

## SKODA 110 LS - Super de Luxe

The SKODA Motor Car Works Mladá Boleslav have extended their range with the SKODA 110 LS - Super de Luxe model since January 1972. Derived from the SKODA 110 L it is powered with the more powerful power unit originally designed exclusively for the SKODA 110 R - Coupé model and differs further with more comfortable appointments and other modifications improving its technical standard and giving the car a more sporting character.

## Principal Features

The Skoda 110 LS is a five seater intended for very exacting users with respect to its appointments and higher engine power. Performance and road qualities are of world standard for the capacity class. The car is particularly suitable for constant high speed especially on motorways and possesses good acceleration ability at low running costs. The oil radiator installed at the inlet ports near the water radiator allows constant high speed maintaining favourable oil temperature at the highest engine load even in countries with tropical climate.

Directional stability is perfectly safe being verified by competition cars with high engine power at speeds ranging about 180 km p.h. and with production chassis components and bodywork. The split circuit disc brake system employed also in the Skoda 100 and 110 L models meets the demands on safe braking efficiency of this type of fast car, in particular in combination with the radial ply tyres fitted.

The neat styling is improved by the trimings, as for instance by the plastic model plaque on the engine bonnet, the wheel trims; the front grille is the same as on the Coupé model, there are outside driving mirrors on both mudguards and the seats employ the "Keiper" reclining system from the Federal German Republic allowing smooth back rest adjustment into any position and safe locking with the car travelling.

The most essential feature of the Skoda 110 LS model is the increased engine power to 62 H.P. /SAE/ at 5500 r.p.m. the same as that of the Skoda 110 R - Coupé. The higher power output is obtained with a higher compression ratio of 9.5 to 1, a new camshaft with bigger inlet and exhaust valve opening and the "JIKOV 32 DDSR" twin choke register carburettor.

In recent years this type of carburettor is employed particularly on sports cars. They are a successful replacement of the hitherto used twin carburettors fitted next to each other which had the disadvantage of difficult setting and maintainance for a longer period of time in operation.

The new twin choke carburettor features a single float chamber, perfect regulation of the fuel - air mixture throughout the engine speed range and load. The operation of the carburettor is two--stage. The first stage is operative up to medium load when the second stage takes over as additional up to the maximum engine power. Smooth speed transition is governed by the vacuum register. The carburettor is equipped with mechanical cold starting device controlled from the driver's seat.

The cylinder head is alloy cast iron, the exhaust manifold branches to cylinders nos. 1 and 4, nos. 2 and 3. This called for modifications of the exhaust silencer. The inlet manifold is adapted for the twin choke carburettor. To reduce passive resistances in the cylinders special light alloy pistons with three piston rings are fitted. There is one chromium plated compression ring,

the second ring is semi-scraper and the third is a scraper ring. The engine sump is light alloy with cooling fins. The valve rocker arm shaft ends are supported in futher brackets. The "Pal-Magneton" distributor has centrifugal ignition advance regulation.

To maintain constant high speed, in particular on motorways, the engine is provided with an oil radiator located in the inlet ports ahead of the water radiator. The copper oil radiator is tubular with cooling fins interconnected with the engine oil passages by high pressure hoses. Protection against oil excess pressure is by safety valve, so that there is no need to uncouple the oil radiator in winter. The car is equipped with a copper water radiator with three rows of heavy duty cooling pipes.

The Skoda 110 LS equipment includes the alternator as electric power source, a standard feature of all Skodas beginning with the 1973 Skoda 100 model. This serves to ensure longer service life and perfect reliability of the electric system, as well as a higher power reserve for the electrical equipment of the car. The alternator is capable of supplying the car's grid with 35 Amp current at 14 V. It is constructed as a three phase generator with semi-conductor rectifiers, working in three-phase, two-way connection. Ten silicon diodes serve as semi-conductors. The regulating relay is mechanical, much simpler than in orthodox sets, since there is no reverse switch. No screws but connectors are used for regulator connections.

## Brief Specification:

Displacement 1107 c.c.

Bore/stroke 72/68 mm

Maximum power output /SAE/ 45.6 kW /62 H.P./

Maximum torque 8.62 daNm /8.8 kpm at 3500 r.p.m./

Maximum speed 145 km p.h.

Basic fuel consumption 9.0 litres per 100 km

Acceleration 0 to 100 km p.h. 18.5 sec.