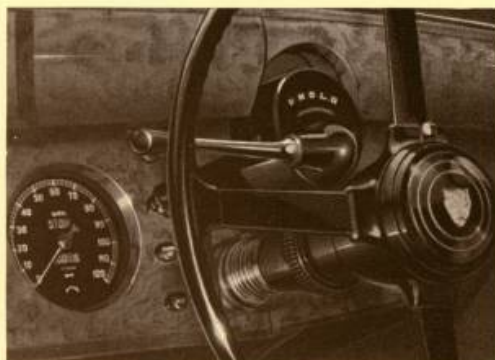
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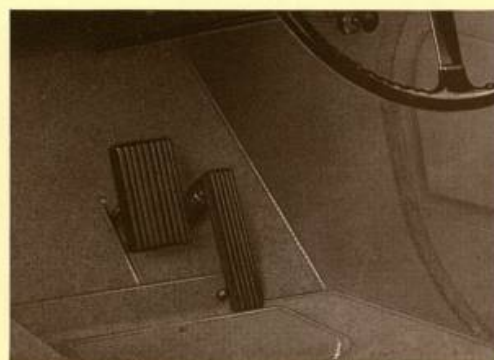
No clutch, no gear lever ; simply two controls—the footbrake and the accelerator—bring to you an entirely new conception of motoring pleasure from the moment you take the wheel of the Jaguar Mark VII Automatic Transmission model. For over three years the Mark VII Jaguar with Automatic Transmission by Borg Warner has been available only for export overseas where it has given the completely trouble-free service to be expected from a form of transmission of which over two million examples are in use all over the world. Now available for the home market, more and more motorists are finding in the Jaguar Automatic Transmission model a new and thrilling driving experience in which zest of driving a high efficiency car is blended with complete relaxation and freedom from fatigue.

An entirely new conception of motoring pleasure



The control lever illustrated is not a gear lever but is the means by which the handling of the car is determined by the driver before it is set in motion. Once in motion, all normal progression is regulated entirely by the two foot pedals shown in the illustration opposite. A full description of the use of the control lever is printed overleaf.

For all normal purposes, all the driver has to do is to place the control lever (illustration left) in the "D" or "drive" position, depress the accelerator (illustration right) and glide smoothly away. Thereafter, the progress of the car in all circumstances, whether up hill or down, in crowded city streets or on the open road, is controlled entirely by one or other of the two pedals—accelerator or footbrake. Whether moving at a crawl or flashing away in a burst of acceleration, the automatic transmission selects exactly the right gear ratio to meet the situation. It is sometimes thought by drivers of long experience with cars having manually operated gearboxes that, since the automatic transmission virtually "thinks" and acts for the driver, some feeling of not having complete control must be induced. Whilst it is true that the entirely automatic selection of the right gear ratio for all normal driving conditions removes the need for routine gear changing by hand, Jaguar's Borg Warner system nevertheless allows the driver, if he so desires, to assert his own free will in the matter of timing the engagement of intermediate gears and top by a simple pressure of the foot. This novel feature which creates the feeling of always being "in command" can only be fully appreciated by actual experience in driving the car, and one demonstration alone will be sufficient to prove that, in the handling of the Jaguar Automatic Transmission model, a new exhilaration is brought to modern motoring.



Two pedals only regulate the progress of the car at all times. Depress the accelerator and the car gathers speed. Raise the foot and the car checks. Depress the brake pedal and the car slows and, if required, stops. Having stopped, even on an incline, the car remains stationary and will not roll either backwards or forwards even when the footbrake is released and the handbrake is in the off position.

SOME QUESTIONS AND ANSWERS

(Q) If the control lever is inadvertently left in the "drive" position when the car has been parked, will the car move off when the engine is started? (A) It is impossible to start the engine until the control lever has been placed in the "P" (Park) or "N" (Neutral) position. *(Q) When I come to a hill for which I would normally engage a lower gear, what do I do?* (A) Normally you need not do anything, for the automatic transmission will select the correct intermediate gear ratio without any action on your part. *(Q) In overtaking another vehicle I often find it an advantage to slip into a lower gear in order to get past quickly. Can I do this with automatic transmission?* (A) Yes. Simply press the accelerator hard down and a lower intermediate gear will automatically come into action. Ease the accelerator slightly and you will be back in top. Or, if you prefer, keep your

foot down, and top gear will be engaged automatically when the car reaches 68 m.p.h. *(Q) If I stop on an incline in traffic or at a halt sign will the car roll back?* (A) No. Having brought the car to a stop with the footbrake, you can remove your foot from the brake pedal and the car will not move. There is no need even to apply the handbrake. *(Q) If the "D" (Drive) position caters for all variations in forward speed, why is there an "L" (Low) position?* (A) This is an extremely low emergency gear only likely to be needed in ascending very steep gradients such as those in mountainous districts. Alternatively, it can be used as an additional braking medium in descending long steep hills. It can also be used in conjunction with reverse to rock the car out of deep snow or soft ground.

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