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SECTION 13 — CONTROL LINKAGE

The drive selector lever on the steering column has five positions marked 'N', '4', '3', '2' and 'R'. It is connected to the gearbox selector lever by a system of rods and levers, connected by ball joints and clevis pins, as also is the accelerator pedal to the gearbox throttle valve.

As the engine and gearbox unit is flexibly mounted a method of preventing relative movement interfering with the controls is necessary.

Various methods are used and are briefly explained in the following paragraphs.

The early 'R' type has a swinging link or trapeze secured to the steering column and carries a shaft to which both the throttle and selector levers are mounted. This swinging link is positioned by the use of two rods connecting the selector lever with its intermediate lever. Accelerator pedal movement is transferred to the engine by means of a cross-shaft mounted on the bulkhead.

Control arrangement for later 'R' type and 'S1' types differ from the early model in that the control cross-shaft is not mounted on the bulkhead, but runs through the gearbox bell housing. This is fitted on both left and right-hand cars and eliminates the swinging link on the steering column.

'S2' and 'S3' cars are again slightly different, right-hand drive cars having the throttle control shaft bolted to the underside of the body and the gear selector cross-shaft located on the chassis frame at one side and by a swinging link attached to the bell housing bottom cover at the other side.

On left-hand drive cars all the controls are on the left-hand side of the car; the swinging link pivots on a bracket secured to the frame. Gearbox control levers are mounted on concentric control shafts which pass through oil seals in the gearbox side cover and through a bearing integral with the control valve unit. The levers are splined to their respective shafts and can be fitted in one position only (see Fig. 53, Chapter 3—Overhaul).

The outer shaft operates the selector valve by means of a pin engaging in a groove in the end of the valve.

Selector positions are determined by a spring loaded plunger engaging with notches in a plate which is integral with the lever shaft. Projections on the plate contact a blade which moves a cam to engage or disengage the parking pawl when the selector lever is moved into or out of reverse. The blade is spring-loaded to permit the pawl to be held out of engagement by the parking blocker piston.

The lever on the inner shaft varies the throttle valve pressure by acting on the stem of the valve, compressing the throttle valve spring in the control valve unit.