# It Takes "GUTS" + \$\$\$'s To Be Original

## After Three Years and a Wastebasket Full of Plans and Sketches Arrives the TIARA...the Crowning Jewel of Motor Homes

By Jack Tillotson

The great American game it seems has been to follow the leader. Be cozy, play it safe, and whatever you do, don't be original. Just follow like a flock of sheep.

If you will visit the average recreational vehicle show, after you have looked at dozens of units, you can't remember any outstanding features that make one stand out over others. This seems to be particularly true in the motor home field—just follow in the path of others. It remainds one of that poem of the wobbly calf.

One day through the primeval wood,
A calf walked home, as good calves should;
But made a trail all bent askew,
A crooked trail as all calves do.
This forest trail became a lane,
That bent and turned and turned again—
And this, before men were aware,
A city's crowded thoroughfare;
And men two centuries and a half
Trod in the footsteps of that calf.

Tradition has it that actually many of our early cities were laid out that way. For example, Emerson once wrote, "We say that cows laid out Boston-Well there are worse surveyors."

You will find basically two types of motor homes. There are those with square upstanding corners and lines, usually wood interiors and skeleton framing or reinforced with wood. Then there are those that are aerodynamically streamlined, aesthetically appealing to the eye, and usually a framework of metal.

Most any "shade tree mechanic" with a hammer and saw can build a "box", run a truck chassis under it, and call it a motor home. But it takes experienced engineers, toolmakers, draftsmen, mechanics, metal workers and genuine craftsmen to build the kind of a motor home of which you can proudly say, "That's My Home."

As you will quickly see, motor homes vary all the way from the upstanding boxes on wheels, to the ones with graceful streamlines and aesthetically pleasing curves.

The TIARA of course belongs in this latter class. It is so new, however, so different and appealing that it is entirely in a class by itself. We believe that you will find it different from anything you have ever heard of. Someone has compared the wind resistance of the square upstanding vehicles to pulling an open parachute behind you.

FIRST and foremost it is a front wheel drive vehicle, powered by the fantastically popular and power-packed 375 Horsepower OLDS-MOBILE TORONADO Rocket engine. For years engineers recognized the many advantages of supplying power in the front, allowing the rest of the vehicle to follow, rather than the customary pushing from the rear. Originally there were certain mechanical problems.

When GENERAL MOTORS first came out with the front wheel drive a few years ago, it was a bold experiment. The idea caught on with the public. Sales and acceptance grew. It proved so popular that for the 1969 season GM added this feature to their most expensive luxury car, the Cadillac El Dorado.



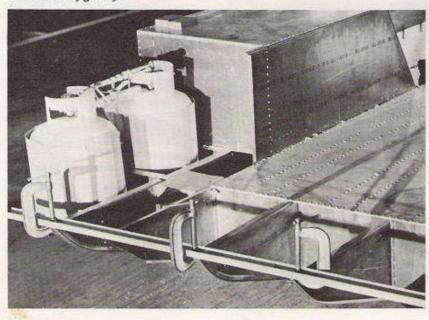
Even a Casual Inspection Will Show You How the TIARA is Miles Ahead.



The OLDSMOBILE TORONADO 375 horsepower Rocket engine is the heart of the TIARA Motor Home. Nothing can equal this front-wheel drive unit.



The rolled and welded aluminum rocker panels, have out-riggers and bulkheads attached as shown. Gasoline, holding and fresh water tanks go underneath for a LOW center of gravity.



TORONADO sales were so brisk, that we had difficulty for a while even getting these units. Our first test unit was developed by our buying a used car and taking out the engine and drive train. WOW! what a sensation and what a difference from the usual motor home built on a truck chassis with a truck engine. Any possible doubts we might ever have had concerning this power-package, melted like a spring snow. In talking to various TORONADO owners, from their enthusiasm one might have been suspicious that they were GM employees.

While you drive this just like any other vehicle, there is a sureness and a feeling of precision and confidence above and beyond what you are accustomed to. You aim the front and the rear is sure to follow. It's that simple. That is why it is so perfect for a motor home.

On rough roads, sharp curves, snow or mud—the superior traction and maneuverability give you confidence and a feeling of sureness never before equalled. The TIARA Motor Home has the riding qualities and handling responsiveness of a luxurious high-class passenger car. The power is instantly ready to do your bidding—It will perform like a giant, or purr like a gentle kitten.

You may say, "Oh, I don't need that much power." It is true that normally you don't, but you pay for what you use. Remember, when you DO NEED POWER on inclines, or passing it is there ready to respond for you instantly. (A proposed new Federal Safety Regulation is suggesting that all vehicles have a reserve of power to allow acceleration on passing and on inclines.)

Many motor homes are underpowered today, running 40 to 50

Rear view, showing wheel wells and the twin, 20 lb. (each) L.P. gas cylinders. These have the automatic change-over, with "red" showing when one tank is empty. This compartment is completely sealed off. The aluminum floor keeps the weight down, yet gives superior strength. Aluminum has twice the strength of auto frame steel, yet weighs only one third as much.

pounds of weight per horsepower. Many run more. We know of one unit that runs 133 pounds per HP. This is on the basis of curb or empty weight. Add fuel, water, gear and passengers and what-have-you—"Oh! my poor

aching cylinders", says the engine.

The TIARA, owing to its all aluminum construction like an airplane fuselage has a curb weight of around 6,000 pounds, or 16 pounds per HP. Even if you add a ton of extra weight (which is more than normal) you are still around 21 pounds perhorsepower. Nothing, absolutely nothing with which we are familiar, can approach this margin of safety in emergencies.

# How Come!! An Ex-Publisher Builds Motor Homes?

You may wonder why a former magazine publisher should become interested or involved with manufacturing motor homes. Frankly, until about 1964 I had never heard of one. Returning from a South African holiday, the hostess gave my wife a magazine with a story about motor homes. The idea appealed to us. It grew until we plunked down a substantial amount for what looked like the best, yet reasonably priced motor home then in the field.

Then the trials and tribulations began. They could fill a book. The first shower bath left water from stem to stern. Rain—Ugh! it came in in a dozen places. One persistent spot we never did fathom. So when rain started, a towel was placed under this place to catch the drip.

In spite of all of this, we enjoyed the unit immensely. It made all other types of recreational vehicles obsolete. Our Motor Home became our car—it was our efficiency-apartment, our modern hotel or motel room—all in one. It had this added advantage: We could have a change of scenery whenever we chose.

There are illustrations showing the TORONADO engine, the floor and rocker arm sections, as well as how the sides are formed in one unit. This sketch may give you a clearer understanding of how they fit together.

A couple of decades ago the song "Little Gray Home in the West" was very popular and on everyone's lips. They must have subconsciously been dreaming of the coming of the motor home. Now, however, you can have your home in the West, the East, North or South.

When you get your first motor home, provided it is a TIARA, you can lustily sing "Happy Days are Here Again." Incidentally, motor homes have become the fastest growing segment of the recreational vehicle field.

With a TIARA you can be a carefree nomad, a vagabond or wanderer, living day by day without responsibilities or a worry for the morrow. It is the "ideal" for honeymooners or those celebrating their Golden Wedding Anniversaries—and everyone between. There are no reservations to worry about, or wondering where you can find a good place to eat. This is the motor home that is years ahead—just talk to any owner and you will understand why we make this statement. You get a maximum of comfort, with a minimum of care.

Following the concept of an airplane monocoque fuselage, this shows one half of the roof and one side, with ribs, being formed into a single piece. The ribs and side as shown on the right, go into the channel as shown on the outside of the rocker panels on the opposite page. Urethane fills the space between the ribs, giving twice the insulation value of an equal amount of fiber glass. This will not absorb moisture from the air, and it is mildew and vermin proof.

This is the same insulating material used in the modern "thin-wall" refrigerators.



## **Motor Homes Become An Obsession**

The motor home idea almost became an obsession with me. Finally our company, from which I had retired, bought a small motor home manufacturing company. It was a GOOD unit, but still didn't measure up to all that I felt a motor home should be. I felt a better one could be built.

I started "doodling", making sketches—throwing them away—making more. The problem with the limited space available, without building a bus or a box car, is to get everything in that was necessary or desirable and still have living room.

Finally I turned the rough sketches and ideas over to our engineers, and we set up a Research and Development Department. After several prototyptes, we now have the TIARA.

Having observed others entering this field, I got the idea that many were basically building something to sell-not to live in. I realize that peoples' tastes will vary, but I wanted something that I personally could be happy with. Many others undoubtedly would feel the same way, was my reasoning.

We established this policy: Executives, engineers, salesmen and service personnel have to go out in a unit and learn first hand what it is like to live in a motor home. What a difference that makes.

In our eyes, the customer is a mighty person. We try to visualize ourselves in his shoes. Employees working on production units are told, "Just imagine that your wife or mother is going to be riding in this vehicle."

#### We Dared to be Different

With this as a background, you'll understand how and why we dared to do things differently. We were not satisfied simply to copy others.

In attempting to describe a motor home, there is a question of where to start. There is much to tell, yet we do not wish to bore you. However, since you are thinking about a substantial investment, we want to give you full details, so you can decide for yourself.

As a rule men are more mechanically minded and wish to know the overall specifications. (A full detail list is found on a separate sheet.) Women on the other hand look more for comfort and livability. When going on a trip they do not wish to be tied down with a lot of work. That is why we designed this unit to make it enjoyable for the whole family. Since we are approaching the TIARA for the first time, let's examine it from the outside. Let's see some of the features that make it truly different.

We have already mentioned the 375 horsepower TORONADO engine, the relative weight to horsepower etc. Airplane grade aluminum is used for the outer skin. To show what this means: Several years ago in using regular aluminum we had a unit caught in a hail storm. The roof was dented and pebbled. Recently there was another hail storm in this area, cars, campers and trailers were severely damaged.

We had two motor homes using this airplane grade aluminum outside, but there was no damage. Remember the body is built in the monocoque (ovate) shape which allows the air to flow up, over and around. In addition it adds greater strength. To prove this, try the old stunt of placing an egg endwise between two palms of your



The pride of accomplishment shows in the smiles of this research and development team who stand in front of their masterpiece. Engineers, draftsmen, toolmakers, jig and die makers, electricians, plumbers, welders and riveters make up the group.

hands, and with a steady pressure, try breaking it.

We don't stop by just having a superior power plant and body. While we buy the TORONADO chassis from the OLDSMOBILE Division of General Motors, we eliminate some items and add others to make it suitable for our purpose. The Olds is 18 feet long. The TIARA is 23 feet, including the bumpers. When we get the chassis, we cut the frame off just back of the torsion suspension, and extend the wheel base from 119 inches to 173 inches. This gives a much shorter overhang above the rear axle. This saves bumps and dips, making a much smoother ride in the back than some units having six or more feet overhang. Here we might mention that the rear springs are built up to heavy-duty standards. These have been static tested for weights up to 2500 pounds each. The shocks are likewise heavyduty. We also re-enforce the rear axle with a welded steel plate to eliminate vibration and metal fatigue.

#### Other Changes We've Made

We previously referred to the torsion bars. These usually are found only on luxury cars. They help hold the front end level and eliminate the tendency to sway when going around curves. We have, however, enlarged these torsion bars, and added heavyduty shocks. We have added a heavyduty transmission oil cooler, just in case you load your vehicle a bit more than usual, are doing a lot of mountain driving, or wish to pull a boat.

Let me especially call your attention to the graceful contours and the smooth roof line not marred with a miscellaneous assortment of stacks, vents, air conditioners and what-have-you. There are two small vent pipes for the sink and shower, and the roof vent with an exhaust fan for the bath. This helps give the distinctive appearance to the TIARA.

In the motor home field it seems to be customary, to buy a truck chassis and have a long rear overhang. Some cut the chassis in two, extend the drive shaft and the side channels of the frame to the desired length.

On the TIARA, however, rather than extend the chassis side rails or channels, we take two welded and rolled pieces of aluminum for rocker panels. These are fitted to a jig with the outrigger or bulkheads as shown in an earlier illustration. All of this gives added strength. Wiring and plumbing lines are run in these rocker panels, so they are thoroughly protected.

As shown in the previous illustrations, the floor of the vehicle comes on top of these rocker panels. This extends from the base of the front bucket seats to the rear. The wheel wells are part of this unitized construction. This makes a stucture that is unbelievably strong, yet light in weight.

The forward part of the original chassis previously mentioned is then joined to this part of the structure. The OLDS chassis and this special suspension gives an automotive type ride, smoother than a truck. By using the rocker panels as described, this leaves rooms between to locate the fresh water as well as the holding or disposal tanks. Each of these hold around 50 gallons. The water tank is coated inside with an epoxy to eliminate any metallic taste or reaction between the water and the metal. Both tanks are coated with urethane-the material that does not absorb moisture from the air, and has twice the insulating value of fiber glass. This same insulation also goes under the floor of the vehicle. All of this adds up to a "snug" interior.

Each half of the walls and ceiling is insulated with this same urethane—the same as used in thin wall refrigerators. Borrowing from the airframe builders, the ribs and skin are joined with an adhesive that is much stronger than rivets. (Up to 3,000 pounds per square inch in some cases.) We have previously told you how these wall sections are mounted on the sides of the rocker panels. The mid-section where they join at the roof is sealed.

Next the end sections are added and they also have these insulated and protective areas. You now have the overall monocoque (ovate) structure like an airplane fuselage.

In addition to greater strength, these graceful curves have a distinct eye appeal. We have previously mentioned how this also cuts down wind resistance.

With many recreational vehicles, a lot of desirable features are "optional". That means extra cost. All features with the TIARA, except air conditioning and a power generator, are standard and included in the basic price.

For example, the windshield is of tinted safety glass. Tilted steering wheel, power brakes—disk in front and expanding in the rear. There are two brake cylinders, so if one set of brakes should fail, you still have braking power.

You get an extra spare wheel, and FIVE 8:90x15, six ply, eight ply rated tires. (Heat is the problem with tires. There is a difference of opinion, but many experts feel that the fewer ply tires will run cooler than when there are more plies.) These tires give a passenger car ride.

A transmission oil cooler is standard. There is an extra radiator-heater above the regular engine radiator. This gives floor level heat to the driver and front seat passenger through registers.

This unit comes with the turbohydra-matic transmission. There is also forward control steering especially worked out for the TORONADO to make it suitable for motor home use. This makes it possible to obtain more living space.

The "cockpit" or driver and front passenger area is slightly elevated from the main floor. Both bucket seats are adjustable from front to rear, and will turn. They are covered with quilted vinyl, which makes them more comfortable, as the air can circulate. Of course there are safety belts. These seats are over the front wheel wells, and the engine cover or hatch is between. This is hinged and can be raised forward. The entire area is carpeted and insulated. As you will note from illustrations elsewhere, this entire front is level all the way across. Nothing to climb or stumble over.

Dual batteries are standard. They are located in a compartment just back of the driver. There are two switches, permitting you to cut off either one or both of the batteries. When the engine runs the batteries are charged. They also can be charged when the shore line if plugged into a 110 volt source. The battery charger, which is in a companion compartment back of the passenger seat, automatically charges the batteries. When fully charged, a "diode

gate" bypasses the current. preventing overcharging. The rest of the space in this compartment may be used for tools.

Vinyl and plastic 11 inch wide coffee bar runs completely across the front area. You'll find this a most handy area. The seats can be quite easily removed, and this wide front "deck" can be covered with a mattress or sleeping bags for extra beds. Or for small fry, the seats may be turned and the space between filled in with a mattress or pillows.

Conduit is placed in the insulated walls and ceiling. This naturally protects the wiring, but if you should ever have any problems, the wiring can be replaced without having to tear out the walls. There is an outside light, turned on by an inside switch. You

may leave this on when away, expecting to return when it is dark, or you may turn it on to look out the doorwindow.

There is a three-way switch just inside the door that turns on a pair of high intensity lights over the daven-port-dining area. The other pole of the switch is beside the driver, so the lights may be turned on or off from either position. Another pair of these high intensity lights is in the back bedroom. These will rotate to throw the light in desired directions. There is a light over

desired directions. There is a light over the galley, one in the bath and another in the hallway in front of the closet. All of these lights operate on 12 volt current from the batteries.

current from the batteries.

In addition, there are six double plugs for 110 volt current. These are supplied from the shore line coming as standard with the TIARA, or if you have a separate generator installed, it will supply current to these outlets—in front, in the galley area, two in the dining area and two in the rear bedroom.

#### **Dual Emptying System**

Another innovation with the TIARA is the dual emptying system for the holding tank. There is a sump at the bottom edge of the tank, where the outlet fits on. Here is the customary knife valve and the three inch flexible hose. The end of this hose may be run into any dumping station outlet, and the knife valve turned on at the lower left side of the vehicle.

In addition, however, there is a tee at the outlet junction, with a powerful "Digester" pump connected to the 12 volt circuit. A hose is connected to the pump. Remove the cap from the end of this hose, and run it into any toilet. Flip the switch and the pump does the rest, emptying the tank in a few minutes. Run a bit of fresh water through the tank, flush the toilet, rinsing the end of the hose, replace the hose cap, return it to the hinged covered compartment. It is really a white-glove job.

Looking down the road a few thousand miles, if you should ever need to work on the engine, mechanics won't need to stand on their heads, or tear everything apart to get to it. Jack up the front end. There are just eight bolts, that when removed, will let the engine come out the bottom. All brake, fuel and electric lines have quick disconnects. Likewise the air conditioning lines, if your unit has this optional feature have these quick disconnects to speed removal, and also prevent loss of fluid.



Even "Skipper" is enthusiastic about the TIARA Motor Home. The door opening is 28 inches—large enough to take the average wheel chair if needed. Note the circle above on the left—this is the outside light, controlled by an inside switch. The screened window in the door may be opened.

## **Now Let's Peek Inside**

We have covered the high points of interest on the outside of the TIARA in general. It is time to look closely at the interior, where feminine interest will be greatest. You will find it extravagantly beautiful, tastefully done, yet reasonably priced. As has been previously pointed out, many features are included as standard, where some quote a low initial price, but to make

them desirable or even livable, you have to add a lot of "options."

You will truly gasp at the beauty and convenience of the interior of the TIARA Motor Home. Every line, every appointment exudes good taste, quality and elegance—sparkling and refreshing. It is literally a palatial unit by day with every living comfort, yet housekeeping is minimal. By night you

have a dream world of luxury with your own comfortable beds.

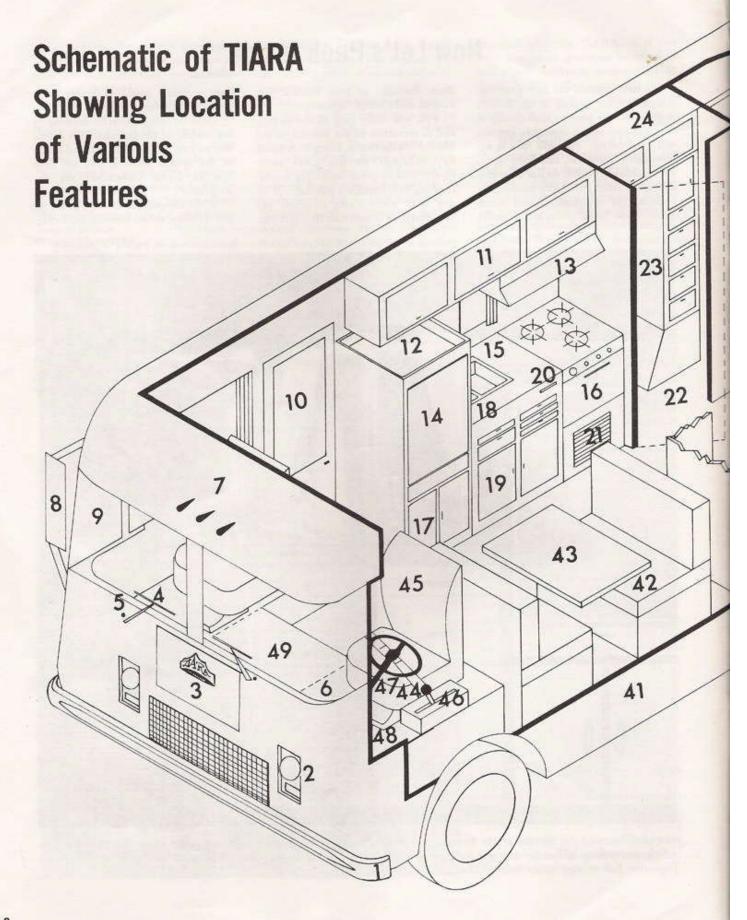
Look at the schematic drawing in the middle of the booklet. This points out to you the exact location of many of the special features, and will help you to better understand the descriptions.

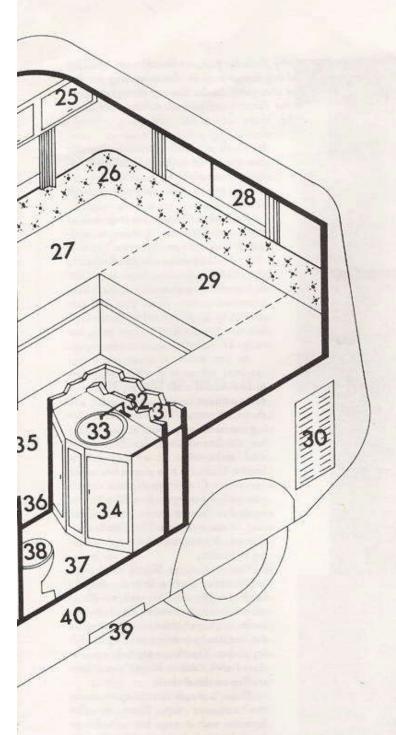
While dimensions are not given on this as they would become confusing,

Continued on page 10



The very heart of the TIARA is the liberal, yet compact galley. Everything is handy. The eye-level gas-electric refrigerator has storage space below. The double stainless steel sinks come with removable laminated covers for increased working space. There is 78 inches of padded storage space above.





- 1. Shock absorbent bumper
- 2. Headlights and park lights
- 3. Access door
- 4. Windshield wiper 2 speed
- 5. Windshield washer
- 6. Padded dash
- 7. Clearance lights
- 8. Rear view mirror
- 9. Wrap around tinted windshield
- 10. Entrance door with window
- 11. Galley overhead storage
- 12. Storage shelf, with lip
- 13. Hooded vent with light and fan
- 14. Eye-level gas-electric refrigerator
- 15. Stainless steel double sink
- 16. Range with oven and broiler
- 17. Storage
- 18. Drawers
- 19. Hot water heater and pump
- 20. Breadboard
- 21. 23,000 BTU forced air furnace
- 22. Closet 26" x 38" with door that closes across aisle making separate compartments
- 23. Closet drawers 5 each
- 24. Closet storage cabinets 3 each
- 25. Overhead storage in bedroom 7 cabinets
- 26. Vinyl padding
- 27. Basketball player size bed 54" x 87"
- 28. Window that opens like a door
- 29. Storage
- 30. Twin LP tanks 20 lbs. each
- 31. Storage and knick-knack shelves
- 32. Mixing faucet
- 33. Stainless steel lavatory
- 34. Linen and toilet paper storage
- 35. Wall to wall carpet
- 36. Sliding bathroom door
- Bathroom 28" x 48" with telephone shower, medicine cabinet, shower curtain
- 38. Automatic marine stool
- 39. Dual emptying system access door
- 40. 50 gallon holding tank
- 41. 50 gallon fresh water tank
- 42. Divan bed combination
- 43. Dining table removable
- 44. Seat belts
- 45. Quilted vinyl bucket seats
- 46. Turbo Hydra Motor shift console
- 47. Power steering
- 48. Power brakes front wheel disc
- 49. Olds Toronado 375 HP V-8 engine





Kathy finds the pull out bread board, ideal for holding her cup while she is waiting for her hot chocolate. Under the top storage cabinets is the range hood with an exhaust fan and a

> let's call to your attention that the doorway is 28 inches wide. This is extremely important to some, for the average wheel chair will pass through this opening.

> Note that there is no step well at the front entrance. Nothing to accidently step into or trip over. The first thing that impresses one upon entering the TIARA is the large level uncluttered living area. If you have ever examined some units, you will immediately be impressed with the livability, not only in the front area, but in the aisles, bath, closet and bedroom.

> As you enter, at your left is the eye-level refrigerator with about five square feet of shelf storage. There is a compartment for ice cube freezing and about 10 pounds of frozen food. This is a combination gas-electric unit. Next are the liberal sized double stainless steel sinks with a swinging mixing faucet. There are two plastic laminated covers that fit the tops of these sinks if you wish more work area. The LP gas range has three burners and the heat may be set as desired. The oven is thermostatically controlled for either baking or broiling.

There are three liberal sized overhead cabinets extending the full 78 inch length of the galley. These cabinets are aluminum lined in the back, with polyfoam cushioning on the bottom to prevent rattling or sliding dishes. The doors are held open or closed with "scissor hinges", and there

are lips on the shelves.

There is much storage space under the counter top. There are five drawers, and storage beneath the refrigerator and the sinks. There is even a small pull-out breadboard.

Under the range is the 23,000 BTU forced air furnace with wall thermostat. The furnace operates from either 12 or 110 volt electricity. It is

Linda enjoys a copy of our parent company's FLOWER and GARDEN Magazine. This view shows the pair of settees against the outside wall. There is storage space underneath them.

set up on top of a raised plenum. There are two outlets to the front and another under the end of the refrigerator. There is also an opening in the bottom going into the rocker panel area, to keep plumbing pipes from

freezing.

The six gallon thermostically controlled LP gas water heater is right under the sinks. This means a short distance so you get almost instant hot water in this faucet. This heater has a recovery rate of nine gallons per hour, so this means a total hot water capability of 15 gallons in an hour.

This water heater operates on LP gas. It gets its constant pressure from the 12 volt electric pump located in this same area. This pump likewise supplies water to the bath. We have previously mentioned the 50 gallon

fresh water tank.

#### Sleep, Eat or Just Loat

Across the living area from the galley is the combination dining and sleeping area. Normally the two settees have their back to the outside wall. These can be opened up, and since they are end to end, you have a 37x72 inch bed. Many refer to this as a double when listing sleeping capacity. Unless they are quite small, it will take two children or only one adult. There is storage space underneath for bedding, etc.

If you prefer, you can move these units crosswise of the area, with space between. Opened up it makes the same size bed. There is a bracket on the outside wall to which you may fasten the table. With the table leg let down, you have a dining area. When removed, the table may be stored behind the settees.

Owing to their nature, space in motor homes is always at a premiumyou must do a certain amount of compromising. However, we are extremely proud of what we have been able to accomplish in the TIARA, all the way from the front to the rear bedroom. It is comfortably cozy, yet there is space to live and move about, there is space to sleep in comfort, as well as preparing meals and eating, and lots of storage space.

For example, the bathroom: 29x48 inches of it-it is truly a man's size unit. And ladies like it too. There is the round lavatory in a vanity setting.



You now see the pair of settees let down, making a 37x72 inch bed.

When moved at right angles, the settees make a comfortable dining area for four, with the detachable table fastened to the wall. Cinnamon rolls and coffee are always welcome.



The storage space beneath has a special compartment for the toilet paper to keep it dry when showering. The hot and cold water mixing faucet has the divertor valve on top, which can direct the water to the telephone-type shower head, controlled by the thumb. A shower curtain on a rod is furnished. There is a medicine cabinet, towel bar and the roof mounted vent that can be opened either to the front or the rear, and the exhaust fan runs on 12 volt current.

The marine toilet, using a minimum of water, empties directly into the 50 gallon holding tank. Note how much space is saved, and how much more convenient this bath is with the sliding door.

Directly across from the bath is the closet with a swinging door. This may be closed across the wide aisle, and it makes two separate compartments. Note the unusual amount of storage space (for a motor home) in this closet. One side goes to the floor for full length garments. There is a pair of storage cabinets above with the closet rod underneath. PLUS the tier of convenient drawers and a smaller cabinet. This portion is over the wheel well. (If you prefer more hanging space, making a rod 38 inches long in place of these drawers, this can be had as an option without extra charge.)

### Davenport by Day Big Bed by Night

In the rear is the living area with a davenport by day and bed by night. The back and ends are upholstered with vinyl and the convenient pillows fill out the bed area matresses by night. This spot will be a great favorite with extra passengers.

From each side of the davenport U a section pulls out meeting in the middle and forming the bed. There seems to be a tendency to call anything over a crib size bed "Double" or "King Size." Actually a standard bed is 54x75 or 80 inches long, a youth, 32x66. When this area is converted to a bed, you have a BASKETBALL PLAYER'S size—54x87 inches. This is real luxury for tall people. And the headroom is 77".

In case you don't wish to use the full length of this bed, a storage chest may be placed at one end. Note the tier of four 10" deep storage compartments. These have a lip to keep things from sliding out. Underneath the davenport-bed in the back is a large storage space. In addition there are seven storage cabinets above in this area. Three across the back and two on each side extending to the bath and

closet walls. These doors have "scissor hinges" to hold open or closed. The cabinets are lined with polyfoam for added insulation and protection.

In an earlier illustration it was shown how the aluminum floor was formed as part of the basic structure. Over this we place an insulationing and cushioning layer of polyfoam. Then on top of this goes the wall-to-wall high quality nylon carpeting.

The ceiling is an off-white, vinyl coated aluminum. The walls are melamine plastic (trade names such as Formica, Wilson Art, etc.). These materials are extremely easy to keep clean with a damp cloth and a little detergent. The plastic will not stain, and it will withstand up to 275 degrees temperature.

All windows, except the rear will open (this is described elsewhere) and are of safety glass. Except on the drivers side, these windows have fine mesh aluminum screens. They can be easily removed from the inside for cleaning windows. There are drapes at all windows. The front ones pull completely around on nylon bearings in a grooved track. This assures complete privacy at night. The windshield is not only safety glass, but it is TINTED.

All 110 volt circuits are protected with circuit breakers. The 12 volt system has a 30 amp main circuit breaker, and each circuit has individual automotive type fuses. (The fuse panel is in the cabinet under the galley.) There is a special rear view mirror on EACH side. These give a clear view of the sides of the vehicle, the ground, center lines, and enable the driver to see back a great distance for oncoming traffic, etc.

If you are going to be in one place a few days, or even for a few hours, you may find an awning desirable. On the TIARA you will find that on both sides there are awning type drip rails.

At a casual glance, the bumpers may look just like another bumper, but probably a bit more attractive.



Now it is story time—and soon in bed. In the middle of this view, the bath room opening is shown with the sliding door. To the rear is the daytime, davenport area.



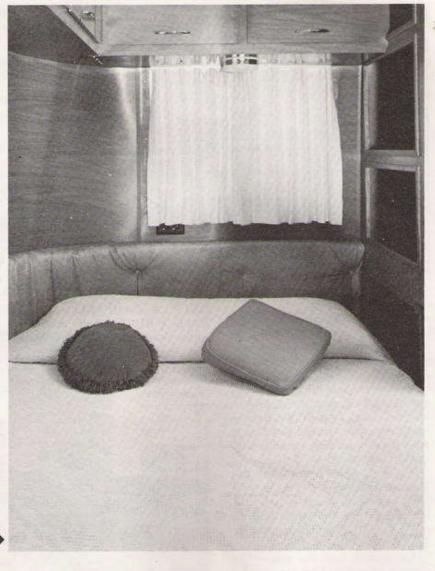
Here is one end of the 29x48 inch bath with medicine cabinet. Note the neatness of the lavatory, with storage space, including toilet paper underneath. The valve may be closed on the mixing faucet and the shower is ready. The telephone type spray head allows one to control the flow of water by a thumb button.

The center section of the davenport is now closed forming the basketball player's sized bed-54x87 inches. The four compartments on the right have a lip to prevent stored items from falling out. Above the bed there are seven storage cabinets with "scissor hinges" to hold the doors open or closed.

They are practical and serviceable as well. The wide piece is formed from '4" hard aluminum channel. To this is added the hollow plastic tube. When hit, this compresses, softening the blow from a hard impact. This means less damage than you might expect to receive with a hard metal bumper. This plastic, having a memory, springs back after compression.

#### Safe and Safety

"SAFE" is more than just a four letter word with us. To some in the industry it is considered a dirty word. Early we were told by some of the "experts" and the "big boys" in the business that even to mention safety would instill in the customer's mind a



fear that motor homes were dangerous.

We didn't believe that prospective purchasers were that stupid. You don't move clear out into the boondocks or the hinterland to get some place where there is no fire department. Neither do you cancel your insurance because it might cause a fire or an accident.

Accordingly, as far as we know, we were the first to include a fire extinguisher as standard equipment. Now it has become fairly common, although frequently charged for as an extra. We did not stop here of course. Even before the Federal Safety Standards were adopted, we were including certain features. Now there are specific requirements for various lights, but

also sun visors. windshield wipers and washers. defrosters. emergency flashers

Of course we not only meet these standards. but go beyond in some areas which we consider desirable. For example, the emergency exit (illustrated elsewhere) through the special hinged rear window that swings completely open. The "Give and Take" bumpers. the roll bar and the extra low center of gravity obtained by placing tanks under the floor, etc.

Naturally, no one expects to have an accident. But that doesn't mean that we should bury our heads in the sand. The greatest "Safety Feature" of course, is the driver. Actually, most motor homes are safer than a car. For



one thing, the drivers as a rule are mature. They sit a bit higher than in an automobile, naturally being able to see more. Usually they have the advantage, also, of greater weight.

As you have read this, I believe that you recognized that the TIARA is truly in a class by itself. We dared to be different—not satisfied to follow in the footsteps of that "wobbly calf" and just copy everybody else.

We would be the first to admit that we are "Eager Beavers." On the other hand, we have tried to give you a vivid, but true picture and insight into the motor home field and, of course, the TIARA in particular.

We sincerely hope that you will become a customer. Our business has always grown on the strength of satisfied owners, proudly showing their vehicles to others.

Some people think that "Little Acorns" are just nuts, rather than something that grows and grows. Ultra, Inc.. is a subsidiary of Modern Handcraft. Inc.. publishers of three nationally circulated magazines with a combined circulation of over two million subscribers. (The WORK-

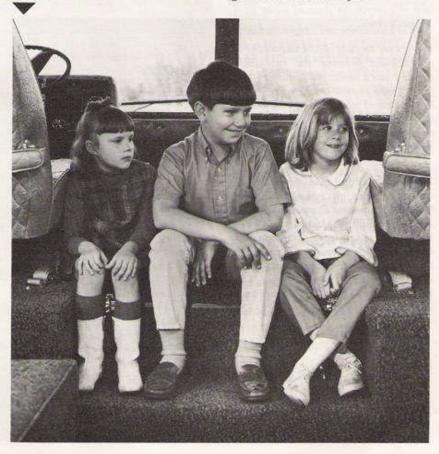
BASKET, The WORKBENCH and FLOWER AND GARDEN).

My wife and I started the first of these, The "WORKBASKET" some 36 years ago. We started on a shoe string, working together from the kitchen table. That is why we know that little acorns DO GROW. ONLY A CAMPBELL SHOULD HAVE A HUMP. Usually there is an engine hump in front between the seats. In the TIARA this is open and clear. A big advantage is that with children, there is ample room to move about.

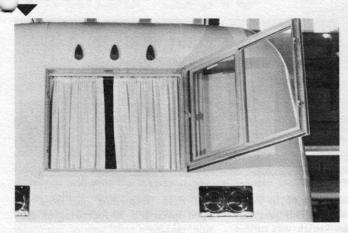
Most companies proudly list their capital assets in dollars and cents. Our most valuable asset is the group of men and women who make the TIARA possible. They, too, are "Eager Beavers." Some of the engineers almost get "stars in their eyes" when discussing plans and projects for the future.

We never claimed to be the BIG-GEST, but we are substantial with over an acre under roof. We prefer to be known for building what we sincerely believe is the BEST motor home for the money, rather than going for mere numbers.

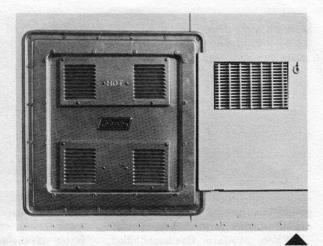
The front seats are covered with a quilted vinyl. This allows the air to circulate making them much more comfortable. The pilot and copilot have ample clear space with a commanding view. The eleven-inch vinyl covered coffee bar runs across the front. There are registers on both sides for warmth for driver and passenger. The storage space above will hold field glasses, camera and maps.



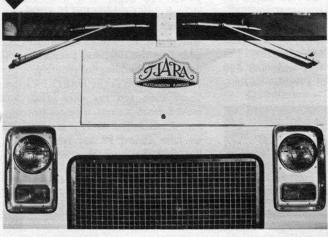
One of the safety features: the rear window will swing open, naking a quick easy exit if it should be needed.



The distinctive and attractive "TIARA" emblem is on the spare tire cover in the rear, as well as on the front. These clean, graceful lines distinguish this unit.



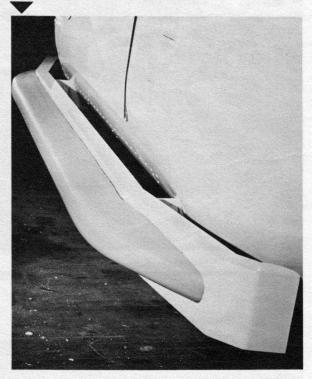
This shows the fresh air intake, as well as the exhaust for both the water heater and the furnace. They have sealed combustion chambers, so no fumes or exhaust will reach the interior.



A corner of the testing laboratory, where materials and utilities are tested before being accepted for use. Just one facet of the rigid quality control program.



"Give and Take" bumpers are on both front and rear. A quarter inch, hardened aluminum body has a hollow plastic tube. If hit, this "gives", absorbing the shock, but it will spring back when pressure is released.



The information given in all literature is correct up to time of publication. The company does not produce yearly models as such. Changes and improvements are made from time to time, and the company reserves the right to change colors, prices, equipment, specifications or discontinue models without notice. No obligation or liability is assumed to equip units previously sold with new or improved features.



When Modern Handcraft, Inc., (Publishers of The WORKBASKET, WORKBENCH and FLOWER and GARDEN Magazines) bought the Ultra Van Co., in 1965, a search was immediately started for a place to operate and grow. After looking at many locations, Hutchinson, Kansas was selected.

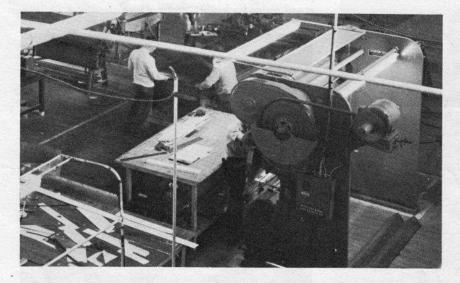
There were many natural advantages, including labor familiar with airplane construction, since the shell is like an airplane fuselage. The deciding factor was the availability of the building as pictured above. This was formerly a Navy Base which was turned over to the National Guard. They in turn gave up part of it, and a group of civic-minded men in Hutchinson bought it, forming the Hutchinson Air Base Industrial Tract, or "Habit" as it is known.

Started as a hangar, it was later turned into a recreational facility. The main area is 100 feet wide and 300 feet long—the size of a regulation football field. Extending out from this open space is a 20-foot wing on each side, making a total area of just under an acre.

It was necessary to add lighting and heating facilities and bring in adequate power. To begin with it looked as though we would be lost in this amount of space. Since this picture was made a 30-foot warehouse was added on the side, and a separate concrete block building for painting.

All of this is at the HABIT location. Some time ago the sales office was moved from Kansas City to Hutchinson, Kansas. This is right in town and we have almost 10,000 feet of space, but find that even that isn't enough. Plans for more expansion are in process.

In one of the 20-foot wings, we have the tool and die making department and stock room. On the other side we have the welding shop, plumbing and cabinet work. We have even added a balcony where the upholstery work is planned, and the electric wiring bundles are made up.





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