

Design and Operation of Backrest Interlock

The automatic backrest interlock of a coupe serves the safety of the occupants, since the backrest will resist high shock loads — in the event of an accident — and will not change its position. The system operates by means of a vacuum established in intake manifold of the running engine.

The line system of the vacuum-backrest interlocking system is directly connected to intake manifold of engine without a supply tank and the system only functions when the engine is running.

When both driver's doors are closed and none of the two rear switches is actuated, the line system is also closed. The running engine will establish a vacuum which actuates the operating elements located under driver's seats. The force of the operating elements energizes the interlocking hooks via a linkage and guide lever system. One hook each is located on each side of seat cushion and will hold the backrest fitting under a preload by means of a pin.

This preload is required to prevent any rattling of backrest or of interlocking mechanism in interlocked condition.

As soon as a driver's door is opened or a rear switch is actuated, the line system will be under atmospheric pressure and the vacuum elements will become ineffective. Restoring springs will provide the required force to pull the interlocking hooks back to their starting position.

The backrest can again be swiveled forward to permit easy leaving and entering of vehicle for rear seat passengers.