

When a sagging economy and rising fuel prices cause the bottom to drop out of the American car market, every phase of it is depressed. Recreational vehicles, particularly large motorhomes and vans, are among the hardest hit, as the lure of travel is dampened by high fuel prices and poor fuel economy. Van modifiers, who just over a year ago were working double shifts to keep up with demand, have for the most part shut down or converted to making lightweight trailers. Domestic manufacturers, hard pressed to retool for smaller passenger cars, have put production of mini-vans on the back burner while they strive to recoup sales with new fuel-efficient cars.

Fuel efficiency, until now, was never a really important factor to the average American car buyer. Even when crude oil was selling for \$3 a barrel, most of the world was paying \$1.50 per gallon and up for gasoline, while U.S. motorists enjoyed all they needed for 35¢—and even less during the so-called “gas wars.”

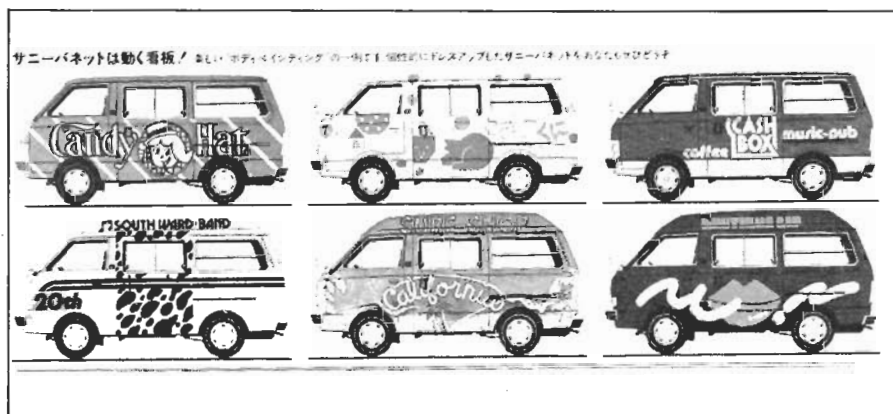
Consequently, foreign manufacturers designed vehicles that gave the most miles per pound, yen, krone, mark, franc or lira. Commercial vehicles, including trucks and vans, were also designed for fuel efficiency with some sacrifice of performance and load capacity. The best-known van to gain early popularity in the U.S. was the VW, available as a cargo van, multi-seat bus, or with a Westfalia camper conversion. Crew cab pickups were also made using the basic rear-engine-chassis platform.

The Japanese, leaders as they are in fuel-efficient passenger cars, also make a variety of commercial vehicles, including some very neat little vans. With no domestic source of crude oil, the Japanese have always been very conscious of the need for the ultimate in fuel efficiency, and the worldwide acceptance of their vehicles attests to the fact that Japanese cars get good gas mileage. As a highly industrialized nation, they have need for all types of commercial vehicles, from heavy trucks to light utility pickups and vans. Until recently, vans and station wagons were considered only for commercial use and were licensed as such, but they are coming into more general use as private passenger and recreational vehicles. While the mini-pickups are distributed worldwide, the Japanese vans are available in about every country except the U.S. The Japanese answer to “Why not?” varies from “Does not meet U.S. crash standards” to “Have not thoroughly explored U.S. market acceptance.” When queried as to what is most important to American vanners, surviving a 30-mph frontal crash or 30 mpg, the answer was obvious: “30 mpg.” Our National Highway Traffic Safety Ad-

Japanese Vans

They're waiting in the wings





ministration has long frowned on forward-control vehicles, which has resulted in the new domestic van designs that feature a short semi-hood. VW's new Vanagon, however, has pretty much the same frontal design as the original van and still meets U.S. standards. So it seems very likely that existing Japanese vans could be modified for U.S. import with little alteration to existing body styles.

Among the most likely candidates that would fit nicely into the American market are the Nissan (Datsun) Caravan, Mitsubishi Delica, Toyota Lite-Ace and Mazda Bongo Multi-Van. Once building vans as purely commercial vehicles, most manufacturers are now emulating American van decor with near passenger car-like interiors, multi-seating capacity, carpeting and raised roofs for extra head room. Mazda's Multi-Van and Nissan's E20 series are available with diesel engines, an option American van makers should have offered in the face of waning sales and the need for better fuel economy. While Japanese van makers build a variety of models, there are some that would fit very well into the American travel mode for both commercial and recreational uses. Four-cylinder engines are the rule rather than the exception, and they range from 58 to 91 horsepower. The power could be easily increased for the U.S. market and be competitive with small 4-cylinder U.S. passenger car engines slated for immediate and future production to meet coming CAFE standards.

All of these smaller vans are front-engine, rear-drive with MacPherson-type independent front suspensions, solid axles with leaf springs at the rear, and 4-speed manual transmissions. Compared to American vans with some intrusion of the engine compartment into the front section, the Japanese models gain unobstructed floor space by locating the engines beneath the front seats. This is one of the problems in meeting U.S. frontal crash requirements, as there is nothing between the front passengers and a potential crash but some sheet metal. This seems to worry the NHTSA more than it does the Japanese van owners. In light of Nissan's decision to build a truck plant in the U.S., it is quite possible that part of the production schedule will include vans that meet U.S. crashworthiness specifications.

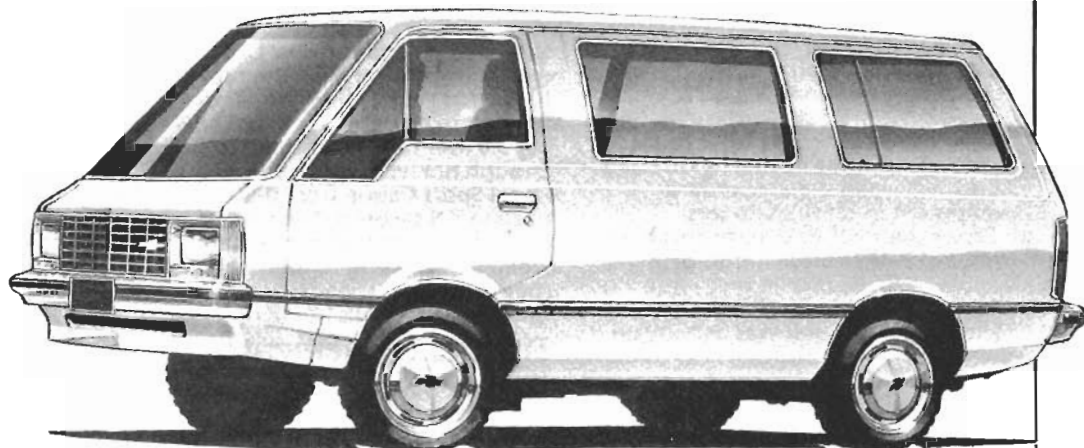
Legal for the U.S. or not, it is a sure bet that right now any number of Japanese vans made available on the domestic market would be sold out as fast as they could be unloaded from the boat. There is little doubt that scaled-down vans with good mpg numbers have a substantial place in the American market. MT

International Report

ILLUSTRATION BY DUANE KUCHAR

CHEVOTA OR TOYOLET, TAKE YOUR PICK

While it was yet to be announced at press time, General Motors has come to an agreement with Toyota to build small vans in the United States before the end of 1984. Plans call for the General Motors Assembly Division, or GMAD, to build a modified version of Toyota's successful Hi-Ace van. Apparently, Toyota's management was quite impressed by GM's manufacturing proposal and GM Design's restyling of the Hi-Ace. The major suspension and drivetrain components will be imported from Japan along with some of the sheet metal. The truck's interior, front sheet metal, structural body stampings and electrical and hydraulic systems will be sourced in the U.S. The agreement calls for the van to be built as both a Toyota and a Chevrolet. In addition to the



styling differences between the two models (different grilles, headlight arrangement, wheels, bumpers, and taillights), the Toyota and Chevy will be fitted with different powerplants. Toyotas will be offered with either a 2.4-liter OHC gas engine or a 2.2-liter diesel, both of Toyota design and manufacture. The GM van variant will offer a 2.0-liter OHV four from the J-car as the base powerplant with the corporation's 2.8-liter 60° V-6 and 4.3-liter diesel V-6 as optional engine choices.

While it may seem overly complex building the same vehicle with different engines, neither GM nor Toyota were interested in adding extra engines to their already large powertrain lineups. Also, there was more than a little concern about a possible buyer backlash from middle Americans displeased about getting "a Chevy with a Toyota motor."

It seems as though GMAD will build the Hi-Ace at one of the corporation's two recently closed California assembly fa-

cilities: Fremont, in the San Francisco Bay area, or South Gate, an older plant located in the eastern part of the Los Angeles basin. While South Gate is closer to Toyota's U.S. headquarters in Torrance, the Fremont plant was building trucks as recently as October 1981. In addition, the Fremont facility would be better suited to the assembly of a vehicle the size of the Hi-Ace. In either case, you can expect an official announcement from GM and Toyota before February 1983.

NEW FROM ITAL DESIGN

Giugiaro's Ital Design displayed two prototypes at this year's Torino Motor Show. One, the Orca, is a front-wheel-drive version of the original Medusa show car. Unlike its predecessor, which was mid-engined, the Orca is powered by a 1.6-liter inline four Lancia Turbo Delta engine driving all four wheels through a 5-speed gearbox. While there are no plans to do so, the Orca could be produced with little difficulty.

The same cannot be said for the Ital Design Capsula, a "people-mover" that redefines the word bizarre. The vehicle is claimed to be a logical extrapolation of design concepts introduced by Giugiaro on the Megagamma and Alfa Romeo Taxi projects a few



Orca

years back. The Capsula features a separate modular powerpack that is not an integral part of the vehicle structure. Presumably this could be swapped for a "loaner" motor in the event of major engine repairs. One thing is certain: With its gullwing doors, rocker-panel-mounted storage lockers, and colossal glass area, the Capsula is the strangest thing to come out of Ital Design in many years.



Capsula