

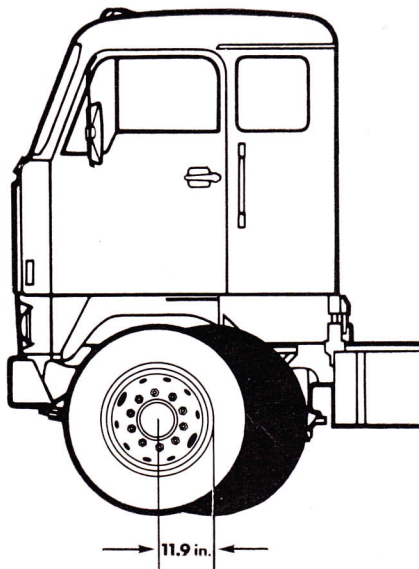
Short front-overhang and non-sleeper for Volvo

Latest model brings a new multi-speed transmission

A new short-front overhang Volvo prime mover will be available in Australia this month.

Designated the G88, it will supplement the F88 series which has been running here for some time. Release of the G88 also introduces a non-sleeper cab as an option for it and the F88 chassis range. Sleeper cabs are standard on both of these chassis in Australia.

The optional non-sleeper reduces the front overhang from 45.5 in. (on the standard sleeper) to 33.6 in. thus



reducing the BBC dimension of 75 in. to 59.4 in., while the weight has seen a decrease of 154 lb.

The entry step on the new G88 is now located behind the front wheel; it is larger and is of the shoe-scraping type.

The G88 will be sold in 4 x 2, 6 x 2, and 6 x 4 configurations, with various wheelbases additional to factory-of-fered standards.

The engine to be employed will be the TD 100A, a six-cylinder turbo-charged unit of 260 bhp (din) at 2200 rpm, and torque of 694 lb./ft. at 1400 rpm.

ENGINE DESIGN

The TD 100 has a capacity of 9.6 litres (585 cu. in.) and a bore and stroke of 4.75 in. x 5.51 in. Designed for turbo operation, it has separate cylinder heads for each cylinder, head gaskets made of solid steel, wet liners guided by a liner collar having a stepped edge for improved sealing, and stress transferring members between the cylinder head and the main bearings for maximum tightening torque. Compression ratio is 15:1.

The coolant system has been adapted for turbo running and features high-lying distributing channels for cylinder head cooling, ceramic wear ring for the water pump, three wax thermostats, and an expansion tank for the radiator.

The new cab has mudguards of fibreglass armoured plastic, and the air intake for the engine has been moved to behind the cab.

TRANSMISSION

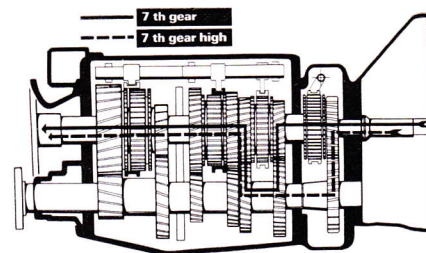
The new 16-speed gearbox — the SR 61 — is a combination of the

eight-speed Volvo 'Range' box. It has been reinforced and has a splitter section between the Range box and the clutch. The splitter section is fully-synchronised and can be selected so that each ratio in the main box can be given a corresponding high ratio.

The actual splitter is compact and measures 5 in. long, with a weight of 132 lb. Control is by means of a lever located on the side of the cab's radio console.

The lever mechanically controls a valve which, on operation of the clutch, opens a compressed air circuit to actuate the splitter. Gear changes with the splitter section are said to be approximately 0.2 sec. Gear ratio steps are 20% compared with the eight-speed R 60 box.

The clutch for the SR 61 will be 16½ in. single disc.



Ratios of the box are as follows:

1st: 11.22	5th: 2.86
1st high: 9.46	5th high: 2.41
2nd: 7.84	6th: 2.00
2nd high: 6.61	6th high: 1.68
3rd: 5.50	7th: 1.40
3rd high: 4.64	7th high: 1.18
4th: 4.93	8th: 1.00
4th high: 3.31	8th high: 0.84
	reverse: 10.29
	reverse high: 8.67

ENGINE CHANGES

Volvo has also announced increases in engine output for the 86-series trucks: The engines concerned are the TD and D 70 A units which are now designated TD and D 70 B. Other modifications to the 86-series chassis are a strengthened gearbox and an alternator rated at 980 W.

The most important modification on the TD 70 B engine is the totally new fuel injection pump which features a pressure governor (smoke limitation device). This is intended to limit the amount of smoke emission at low speeds and full load as well as during acceleration.

The injection pump now has 10 mm plungers, and the pressure line diameter has been increased. Jet opening pressure has been increased also, and a new camshaft, especially designed for the turbo version, together with a modified valve mechanism, has also been introduced on both this model and the D 70 B.

A newly designed piston is now being used, and this has a special version for the turbo engine. The upper compression ring, according to