

One Key or 2 for the Car? Innovation Is Unwanted

By DORON P. LEVIN Special to The New York Times

New York Times (1857-Current file); Dec 29, 1992; ProQuest Historical Newspapers The New York Times pg. D5

One Key or 2 for the Car? Innovation Is Unwanted

By DORON P. LEVIN

Special to The New York Times

DETROIT — Standing in the dark next to a locked Buick, arms filled with packages, a shopper inserts the key in the door; it won't turn. A package falls. The door opens on a second try, but the key fails to turn in the ignition because it has been inserted upside down.

In the mid-1970's, the Toyota Motor Corporation, followed by other Japanese auto makers, introduced a way to prevent this annoyance: a single key, insertable in either direction, that unlocks the ignition, door, trunk and glove compartment.

Most automotive engineers today agree that the single, multipurpose car key is a blindingly obvious, inexpensive and low-tech innovation that in retrospect should probably have come earlier. But 15 years after single keys were introduced, the General Motors Corporation has yet to adopt the idea and is not even considering it.

Admittedly, General Motors is not the only company that has resisted changing to a single key. The Ford Motor Company still issues a sepa-

Tiny Saturn differs with G.M., its parent.

rate key for the trunk of most models, for security reasons, it says. And while G.M.'s failure to embrace the concept of a single key is hardly significant in itself, it may be symptomatic of a general corporate tendency to be tardy in adopting innovations.

G.M. issues one key that operates the doors and trunk, and a second key for the ignition, despite research indicating that customers prefer a single key. Only G.M.'s Saturn brand, which accounts for 6 percent of the three million cars G.M. sells in this country each year and which operates autonomously from its parent, has switched to one key.

It is not the first time G.M. has resisted innovations. The auto maker was behind the pack in bringing out advanced engines and transmissions. It also fought against seatbelts in the 1950's and air bags in the 1980's.

And some marketing experts and analysts say this aversion to innovation, even in the face of consumer demands, is a big reason that customers have defected over the years from the nation's No. 1 auto maker.

Anti-Theft Chip

"It's hard to fathom what goes on in that company when it comes to decision making," said Brian O'Neill, president of the Insurance Institute for Highway Safety, a nonprofit research group. "The decision to go slow on air bags definitely hurts them now."

Several senior G.M. executives interviewed say the auto maker has not changed to a single key because two keys may prevent dishonest parking attendants from opening the trunk. But a single key was also made impossible by an anti-theft feature G.M. introduced in the 1980's to cut down on a wave of G.M. vehicle thefts. Ignition keys are imbedded with a chip that electronically enables the ignition to work, but complicates the adaptation of a G.M. ignition key to fit a door or trunk. Moreover, the protruding chip makes it far more difficult to engineer the key so it can be inserted in either direction.

To cut through some of the inconvenience of multiple keys, G.M., like most auto makers, now offers a remote door opener for an additional \$135 on 30 of its 65 car and truck models.

One automotive engineer who spoke on the condition of anonymity theorized that regardless of that technical problem, shifting to a single key would have been an operational nightmare at G.M. The company manufactures all of its steering columns at a factory in Saginaw, Mich., and prefers to ship them to assembly plants with keys already in the ignition. This practice makes it somewhat difficult to match ignition keys and door keys.

G.M.'s "whole system has been geared to produce conservative, cost-conscious decisions," said Mr. O'Neill of the safety group. "They'll tell you saving a nickel a car adds up to a lot of money — maybe their key system is a holdover from that."

One Key Saves Money

Yet the tiny Saturn division, whose mandate was to lure customers from Japanese brands, adopted one key after testing everything its competitors were doing to see what innovations customers liked. "It's not black magic," said Paul Young, manager of Saturn product planning. Best of all, Mr. Young said, one key costs less.

G.M. executives have said they want to learn from Saturn. But Mr. Young, a 31-year G.M. employee, suggested a possible reason why they did not follow Saturn's lead in this case: "Why doesn't G.M. go to one key? It's because they always had two keys. I don't know."

For decades, General Motors was regarded as a leader in automotive technology — the first auto maker to incorporate inventions like safety glass and the air bag into its vehicles. With far more sales than its competitors, G.M. virtually ignored their models, sticking to the view that its own inventions and research from its own laboratories were what had made it No. 1. Its consumer research was aimed mostly at customers who already owned G.M. vehicles, so the company unwittingly insulated itself from criticism that its models did not stack up.

G.M. was the first to offer an air bag as a \$600 option during the 1970's, but decided that too few of its customers were willing to pay for it. So the company canceled air bags until Federal law forced the issue in the late 1980's.

Car Keys

Number of car and truck models produced by each company with either one or two keys.

COMPANY	ONE	TWO
Acura	4	
Chrysler	31	
Ford	5	20
G.M.	4	61
Honda	3	
Hyundai	4	
Infiniti	3	
Isuzu	5	
Lexus	3	
Mazda	10	1*
Mitsubishi	10	
Nissan	9	
Subaru	4	
Toyota	11	
VW	8	

*The Mazda Navajo has a separate key for the glove box.

Source: Company reports

In the early 1980's, as Japanese auto makers chipped away at G.M.'s dominance, it became clear that Toyota, Honda and others were benefiting from firsthand observations of how people used vehicles. Product planners for Japanese auto makers, for instance, might stake out shopping centers and then design a station wagon tailgate that is easy to open with packages in one's arms.

For drivers who fear a dishonest parking attendant might open their trunk, Toyota and others have introduced one key that opens every lock and the ignition, and a second — to be given to a parking attendant — that works on everything except the trunk. Saturn, Mr. Young said, is working on a separate "lock-out" feature that would protect the trunk from theft but would not require a separate key.