91-112 Design and operation of seat backrest lock

The automatic backrest lock on coupe serves to protect passengers, since the backrest will stand up to high impact stresses – in the event of an accident – and will not change its position. The system operates with a vacuum, which is established in intake manifold of running engine.

The line system of the vacuum backrest locking system is connected without a reservoir directly to intake manifold of engine, and the system operates only when the engine is running.

With both front doors closed and with none of the two vacuum switches on backrests actuated, the line system is also closed. With the engine running, a vacuum will be set up which will actuate the operating elements located underneath the front seats. The force of the operating elements acts on the locking hooks by way of a linkage and a guide lever. One each of these hooks is located on sides of seat cushions and holds the backrest fittings under a preload by way of a pin.

This preload is required to prevent any clatter of backrest or locking mechanism in locked condition.

As soon as the front door is opened or a vacuum switch on seat backrests is operated, the line system is under atmospheric pressure and the vacuum elements will become ineffective. Restoring springs provide the required force to pull the locking hooks back to their starting position.

The backrest can again be swivelled forward and permits effortless entrance and exit of passengers in rear compartment.