The automatic backrest lock on coupe serves to protect occupants since the backrest resists high shock loads – in the event of an accident – and will not change its position. The system operates with a vacuum established in intake manifold of operating engine.

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

With both front doors closed and if none of the two vacuum switches on backrest is actuated, the line system is also closed. A vacuum will be established when the engine is running and will actuate the operating elements located under front seats. The power of the operating elements activates the locking hooks via cable controls. Of these hooks, one each is located on sides of seat cushion and holds the backrest fittings under a preload by way of a pin.

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

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

The backrest can again be swivelled forward to permit easy entrance and exit of passengers seated in rear passenger compartment.