

## **2020 Kimberley Karavan ECO-Suite**

Date of Manufacture: 03/2020

GVWR: 5500 lb (2495 KG)

GAWR: 5500 lb (2495 KG) (each axle)

Dry Weight:

Capacity: 2023 lb (918 KG)

Approximate DIMENSIONS Kimberley Karavan

Travelling Length (mm) 5190mm (17.02 ft)

Width (mm) Mudguards 1950 mm Body 1870mm (6.4 ft)

Travelling Height (mm) 2190mm (reduced to 2150mm for garage) ( 7.2 ft)

Height after deflating tyres for entry into garage 2150mm (7 ft)

Wheeltrack (mm) 1620mm (5.3 ft)

Ground clearance (mm) 450mm (17.7 in)

Opened overall Length 6510mm (21.35 ft)

Opened inside length 4950mm (16.24 ft)

Opened inside walk height 2100mm (6.89 ft)

Bed Size 2100mm x 1600mm (6.89 ft X 5.35 ft)

### **General**

All systems have been checked, serviced and verified to work be operational.

- Chassis and suspension lubricated
- Lug nuts torqued to specification
- Bearings greased
- Tires at correct pressure and wear normal (including spare)
- Brake pads serviceable
- Fluids at correct levels
- DO35 lubricated properly
- Electrical contacts cleaned and properly lubricated
- Lighting and outlets functional (including marker and tail lights)
- Breakaway switch battery - full/functional
- Roof seals, hatch sealants/etc. serviceable
- Solar panels, sealant and connectors serviceable
- DC to DC verified functional
- Plumbing to include tanks functional and leak free
- Awning, poles and setup functional
- Tow connections and lighting (markers/turn)
- Vehicle to trailer charging system/connector
- ARK operational, lubricated and crank present
- Stabilizers - operational and lubricated
- Aluminum checked for corrosion and protective layer added
- Propane system serviceable and in date
- Grill and Wok cleaned and serviceable
- AC, fans, heat and appliances cleaned and serviceable
- Air compressor and ports functional
- TV and multimedia devices operational
- Composting toilet clean and serviceable w/fresh material

- Propane, CO2, and smoke alarms serviceable

## Basic Info

### BODY | SUSPENSION | BRAKES | CHASSIS

- Ceramic exterior coating (upgrade)
- Laser cut, interlocked, hot-dipped galvanised Chassis
- Independent trailing arm suspension with tapered stub axle and steel hubs
- Revolutionary turning Drawbar Extension | KAG510
- Multi height Double wheel Jockey Wheel | KAG410
- Kimberley Kamper Custom Air Suspension
- Air Suspension PLUS w/on-board Air Compressor, Air Tank | KAG0551PAK (Viair)
- External mounted air chuck (upgrade)
- Mono-tube shock absorbers (Bilstein)
- Hydraulic Disc Brakes (2500kg rating) | KAG5382
- One-Touch Park Brake
- Heavy Duty Anti-Sway Bar | Gvx\_ANTI\_SWAY\_BAR (between suspension arms)
- VC DO35 - 3500kg Off Road Hitch w/spare pin (upgrade)
- Heavy Duty Internal Fold Out steps (3-step) - full external clearance
- ARK HD 750 XL jockey wheel (cracked wheel but functional)
- ARKO Rear stabilizers
- Rear step ladder mounting, ladder, and straps (upgrade)
- Custom decals (upgrade)
- Windows and screen operational
- 3M clear protectant at critical areas (upgrade)
- Custom door seal(s) (upgrade)
- Custom walk thru magnetic door screen (upgrade)

### WHEELS

- Spare Tyre under camper trailer
- Off Road Wheels (Toyota Land Cruiser wheels and hub spacing) 5x150 bolt pattern
- BF Goodrich AT2 tires 7" LC200 wheels with 285/70R17 BFGs probably 15K miles

### WATER

- Dual Water System (70L 18gal front + 120L 32 gal rear) | KAG553
- 60L 16 gal Grey Water Tank | KAG928
- Water Tank Outlet Tap | KAG400
- Visiflow Water claim System | KAG3603 (- allows pumping from Streams or Billabongs - can backfill tanks)

### AWNING

- Fiamma Roll out Awning (small tear repaired on right side) (upgrade)
- Tentproinc shade attachment (upgrade)
- Snowpeak forged stakes (x3) (upgrade)
- HD guy line springs (upgrade)
- HD guy lines(upgrade)

### COMFORT

- Natures Head composting toilet up to 80 uses | KAG734\_KVN (upgrade)
- Diesel Hot Water System | KAG360\_V (hotwater in 5 min)
- Diesel Air Heater Ducted WITH air speed controller 2kW rating | KAG357R (upgrade)
- Bed Step with Diesel Space Heater (utilizes Hot Water System) | KAG7371(upgrade)
- Light weight Rooftop Air-conditioner with reverse cycle heating | KAG840
- 3x 12V Fan multi speed (upgrade)
- New Hi-speed Air Pressuriser - PosiVent | KAG0490

- Magazine Racks + Mirror + Privacy Screen
- Winterized plumbing and water tanks with tank heaters
- Full size Shower Stall with swing away Toilet
- Outside Hot and Cold Shower at rear
- Magnetic Curtains | KAG391 (upgrade)
- x5 Sliding tinted large windows for maximum airflow
- Under bed 12v membrane heater

## KITCHEN

- INSIDE: Solid Surface (Corian™ Equivalent)
- Benchtop, Hot and Cold Water with new built in moulded sink
- INSIDE: Fridge with smart cooled compressor Ice freezer, 120L
- INSIDE: Diesel Cooktop KAG732 (upgrade)
- INSIDE: Microwave Oven | KAG825 (upgrade)
- Galley Kitchen with large sink & Weber® BabyQ™ BBQ | KAG843W (upgrade)
- OUTSIDE: 110V GPO standard for external Induction Cooktop
- Large Single WOK Burner with large wind deflector ring | KAG605 (upgrade)
- Gas Bottle - 20lb and 2700mm Quick Connect stainless steel gas flexible gas line

## POWER

- Robust 30 Amp Power cord (w/exterior cover when not in use)
- Simarine Power & Water Monitor Battery capacity, voltage current and water tank levels | KAG3410PLUS
- Simarine Power & Water Monitor Smartphone App Bluetooth connected
- 3000W Kisae Inverter True Sine Wave with Auto cutover AC + 60A Intelli-Charger | KAG364A (upgrade)
- 200Amp Intelligent Bluetooth Lithium Battery | KAG 3491
- Second 200Ah Lightweight Bluetooth Lithium Batteries | KAG3491 (upgrade)
- x5 12V Outlets / 110V Outlets
- Anderson Plug Cable - Charge from the Vehicle | KAG
- Anderson Solar Input | KAG320
- Rail Mounted Lightning and poor power - Surge Protector | KAG324
- WiTi Wireless Trailer Plug Connection w/built in Anti-theft and GPS tracking (upgrade)
- Ultra Thin - NASA Panels by Merlin Solar Tech - USA - 600W Roof mount with 60Amp MPPT Reg (upgrade)
- 12V 40+A DC-DC Booster suits Lithium Batteries | KA9017 (upgrade)

## LED LIGHTS

- Dual Reading LED Stalk Lights | KAG037
- OUTSIDE - 1 x set in Multi-Box, 1 x exterior Orange/White LED light, External kitchen door, rear boot
- INSIDE - x1 ensuite, x1 over cooker, Bar light over the kitchen prep area, Bar light over dining table
- Additional Lighting - Under-bench LED's, Large round LEDs in console

## STORAGE | CARRIERS

- Kargo Karrier (luggage rack) | KAG815 storage rack above front box (upgrade)

## INTERIOR FIT OUT

- Bed Walls & Lobster Tail Lined with soft fabric | GVX\_LINED\_WALLS
- Bed Walls fitted with Magazine Rack, Drink holder and Dual USB
- Bunk beds (upgrade)
- Magnetic blackout curtains (upgrade)
- Custom (non-blackout curtains (upgrade)
- Solid Leather Seating | KAG95310 (black)
- Interior Finish - "Contemporary" - Light grey roof finish, black bench tops, grey bed walls, slate colour floor
- Custom low profile artwork (upgrade)
- Custom low profile magnetic attachment points (upgrade)
- Custom mounting hooks and flashlight at front cabin (upgrade)

- Custom mounted trash container (upgrade)
- Custom mounted toilet storage areas (upgrade)
- Custom decals (upgrade)

## MULTIMEDIA

- Fusion upgraded quality sound system with bluetooth, MP3, streaming and bluetooth
- LED TV w/bracket and swivel mounting system (upgrade)

## Additional Info

### NO TIMBER CONSTRUCTION

All of our campers are made from high grade alloy, high molecular weight thermoplastic, marine-grade stainless steel and hot dipped galvanised steel giving higher strength-to- weight and maximum weather resistance.

### STRONGER. LIGHTER. TOUGHER.

Computer Aided Design (CAD) guides our laser cutters to produce our unique interlocking tabs joinery system adding strength whilst removing weight.

### MERLIN SPACE SOLAR

Super-light at only 2mm thick, 80% lighter than glass. Up to 600W at over 30% efficiency and x50 more durable vs Bus-Bar technology.

### INDUCTION COOKTOP

Super-fast and efficient. Combines 1800W's of power with auto temp control. Perfect in high wind. Boil in 3 mins or leave on slow cook safely.

### LITHIUM BATTERY TECHNOLOGY

We use only lithium batteries which are 75% lighter and more durable than AGM lead acid equivalents. Allows you to go further off-grid, for longer, but still in touch and in comfort.

### WIRING LOOMS & HARNESSES

CAN Bus systems for all looms and harnesses, reducing overall wiring weight by around 8kgs and ensuring connections stay strong for off-road conditions.

### WATERLESS TOILET

8kgs maximum weight. Saves 110kgs weight over maceration toilet.

### AIR-CONDITIONING

Roof Top. Ultimate efficiency: can run on batteries from inverter. Replenish power with solar.

### UNDERBED MEMBRANE HEATER

Add a Di-electric 12V membrane heater dries out bed moisture, eliminates sources of allergies.

### BLUETOOTH LITHIUM BATTERIES

Up to 600Ah available. Charge at twice the speed from solar controller. Can drop to 10%.

### ACTUATOR LIFTING SYSTEM

The Karavan lifts with a remote controlled 12V actuator with a manual wind backup. Worm drive means no risk of uncontrolled drop.

### LOWEST WEIGHT

Custom air springs, vented disc brakes, mono-tube shocks: lowest weight to keep rubber on the road for safest towing performance.

### SUPER POWERS

Electronic Vented brakes @ 1200psi have twice the stopping power of electric drum brakes. One touch parking brake.

#### LEVEL HEADED

Air glide over corrugations. Adjust travel height for best towing stability. Raise/lower controls to level your campsite.... All by remote control.

#### POWER OF MONO-TUBE

Big 2" mono-tube off-road racing shocks give a softer ride and corrugation protection.

#### MATCHING WHEELS & DISC HUBS

With one flat tyre, you will head for the nearest town. With matching wheels stay on track and rest easy.

#### WATER 3 WAYS

Twin tanks, Twin fillers, Twin pumps, Twin circuits, plus front stored Jerry cans.

#### STRAIGHT FROM STREAM

With our innovative visi-flow special option, bypass the water tanks and pump directly from any water source. Hot water system uses heat exchanger allowing for varying water temperatures.

#### WATERLESS TOILET

No heavy blackwater to carry, no freshwater to keep in reserve. No fresh water supply needed.

#### SWING OUT FIBREGLASS ENSUITE

Light and airy with overhead fan, toilet, and shower in one. Swing the toilet out the way for a full size hot shower - quick and easy.

#### HASSLE-FREE WATERLESS TOILET

Comfortable for 80 uses, no smell, no dumping station needed, automatic. Clean technology.

#### DIESEL HOT WATER AND AIR HEATER

Hot water & heater: Safe and economical. Hot water on Demand. 12L diesel lasts for months.

#### WIRELESS ELECTRICAL PLUG – WiTi

No more dropped cables, added protection with GPS tracking and sensor alarms - reduce insurance bills.

#### SMART TOUCH (Simarine)

NEW Gorilla Glass high definition display batteries, water tank levels, Solar, Inverter, Fridge and Freezer temp, Shock temp and power on selected models. Smart phone App. Bluetooth® connected.

#### OUTSIDE COOK'S KITCHEN

Outside stainless steel sink with hot water, WEBER BBQ and WOK options.

#### Items included with the sale

All locks, keys, documents and manuals

- owners manual (electronic)
- accessory document (electronic)
- installed items (paper and electronic)
- square drive keys (door)
- water filler caps keys
- tail gate latch keys
- cargo box keys
- Kimberly specific spare parts, accessories/etc.

Specter Jerry Cans (x2)

WiTi System - **is buggy does not recommend using**

Various 12v Hella plug adapters

Hose filler (Billabong kit) for drawing general water from streams/etc.  
Spare DO35 pin

### **Items of note:**

Inline water filter was too problematic. Removed and replaced with direct line. We use an external filter.

Hitch height from ground to bottom of DO35 - approx. 20.5" KK should be approx. 1" below level for best performance  
- to bar weight at 15% opposed to 12%.

Typical airbag height/psi when towing?  
Inspections - Do not travel like this - 23.6"  
Water crossings steep departures/entry's - 22.6"  
Best for corrugations and off road - 22"  
Highway only low absorption - 21.5"  
Storage - Do not travel like this - 19.1"

Note: Ride height measurement from center of wheel hub to underside of fender.

Towing is great but be aware if you have never has trailing arm suspension - it looks different from your mirrors.  
Trailing arm independent suspension follows the road more so than other types.

Typical tire psi when towing?  
Hard Black Road Pressure - 49 psi (60 mph)  
Gibber roads and tracks short minor corrugations - 33 psi (40 mph)  
Severe Corrugations - 23 psi (25 mph)  
Soft sand or thick mud - 17 psi (12 mph)  
Note: If shock temps approach 308 degrees reduce speed/psi.  
Stop and cool if shock temps above 356 degrees.  
Shock temps above 392 degrees will destroy seals.

Suspension bushings if greased properly should last 10-15 years (per Dave at KK USA).

Storage is surprisingly very good for it's size. With judicious packing there is more than enough space.

Solar and power system is excellent. Dare I say it's the best we have ever used. We boon-docked over 20 days with absolutely no problems. Battery levels never went below 75% even in inclement weather. Recharge time was excellent.

Water use was good for about 7-10 days depending on habits.

We have never used the Billabong kit for pumping external sourced water into the general tank.

Extreme cold weather operation. I would class this more of a 3 season trailer. The diesel heat is excellent but the battery box is external and not heated.

For anyone running a an electric over hydraulic disk brake set up I highly recommend the Prodigy P2. Your electric brake signal actuates a computer controlled hydraulic servo motor that generates hydraulic pressure driving normal disk brakes.

### **Insulation**

The Fibreglass shell has much better insulation than aluminium cladding

The upper "tropical" roof gives excellent added insulation to the roof and prevents snow accumulation directly on the body of the Kruiser

The cast polyethylene floor has excellent insulation properties and is so durable with moisture. Compare this to timber flooring which absorbs moisture no matter how it is coated.

The dual layer windows have added insulation.

There is an additional 20mm of high density styrofoam in the wall sections

The white predominant colour does not radiate heat (nor does it absorb in the desert!). This is the perfect dominant colour!

For warmth inside there is:

Temperature controlled Diesel air heater, ducted into the kick board under the kitchen cabinets.

### **Other**

Black leather seating  
Bunk bed system  
Black cabinets with white countertops  
Full queen mattress  
Swing away toilet for full shower access  
Coleman Mach AC with Heat pump with Bluetooth phone controls

External options:

DO 35 Offroad Coupling with 2 pins for truck  
Fiamma Roll out Awning - awaiting a few parts from a high wind issue  
Winterization Package  
5x150 bolt pattern  
17" LC200 wheels with 285/70R17 BFGs probably 10k miles

Electronics/Solar:

Simarine Touch Screen Monitoring System

- Battery capacity & Voltage current
- Water tank levels
- Solar array power
- Fridge temperature and refrigeration power used
- Shock temperature
- Leveling axis information

200Amphr Lithium Battery x2 - Wnerdrive  
3000W Pure Hybrid Inverter/Charger (60A) - Kisea Sinewave Inverter 3000  
Epever Tracer MPPT  
Enerdrive EN31260 12v 60A ePower Charger  
Enerdrive DC@DC ePower Charger (Multi-Stage, Mult-Source w/MPPT)  
AC Power Surge Protector - protects from lightning and poor power  
Ultra Thin - NASA Panels by Merlin Solar Tech - USA - 600W Roof mount with 40Amp MPPT Reg  
Anderson Plug Cable - Charge from the Vehicle  
Anderson Solar Input  
Trailer Plug Cable to Vehicle

3. Kargo Karrier  
Bottom - 40.5" L x 13.5" W  
Top - 46.5" L x 17.5" W  
77 lb (35 KG) weight Limit

4. Suspension bushings if greased properly should last 10-15 years (per Dave at KK USA).

### Tire Pressure Calculation Chart

LT28570R17 - Standard cold pressure @ 5500 lb — 49.3 psi

Standard cold pressure @ 5500 lb — 49.3 psi + 5% =

Standard cold pressure @ 5250 lb — 48 psi

Standard cold pressure @ 5000 lb — 45 psi

Standard cold pressure @ 4750 lb — 42 psi

Standard cold pressure @ 4500 lb — 39 psi

Standard cold pressure @ 4250 lb — 36 psi

Standard cold pressure @ 4000 lb — 35 psi

Standard cold pressure @ 3750 lb — 35 psi

Standard cold pressure @ 3500 lb — 35 psi

35 PSI : 2105	40 PSI : 2315	45 PSI : 2510	50 PSI : 2755
36 PSI : 2147	41 PSI : 2354	46 PSI : 2559	
37 PSI : 2189	<b>42 PSI : 2393</b>	47 PSI : 2608	
38 PSI : 2231	43 PSI : 2432	48 PSI : 2657	
39 PSI : 2273	44 PSI : 2471	49 PSI : 2706	
42 - LB	39 - LB	49 - LB	

### Weight Calculations

GVWR: 5500 lb (2495 KG)

GAWR: 5500 lb (2495 KG)

Note: Typical Liquids (water diesel) add 200kg when full and Jerry Cans add 20kg each. (441 lbs)

Note: Experienced off road traveler's prefer a heavier drawbar weight for best control in both on and off road conditions. We design our Kamper trailers to 12-15% (15% preferred) drawbar weight.