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MotorHome Life

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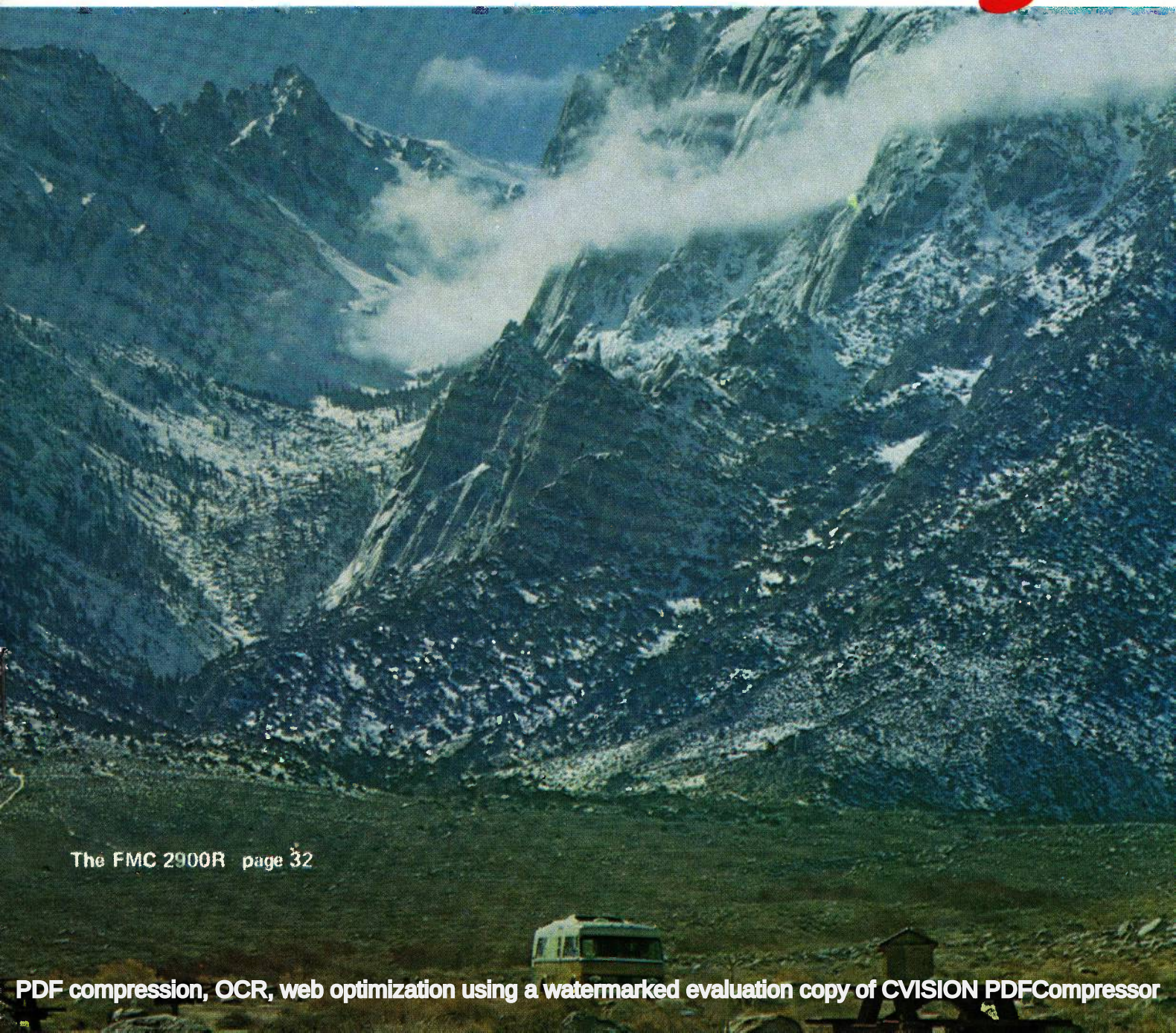
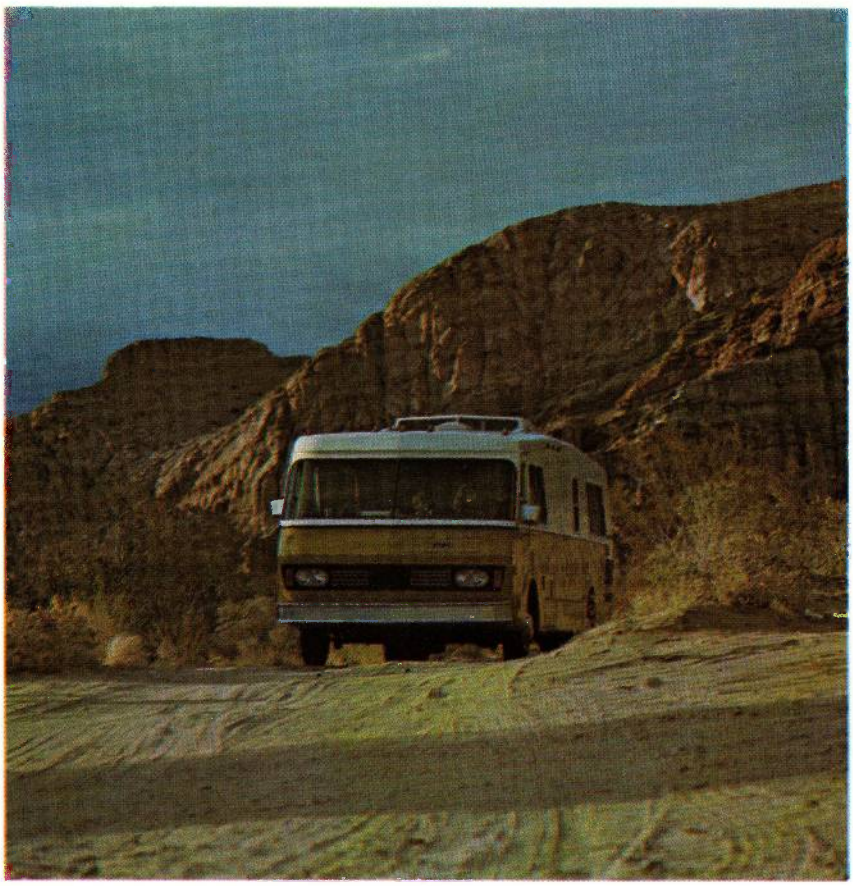


The FMC 2900R page 32

The FMC 2900R

A motorhome unique in driveability and livability for the experienced RVer.

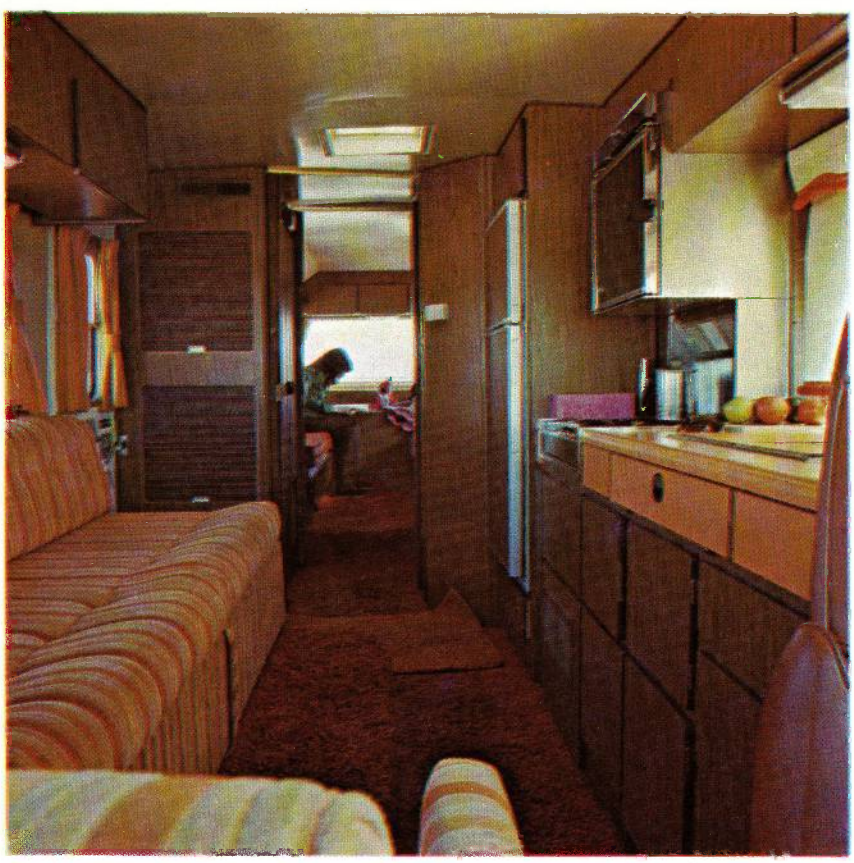
by BILL ESTES, *Technical Editor*



The rear-engine, steel/aluminum frame FMC 2900R is an exceptionally well designed coach with good aerodynamics for comparatively good mileage. It has a driver's door as well as conventional door on passenger side.

Floor plan J features an L-shaped sofa with forward seat which faces forward or rearward with change in seat back position. Chassis instrumentation is in front of driver and coach instruments in center. Visibility is excellent.

Workmanship and decor of the 2900R are excellent and storage compartments of many shapes and sizes are plentiful. Two dining tables stand on individual pedestals which fit recessed, concealed sockets in raised floor in front of sofa.



"FEW COMPANIES could build a coach like the FMC 2900R. Perhaps none could conceive its total design and engineering as well as FMC."

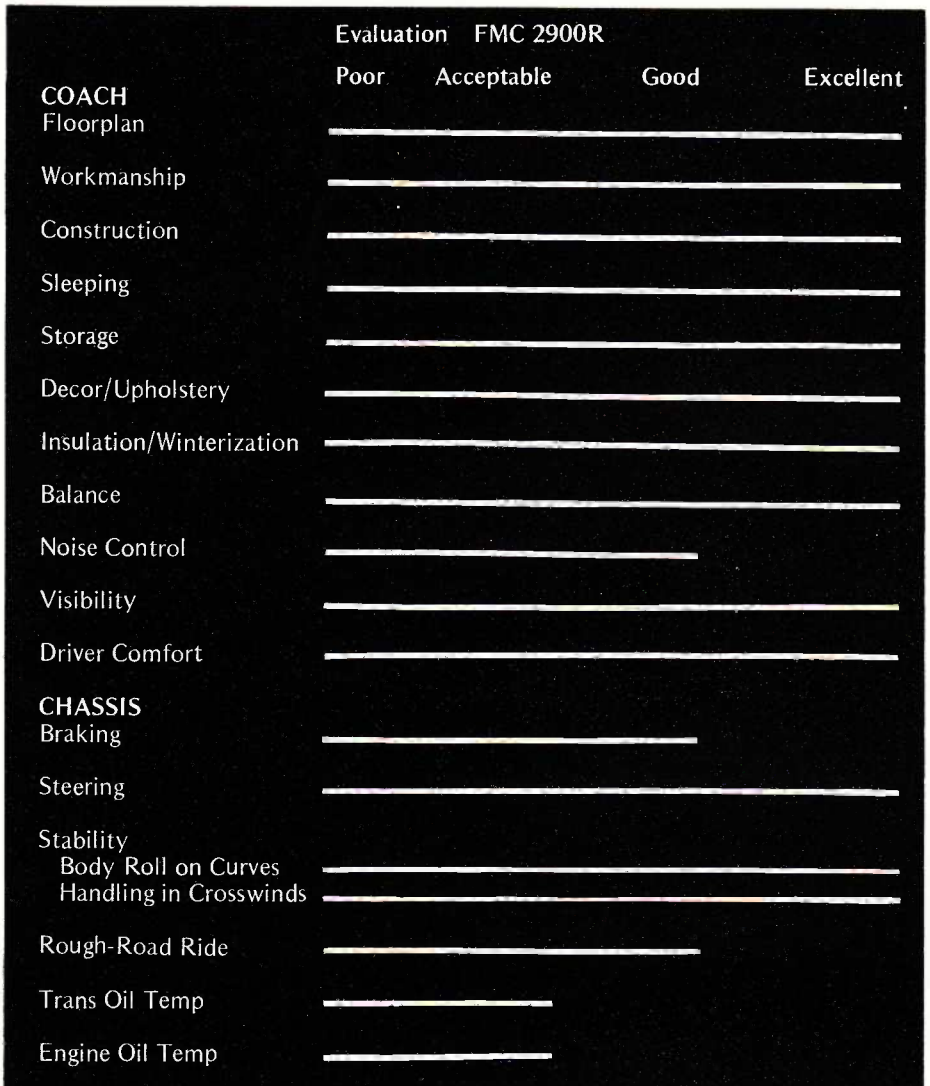
That's FMC advertising talk, which might appear to the unacquainted prospective buyer as a typical idle boast. However, a $1.7 billion international corporation which builds anything from food processing machinery to military armored personnel carriers doesn't have to make idle boasts.

With that kind of engineering background (and the list is quite lengthy, including street sweepers, amphibious vehicles, fire trucks, Navy subchasers) — and considering the fact that the 2900R carries a $40,000 price tag — it would be logical to assume that this motorhome leaves little to be desired. Really something extraordinary, both in driveability and livability.

Those three words tell the story quite effectively: extraordinary driveability and livability. While the FMC is not without its shortcomings, they do not seriously detract from the fact that it's exceptional in design as well as execution. Its 4-wheel independent suspension is quite unusual in motorhomes and the "pusher" engine configuration is not common. An idea that looks great on the drawing boards can be a mess without good production quality control. FMC comes through with both in the 2900R.

Something that really comes across in the FMC is the fact that this is a *comfortable* motorhome. Comfort is an apparently simple ingredient, but it can easily escape a designer, even in a coach large enough to hide minor floor plan mistakes.

The FMC is available in two floor plans, one with an L-shaped sofa (model J) and the other with a conventional RV-type booth-style dinette (model A). The Model



PERFORMANCE

	MPG
Mileage*	
Flat Highway	8.9
Trip Average	7.2
Engine Coolant Temp	
Level	189
Uphill	198
Trans Oil Temp	
Level	183
Uphill	252
Engine Oil Temp	
Level	230
Uphill	260
Acceleration Time	
0-55 mph	19-1/2 sec.
40-55 mph	9-1/2 sec.

*Flat highway mileage recorded at 50-55 mph, 65 degrees F. ambient temp. Trip average mileage in mountains 800 to 4000 feet altitude. Operating temperatures recorded at 60-65 degrees F. ambient temp; uphill test on 8-mile 6% grade.

SPECIFICATIONS

COACH

Ext. Length	28'8"
Ext. Width	96"
Ext. Height	9' 1"
Int. Height	75"
Frame Const.	Steel perimeter chassis, steel/aluminum safety cage upper body
Insulation	Urethane foam & fiberglass
Water Cap.	60 gal.
Waste Holding Cap.	37 gal.
Sink Holding Cap.	29 gal.
Propane Cap.	20 gal.
Water Syst. Type	Demand
Furnace	30,000 Btu
Refrigerator	8-cu.-ft. 12V
Toilet	Marine
Electrical	105A starting batt, 205A aux. batt (2), 45A converter, 6.5KW AC generator, 28,000-Btu auto air cond, 22,000 domestic air cond.

CHASSIS

Engine	440 cu. in. disp., 247 net SAE hp @ 4000 rpm, 371 lb-ft net SAE torque @ 2900 rpm; 8.12 to 1 comp. ratio; 4-barrel carburetor.
Transmission	3-speed automatic
Axle Ratio	4.62 to 1
Tire Size	7.50-17 10PR Michelin radial-ply, max 5510 lbs. per axle w/ 2 tires, 10,480 lbs. per axle w/ 4 tires; at 70 psi.
Wheelbase	185"
Brakes	Drum, 14-1/8 x 3-1/2"
Suspension	Transverse leaf front, torsion bar rear; all independent
Cooling System	33-1/2 qt. cap.
Trans Oil Cooling	Integral in Radiator
Fuel Capacity	60 gal.

WET WEIGHT

(Water, gasoline, propane tanks full but no supplies or passengers)

Front Axle	4425
Rear Axle	8645
Left Side	6740
Right Side	6330
TOTAL	13,070
GVW Rating	14,500 lbs.

Owner may add up to 1430 lbs. in weight of passengers, supplies and equipment to motorhome equipped as test unit, without violating chassis mfr. gvw rating.

J plan is infinitely better, providing a home atmosphere and more seating capacity with a convertible front seat. It faces forward for travel, making the remaining seat a gaucho-style accommodation. Then the seat back pivots and forms the spacious L-shaped sofa. Upholstery is luxurious, although the light orange color in our test unit was vulnerable to stains.

The seating area is surrounded by large tinted windows for excellent visibility and an excellent sense of spaciousness. It's among the most suitable motorhomes we've seen for entertaining guests — as long as they're seated or standing. Accommodating overnight guests is another story which we'll get into later.

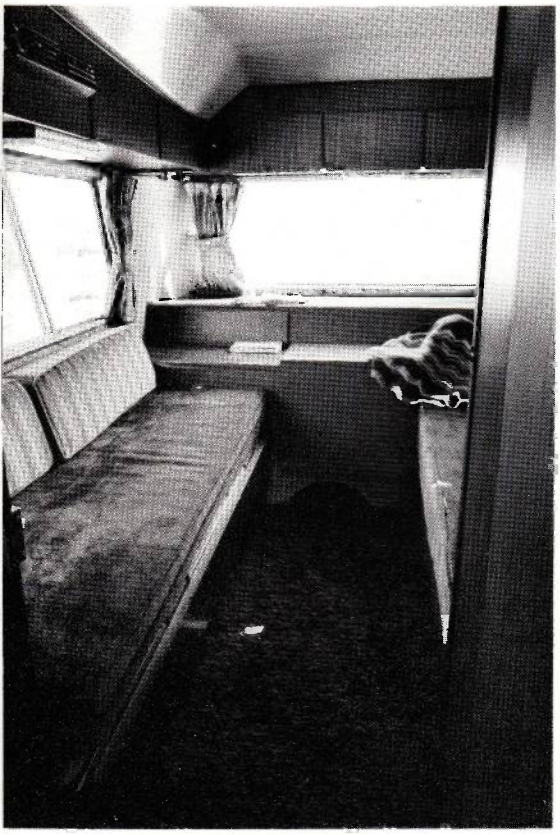
Dining is accomplished by erecting two free-standing tables in front of the sofa. Four adults can dine without problems with elbow room, although all must sit forward because the tables are slightly high and a little too far away to be ideal.

The table legs fit metal sockets recessed in the floor which are covered with patches of carpet when not in use. Thus the motorhome shows no evidence of dining capability — and no congestion caused by its intrusion into the living area — until dinner is ready. Then the tables appear from a drawer below the refrigerator and the two legs from their hiding place in the cedar-lined closet. It's a well-laid plan.

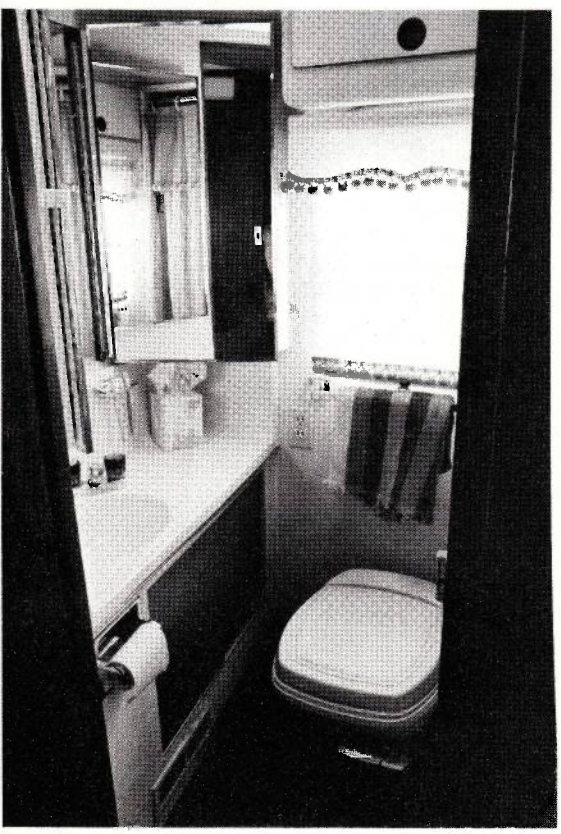
Diners are served from the galley directly across the aisle. It's a conventional bench-style arrangement with double sinks, a built-in garbage pail covered by a chopping block and a four-burner range with eye-level oven. Counter space is adequate, but barely. We found ourselves using one of the dining tables for additional food preparation area. However, our trip involved two adults and two children. With just two adults, the additional counter space shouldn't be necessary.

Holding the galley to minimum size is a design theme which occurs elsewhere in the 2900R. The bath, immediately toward the rear of the galley on the driver's side, also is not what you'd call spacious, although it's quite adequate. This is as it should be. We don't live in the bathroom and any space wasted there must be subtracted from another area. There is a crucial difference, though, between an *adequate* bath and one even slightly too small, which is *in*adequate. The FMC bath serves its role nicely, while including one very strong and unusual feature which the ladies love — three-directional mirrors to permit a view of the back of one's head without use of a hand mirror.

Storage in the bathroom is quite generous, with two medicine cabinets, a large cabinet under the lavatory and a small one overhead. When the furnace is in operation the bath is the warmest place in the coach, even with the air duct



The rear of the coach serves as lounge/sleeping area. A folding table can serve as a desk. A 60 x 79 queen-size bed is set up by folding cushions over a center panel; operation takes 30 seconds.



The FMC bath features a 3-directional mirror and generous storage space with two medicine cabinets. With furnace on, it's also very warm.

closed.

The bath faces a large double-door, cedar-floored wardrobe across the aisle and they form the division between living and sleeping quarters. The rear bed area is designed to serve also as a lounge. Two accordion-style vinyl doors either end of this center bath/wardrobe area divide the motorhome approximately in half. A folding table between the two twin-size rear beds can serve as a desk. Mattresses are medium-firm, an excellent compromise between their two intended uses, sitting and sleeping.

As individual beds, the sizes are 36 x 79 inches. When the two mattresses are placed side by side across the aisle, on special panels provided for the purpose, the queen-size bed is 60 x 79 inches. Arranging the cushions to form the queen-size bed is a 30-second job.

The motorhome's forward bed is formed by the sofa. With the J floor plan, sofa bed length is an exceptional 99 inches. The width of 43 inches is the factor which limits FMC owners' ability to have overnight guests, except children.

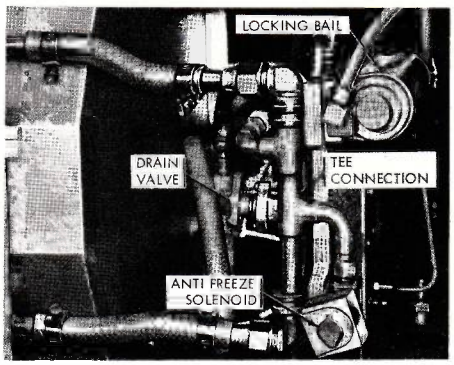
Nighttime privacy is excellent, with drapes of top quality fabric covering the exceptionally large windows, and a wrap-around fabric curtain which attaches to Velcro tabs to cover the front windshield.

Decor, upholstery and carpeting are outstanding throughout the FMC 2900R. Three color schemes are available.

Systems-wise, the coach is equally as good on almost all points. The 60-gallon fresh water capacity is divided into two tanks. A 38-gallon tank is attached under the coach in much the same positior an engine — if the FMC had a front engine rather than its rear Chrysler 440 V-8. It's enclosed in a steel box with styrene foam insulation. Being above the floor, freezing is not a problem with the other tank. Both are filled simultaneously through a front fill spout under a small access door just below the driver's windshield. The tanks fill easily, without backup due to trapped air, because both are air-vented.

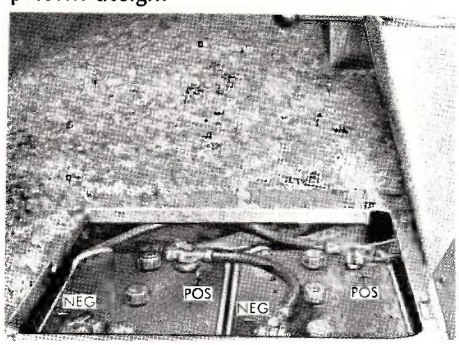
Design-wise, one curious aspect of the FMC is how the main water intake line between the pump and tank is routed. It's underneath the coach, contained in thin foam conduit and attached to the bottom. It would be quite vulnerable to freezing were it not for the FMC's automatic 12-volt anti-freeze system. The water pump and bulk of the plumbing is beneath the galley. Two lines drop through the floor there and traverse forward to the under-floor water tank. One line is the aforementioned water intake and the other is a hot water line connected to an electrically operated valve below the galley.

An electrical sensor is mounted on the below-floor water tank near the main-water outlet to the pump. When temperature of water inside the tank drops to 36 degrees, the solenoid opens, the water pump is activated automatically (as if a faucet were opened) and hot water is pumped into the main water tank. The water circulates within the system until water tank temperature reaches 41 degrees. Then the anti-freeze system deactivates. The pump and system draw 10 amps when running.



The automatic anti-freeze solenoid is on a hot water line in plumbing compartment under galley.

During the initial part of our test, which was conducted in the high mountains with nighttime temperatures of about 10 degrees, we inadvertently left the water pump switch in the off position. The result: a frozen water intake line. The below-floor tank did not freeze, but the line was solid. Daytime temperature rose to 40 but the line did not thaw. A catalytic heater was not available to position under the floor for the defrost job, so the line had be be removed, which took more than an hour. The moral of the story is to run through a check-list before retiring in cold weather: make sure the water pump switch is on and that the coach batteries have enough power to last through the night. The FMC owner's manual describes the anti-freeze system but does not indicate if a pre-check of the system is possible, to make sure it will function later. The engineering department indicates such a check is not possible with the present design.



Two six-volt electric vehicle batteries wired in series for 12 volts are under floor ahead of driver's seat. Ampere-hour rating is 220.

Of course, battery worries are eliminated when the coach is connected to an outside power source, because the 45-amp converter provides 12-volt power

The motorhome is equipped with "wheels filled with brakes," as FMC likes to say. Although drum brakes are used front and rear as opposed to disc front and drum rear, the shoes are unusually large at 14-1/8 x 3-1/2 inches and resistance to fade is quite good. Dual vacuum boosters are used. The brakes must be manually adjusted periodically when brake pedal travel becomes excessive.

The Chrysler engine is equipped with electronic ignition, which eliminates need for periodic breaker points adjustment. It insures that engine initial timing will not gradually retard as breaker point setting changes due to wear of the rubbing block. This is fortunate, because maintenance on anything which must be reached from the top is difficult. Spark plugs are easily accessible, as is the oil filter, but working on the carburetor is something else. The air cleaner can be removed relatively easily, and should be changed often because the engine picks up a lot of dirt that a front-mounted engine avoids. Attention to the air filter is critical when the motorhome is driven on dirt or gravel roads.

Manifold vacuum on level highway at 55 mph in low altitude was between 14 and 15 inches, which is well in the economy range and indicates the engine does not have to struggle with its load under moderate conditions. Of course, during hill climbs the relatively high weight requires heavy throttle. The engine operates without complaint on regular-grade gasoline.

Operating temperatures recorded during our uphill climb of an 8-mile 6% grade in second gear with a heavy foot on the accelerator indicate the FMC will maintain adequate temperatures in warmer weather than we encountered. Engine and transmission oil temperatures were monitored in the sumps. Transmission oil cooling is integral in the radiator. Undoubtedly it will reach or possibly exceed 275 degrees F. on a hot day, judging from the 252-degree level we recorded at 65 degrees. An auxiliary transmission oil cooler connected in series with the radiator oil cooling tank would be a wise investment if the FMC is operated frequently in mountainous areas in hot weather.

Another good addition would be a red-line for the engine water temperature gauge. It's calibrated to 300 degrees F. with no visual indication of what constitutes "hot," which might lead the owner to inadvertently overheat the engine under extreme conditions. A good place for the red-line would be 245-250 degrees, although actual boil-out would not occur until about 260 (at low altitude and with a 50/50% mix of anti-freeze and water).

The FMC 2900R has so many innovative features and systems that this description could easily continue for twice its present length. But suffice it to say, in conclusion, that the following statement from the manufacturer should be in no danger of challenge from the Federal Trade Commission as a false advertising claim: "The FMC 2900R . . . will bring you the world of difference that experienced recreational vehicle owners have asked for in the ultimate coach."

(Manufacturer's Address: FMC Corp., Recreational Vehicles Division, PO Box 664-TL, Santa Clara, Calif. 95052.) MHL

We asked RV owners what conveniences they wanted.

Then we delivered. With whisper-quiet driving. A flat front deck. And a door for the driver.

You could trade whispers all day long in the FMC 2900R—if you were cruising an expressway at 70 mph, or climbing a steep grade—because the engine is a coach's length away in the rear, where it should be.

A special differential keeps things quiet to begin with, and a heavily insulated engine compartment keeps things cool.

There's no engine hump separating the front seats, either. The front deck is flat and unobstructed, so you and your crew can get into and out of your seats without a struggle. And there's full legroom seating for the driver and *two* front-seat passengers.

Inside this 29-foot beauty are conveniences like a central hallway that turns into a private dressing room, a built-in pantry, and convertible rear beds. And there are large capacity air conditioning systems to cool you on the road or while you're parked.

The FMC 2900R delivers a ride, quiet, handling and convenience you won't believe—until you take a test drive. To locate your FMC dealer, write FMC Corp., Recreational Vehicles Division, Dept. ML,P.O. Box 664, Santa Clara, California 95052.

Engineering makes the difference

Driving quiet you won't believe

No engine hump

Easy in, easy out

FMC Recreational Products