

 **BLACK SERIES**

Black Series
owner's
Manual

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SOME CONFIGURATIONS IN THE MANUAL ARE NOT SUITABLE FOR ALL MODELS OF CARS (E.G WASHING MACHINES, ELECTRIC TOILETS, ECT.)



SOME ACCESSORIES WILL BE SLIGHTLY DIFFERENT DUE TO THE YEAR OF MANUFACTURE (CIRCUIT, MAIN CONTROL PANEL, ETC.), IF YOU HAVE ANY QUESTIONS, PLEASE CONTACT WARRANTY.

CHAPTER I

INTRODUCTION

Welcome

◆ Congratulations and welcome to the big family of Black Series camper trailer owners.

◆ Thank you for choosing Black Series.

◆ A Black Series trailer is undoubtedly a smart investment.

◆ We are confident to give you exciting off-road camping adventures that will be lasting and worthy memories

◆ We provide safe and reliable vehicles. We manufacture high quality products to meet all of your

◆ Reading this manual is one of the best ways to enhance your enjoyment of your Black Series camper trailer.

◆ This information will help you learn how to use all the features of your new travel trailer.

1. UPDATES TO INFORMATION/PRODUCTS IN THIS MANUAL

This manual covers all Black Series camper/trailer models. The equipment and functions described in this manual may not fit your trailer model, since some equipment and functions are optional or the equipment on your trailer is upgraded, updated or iterated so rapidly that it may not be described in this manual. For the latest product information and updates, please contact our after-sales services and local Black Series dealers. Subsequent modifications may be evident in the actual products, and specifications are subject to change without notice.

2. WARRANTY, INSPECTION AND MAINTENANCE

Black Series offers limited repair and warranty scope specified in this manual for your trailers. Please carefully read this manual and understand the warranty scope and your rights and responsibilities.

Please go to your dealer for any repair, upkeep or maintenance of your trailer. If you are close to the manufacturer, you can return the trailer directly to the manufacturer's 4S store for repair and upkeep or maintenance.

Maintaining your trailer in accordance with upkeep and maintenance tips and technical methods given in this manual will give you a trouble-free camping experience. Regular maintenance will save you money in the long run. The service chart on the back of this manual defines the minimum maintenance interval. The failure likelihood of important systems of your trailer will be minimized by following this schedule.

The mandatory upkeep items required in this manual are crucial to your travel safety. The time spent on the inspection and maintenance will ensure more years of good use of your trailer. Don't forget that your trailer definitely needs remove daily maintenance on your own. Our After-Sales Service Department offers any help you need in daily maintenance to ensure that you have access to technical support and original parts for repair and replacement. The replacement components you need can be ordered from the After-Sales Service Department of Black Series.

3. USER INFORMATION

User information contains important documents that explain the operations of the main appliances, systems and equipment in your trailer. Since this manual does not cover all possible details of the devices and options installed on your trailer, these instructional materials will help you operate, maintain and troubleshoot these devices and systems.

Depending on your trailer configuration and options applicable to electrical system, user information includes the following:

Owner's Manual / fridge instructions / oven instructions / range hood instructions / microwave oven instructions / water heater instructions / air conditioner instructions / generator instructions / water pump instructions / inverter instructions / smoke alarm instructions / awning instructions / TV antenna instructions / stereo instructions / LCD TV instructions and other necessary operating instructions.

Components of Black Series camper trailers are produced by different manufacturers. This manual is not exhaustive and does not include all the details, and some items have separate instructions. This manual is for your information only. You can refer to two words. If the instructions of a certain item is not available, please contact the customer services of Black Series.

4. RESPONSIBILITIES OF DEALERS

Although all trailers have been inspected thoroughly in the factory, it is the responsibility of dealers to fully inspect all trailer components before shipment. This ensures that all components are in proper working condition and free of defects before delivery. During the delivery, the dealer should help you inspect the interior and exterior of the trailer, instruct and explain how to properly use the trailer.

However, it is your responsibility to fully understand how to use the trailer. To fulfill this responsibility, you must read all instructional materials that accompanies the manual. If you don't know how to use any appliance or device, you should return to your dealer for further instructions.

Safety warning signs and symbols

This manual provides instructions for the operation and maintenance of your Black Series camper trailer. The instructions in this manual must be followed to ensure the safety of personnel and the service life of the trailer.

Safety precautions to prevent injury or property damage must always be followed.

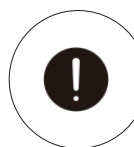
Safety information in this manual is marked with safety signs.

Risk levels are indicated by the following symbols:



DANGER

Danger – If the danger message is ignored, there is an immediate danger of serious personal injury or death.



WARNING

Warning – if the warning message is ignored, there is a risk of serious personal injury or death.



ALERT

Alert – if the alert message is ignored, there is a risk of minor or moderate injury.



CAUTION

Caution – the operation may cause damage to the trailer or other properties.

5. WARRANTY TERMS

Black Series provides warranty services for all the processes and materials of our camper trailers and RVs within the warranty period. During the warranty period, if any quality problem happened during the normal use and the trailer is tested and determined to be a defective product by the Company, user is entitled to free repair or replacement.

- (1) The warranty period starts from the date when the trailer is delivered to user.
- (2) If any fault that happened in the warranty term is unable to be solved and is determined to be a product quality problem by the service station, service station will offer field services free of charge.
- (3) The Company does not authorize any organization or individual other than the service stations to perform QA tasks on the vehicle, and is not responsible for all consequences arising from such. The Company promises to repair and maintain the vehicle, that is, mainly repair the defects and faults of the vehicle during the warranty period, and replace damaged parts that cannot be repaired.
- (4) The Company is not responsible for any non-vehicle repair costs and expenses incurred by faults covered in the warranty, including but not limited to loss of income, loss of goods, road toll, insurance premium, operating profits, fines and other losses.

UNDER ANY OF THE FOLLOWING CIRCUMSTANCES, THE WARRANTY IS INVALID AND REPAIR AND MAINTENANCE FEES WILL BE CHARGED AS IF THE WARRANTY PERIOD HAS EXPIRED.

- (1) The warranty is only valid for the vehicle in normal use by the original buyer and should not be transferred or prolonged in any way. Once the trailer is sold or otherwise disposed of by the original buyer to any third party, Black Series is no longer responsible for anyone other than the original buyer.

- (2) Warranty is invalid for trailers used for rental, loan or commercial purposes.
- (3) Warranty is not valid for the trailers for auction, exhibition, refurbished and secondhand trailers.
- (4) The warranty does not cover misuse in violation of the instructions, collisions, modifications to the design, and damage in traffic accidents.
- (5) During the warranty period, the company has no warranty period if the upkeep and maintenance is not carried out in accordance with the upkeep requirements of this manual at service providers authorized by the company. The warranty is subject to maintenance records issued by our authorized service providers.
- (6) The company is not be responsible for any quality problems caused by change or loss of quality performance of relevant components of vehicle due to any modifications or additions to the vehicle that are not authorized by the Company, nor shall the Company be responsible for any safety accidents caused by such modifications or additions.
- (7) All warranty should be performed by Black Series or an authorized representative of Black Series, and individuals and organizations should not repair or replace accessories without authorization.
- (8) Unless otherwise specified in writing by Black Series, any transportation, accommodation, towing or recycling expenses incurred by warranty claim should be borne by the buyer.
- (9) Black Series is not responsible for any damage due to improper use, maintenance and storage of the product by the ser without following the provisions in the Operating Instructions of the product and this manual;
- (10) Black Series is not responsible for the damage caused by dismantlement and modifications by the user or any unauthorized person.
- (11) Black Series is not responsible for the damage other than product defects, such as collision impact, burning damage, scratches and falling off of any components caused by external factors.
- (12) Black Series is not responsible for the damage to the vehicle caused by natural or environmental impact, such as: flood, lightning, storm, hail and other force majeure.
- (13) Black Series is not responsible for the normal noise, vibration, wear and aging of the vehicle.
- (14) Black Series is not responsible for overloading and speeding of vehicle.
- (15) Black Series is not responsible for faults due to use of parts or components not approved by the Company in the repair.
- (16) Black Series is not responsible for damage that is caused in use of the trailer when the known or hidden fault is not eliminated in a timely manner and resulting damage of other parts and components.
- (17) Black Series is not responsible if the product name, model or number (or VIN code) on the warranty is inconsistent with that of the product under warranty or is altered, and manufacture date of the vehicle is not available.
- (18) Warranty does not cover any vehicle with a warranty period that has expired for 15 or more days.

Note: The Company reserves the right of final interpretation of the after-sales service terms.

6. WARRANTY ITEMS AND PERIOD

CHARGEABLE BATTERY	6-MONTH WARRANTY
TIRES	6-MONTH WARRANTY
DOOR/WINDOW GLASS	6-MONTH WARRANTY
APPLIANCES ON TRAILER	1-YEAR WARRANTY
INVERTER	1-YEAR WARRANTY
INTERIOR FURNITURE	1-YEAR WARRANTY
ALUMINUM FRAME OF VEHICLE BODY	15-YEAR WARRANTY
VEHICLE CHASSIS	15-YEAR WARRANTY

7. RETURN AND EXCHANGE SERVICE

If your product has any quality problems, please contact us within seven days from the date of purchase and we will test the product specifically. If the test results show that the product does have quality problems, After-Sales Service Department will replace the product within fifteen business days.

I HAVE READ AND UNDERSTAND WARRANTY TERMS AND CONDITIONS.

VIN#

Model L:

Name of Buyer:

Warranty Year(s):

Signature of Buyer:

Date:

CHAPTER II

VEHICLE STRUCTURE AND COMPONENTS

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- I. Technical Parameters of Camper Trailer
- II. Structure Composition and Features

I. TECHNICAL PARAMETERS OF CAMPER TRAILER

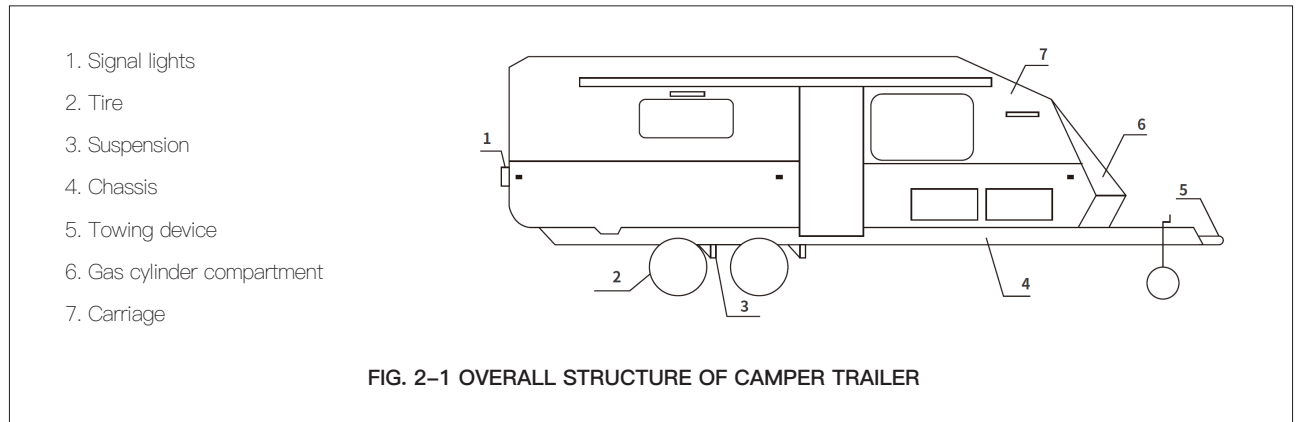
	HQ21	HQ15	HQ19	HQ17	HQ12
Product model	ARCDG6ZP03A	ZS2KH6X201B	ZS2KJ6X201G	ZS77Z6YL01Z	ARJ546W602G
Dimensions (mm)	7998×2355×3110(mm)	7130×2400×2960(mm)	7950×2403×3140(mm)	7420×2340×3070(mm)	5975×2410×2585(mm)
Front/rear suspension (mm)	-/2360	-/2503	-/2330	-/1973	-/2305
Wheel base (mm)	4700+883	4560	4663+890	4500+880	3603
Rear wheel track (mm)	1815/1815	1840	1830/1830	1830/1830	1840
Approach angle/departure angle (°)	-/23(°)	-/21(°)	-/24(°)	-/22(°)	-/21(°)
Loaded weight (Kg)	3485	2850	3455	3250	2600
Curb weight (Kg)	3260	2450	3055	2865	2200
Tire specification	LT265/75 R16 10PR	LT265/75 R16 10PR	LT265/75 R16 10PR	LT265/75 R16 10PR	LT265/75 R16 10PR
Tire quantity	4	2	4	4	2
Number of axles	2	1	2	2	1

	TH19	TH22	LJC	D1	F3
Product model	ARPF76ZP03T	ZS4TP6XZ01L	ARMEL6W602U	ARCDE6W602H	ARCDF6W6028
Dimensions (mm)	7810×2425×3035(mm)	8835×2500×3185(mm)	5995×2375×3000(mm)	5880×2280×1620(mm)	4700×1930×1495(mm)
Front/rear suspension (mm)	-/2535	-/2930	982/1443	-/2270	-/1420
Wheel base (mm)	4368+840	5008+830	3570	3543	3213
Rear wheel track (mm)	2000/2000	2110/2110	1645	1746	1360
Approach angle/departure angle (°)	-/22(°)	-/22(°)	21.7/15(°)	-/21(°)	-/28(°)
Loaded weight (Kg)	3495	3490	4000	2400	1510
Curb weight (Kg)	3095	3390	3510	2125	1255
Tire specification	LT235/75 R15 8PR	LT235/75 R15 8PR	185/75 R16C	LT265/75 R16 10PR	LT235/75 R15 8PR
Tire quantity	4	4	6	2	2
Number of axles	2	2	2	1	1

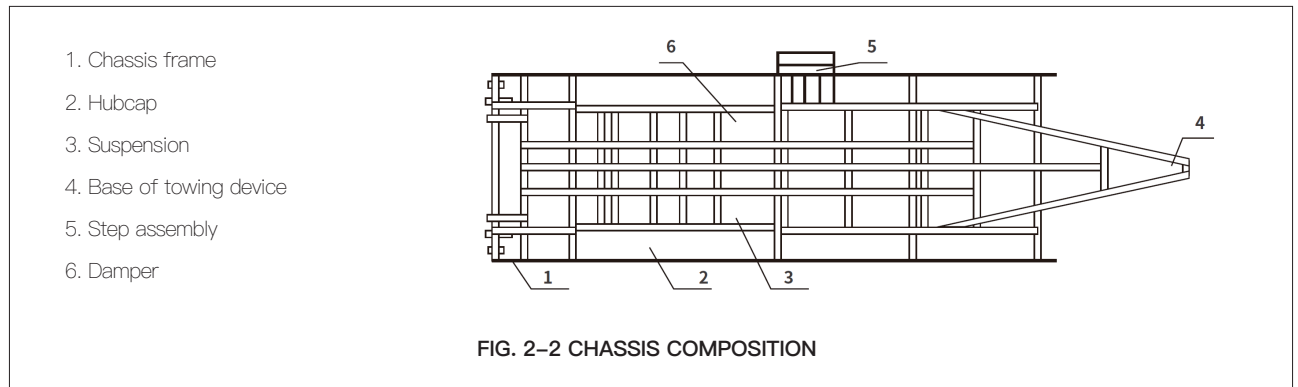
II. STRUCTURE COMPOSITION AND FEATURES

2.1 Hard-top camper trailer

A Black Series camper trailer mainly consists of chassis, carriage, traveling signal system, circuit system, water system, gas system, fuel system, traction and brake devices, PV system, living system, etc.

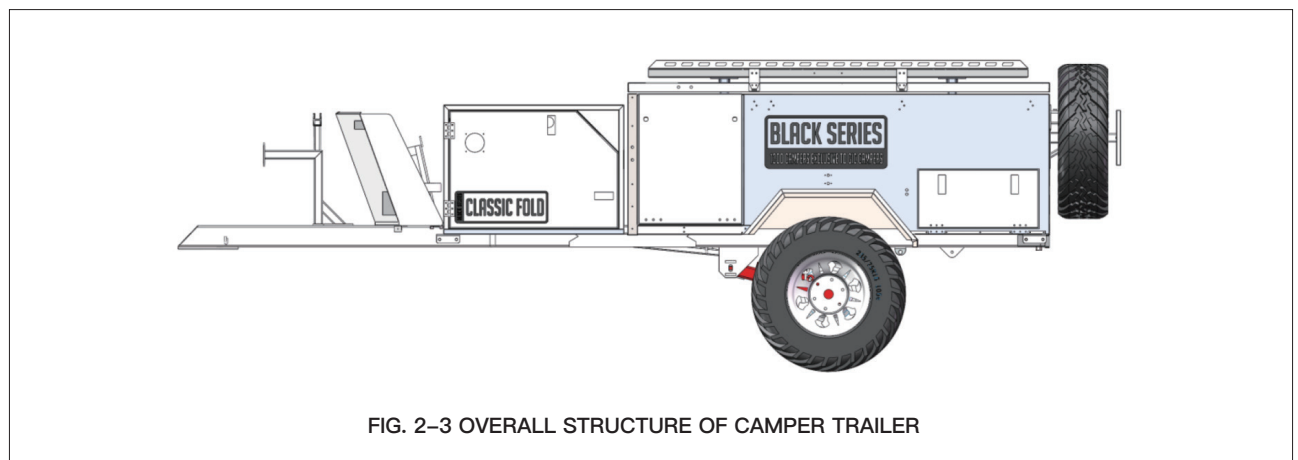


Chassis of a camper trailer consists of chassis frame, tires, step assembly, base of towing device, suspension, damper, etc. Waterproof wooden flooring is laid on the top side of the chassis frame, the space underneath the wooden floor is filled with insulation material and chassis bottom is sprayed with protective armor paint.



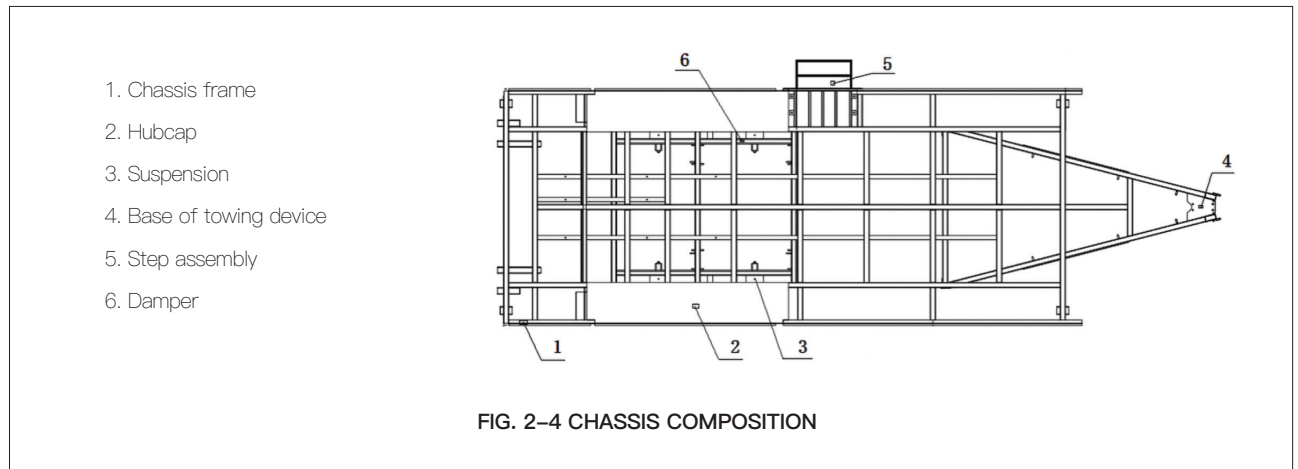
2.2 Lightweight camper trailer

A lightweight camper trailer mainly consists of chassis, carriage, tent system, traveling signal system, circuit system, water system, gas system, fuel system, traction and brake devices, solar system, living system, etc.



(1) Chassis

Chassis of a lightweight trailer consists of chassis frame, tires, base of towing device, suspension, damper, etc. Galvanized iron plates are riveted on the top side of chassis frame, wooden flooring is laid on the iron plates and chassis bottom is sprayed with protective armor paint.



(2) Carriage

Carriage mainly consists of vehicle body frame, exterior body panels, access door, flap cover, tent, circular sofa, etc. A foldable tent is installed in the carriage. When the flap cover is opened, the tent will be unfolded. Install the poles in place according to the pole installation diagram (Fig. 2-5), stretch the telescopic poles, and the tent will be fully expanded. At this moment, the installation of main tent is completed.

A side tent can be installed on the door side of carriage. The side tent consists of four parts: top, side enclosure, bottom and a shower room. There are corresponding zippers on the main tent. Zip the top on the main tent first, and then side enclosure, bottom and shower room, and install the poles on the corresponding positions according to the diagram. At this moment, the installation of side tent is completed.

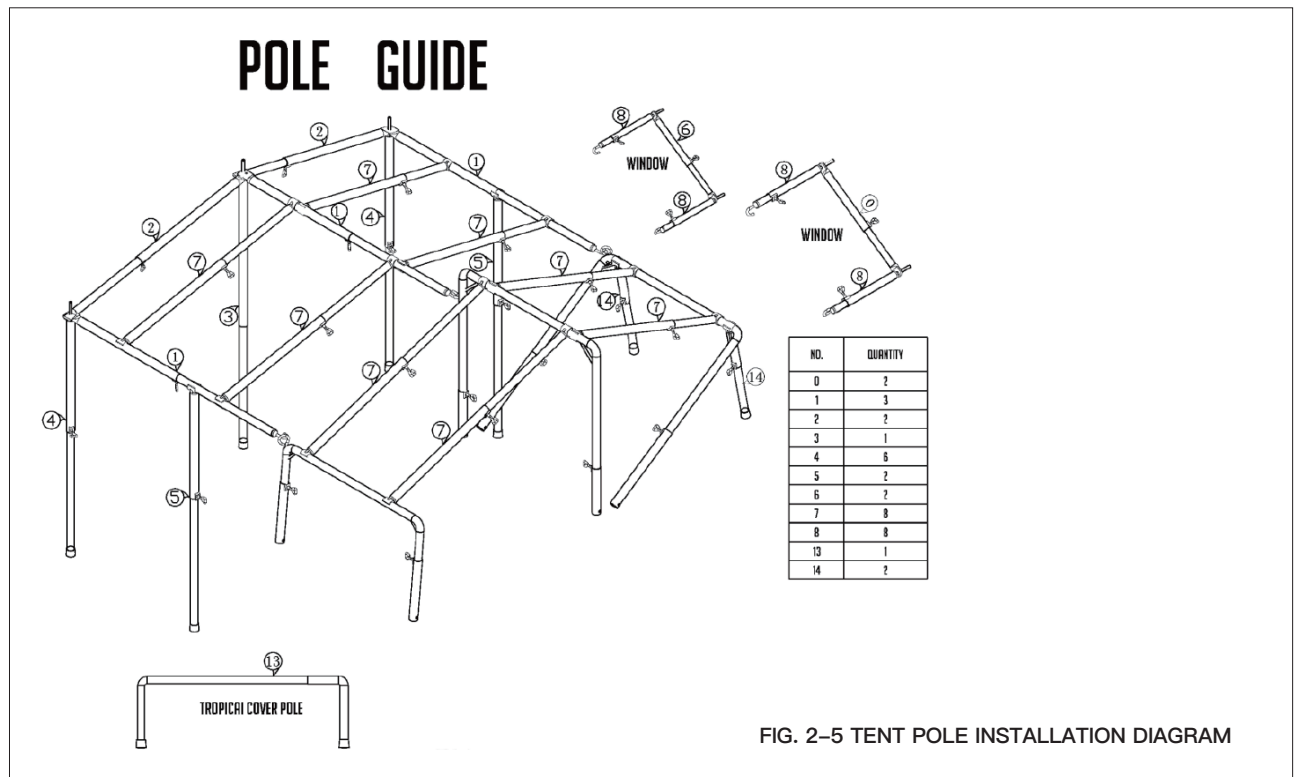




FIG. 2-6 PICTURE OF TENT

The carriage is equipped with a circular sofa and a portable dining table to provide a more comfortable space for customers. And the dining table can be placed in the middle of the sofa, when the sofa is converted into a small bed, so that more people can have a rest at the same time.

There is a portable fridge in the tool cabinet of the carriage for food storage. There is a stainless steel stove beneath the sofa on the rear side of carriage. The stove can be pulled out from the outside. The stove is equipped with a gas stove, a water basin and a faucet for is equipped with a gas stove, a water basin and a faucet for picnicking.

CHAPTER



VEHICLE OPERATING INSTRUCTIONS

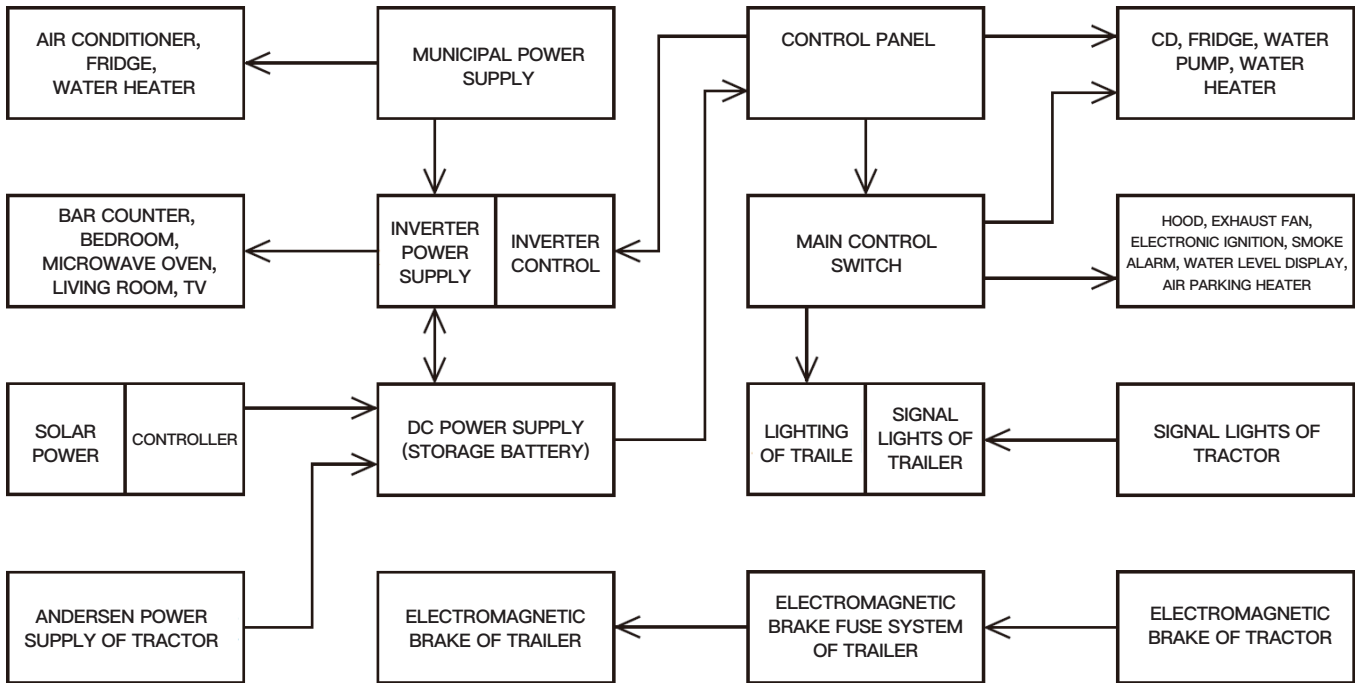
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- I. Operating Instructions of Circuit System
 - II. Operating Instructions of Water System
 - III. Operating Instructions of Gas System
 - IV. Operating Instructions of Fuel System
 - V. Operating Instructions of Awning
 - VI. Operating Instructions of Electric Step
 - VII. Operating Instructions of Stabilizer Legs
and Guide Wheels

I. OPERATING INSTRUCTIONS OF CIRCUIT SYSTEM

Circuit system of a camper trailer includes: signal light circuit; interior and external lighting circuits; on-board appliance circuits; alarm circuit; electric step circuit; water level display circuit; electromagnetic brake circuit; DC and AC outlet circuits; Andersen charging circuit; PV charging circuit; DC→AC inversion and AC→DC charging circuits.

Three charging systems (Andersen, PV and municipal power supply) that work in parallel ensure the battery pack of camper trailer is in good working condition, and provide high quality uninterrupted power supply.

The operating principle of the circuit system is shown in diagram below.



1. OPERATING INSTRUCTIONS OF MAIN CONTROL PANEL

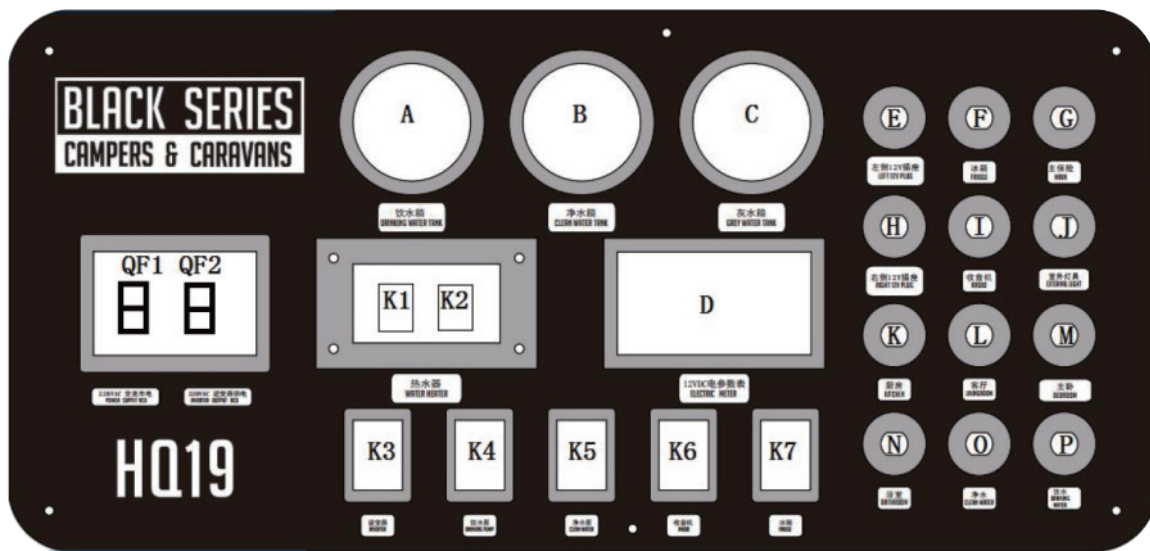


FIG. 3-1 MAIN CONTROL PANEL

Switches of on-board appliance system are integrated on the main control panel on the vehicle and the corresponding appliances are as follows:

- (1) Water gauge (A) of the drinking water tank displays the current drinking water percentage of drinking water tank.
- (2) Water gauge (B) of the purified water tank displays the current purified water percentage of purified water tank.
- (3) Water gauge (C) of the gray water tank displays the current gray water percentage of the gray water tank.
- (4) Water gauge (D) displays parameters such as current battery voltage, real-time current, real-time power, and accumulated power consumption.
- (5) The left 12V outlet circuit fuse (E) is disconnected when this branch is overloaded.
- (6) The fridge circuit fuse (F) is disconnected when this branch is overloaded.
- (7) If the main circuit fuse (G) is disconnected, all the branches except for water pump branch will not work.
- (8) The right 12V outlet circuit fuse (H) is disconnected when this branch is overloaded.
- (9) The radio circuit fuse (I) is disconnected when this branch is overloaded.
- (10) The exterior light fuse (J) is disconnected when this branch is overloaded.
- (11) The kitchen appliance circuit fuse (K) is disconnected when this branch is overloaded.
- (12) The living room appliance circuit fuse (L) is disconnected when this branch is overloaded.
- (13) The bedroom fuse (M) is disconnected when this branch is overloaded.
- (14) Bathroom appliance circuit fuse (N) is disconnected when this branch is overloaded.
- (15) The purified water pump circuit fuse (O) is disconnected when this branch is overloaded.
- (16) The drinking water pump circuit fuse (P) is disconnected when this branch is overloaded.
- (17) Water heater switches K1/K2.
- (18) Inverter switch (K3). Turn on and off the inverter through switch K3 on the control board.
- (19) Turn on and off the drinking water pump through the drinking water pump switch (K4).
- (20) Turn on and off the purified water pump through the purified water pump switch (K5).
- (21) Turn on and off the radio through the radio switch (K6).
- (22) Turn on and off the fridge through the fridge switch (K7).
- (23) 110V AC leakage protector (QF1): Switch on QF1 to energize the AC outlets on the interior branches when the municipal power supply is accessible. AC power supply leakage protector QF1: In case of input of municipal power supply, switch on QF1, and air conditioner, fridge and inverter are energized and work in AC→DC mode and battery is being charged; meanwhile, switch on QF2, and AC outlets are energized through bypass function of inverter; switch off QF1, and municipal power supply is cut off.

Description: Main control switch fuse of the battery compartment should be closed.

- (24) Inverter power supply leakage protector QF2: Switch on QF2 when the inverter is in the inversion (DC→AC) state, and AC outlets on relevant interior branches are energized. To obtain AC 110V power supply in absence of municipal power supply, close the inverter switch K3, switch on QF2, and inverter is working in DC→AC mode and all outlets on QF2 output branches are energized; switch off QF2, and all outlets on QF2 output branches are de-energized.

Description: Inverter switch fuse of the battery compartment should be closed.

2. OPERATING INSTRUCTIONS OF ON-BOARD APPLIANCES

2.1 ENTERTAINMENT SYSTEM

A. Radio

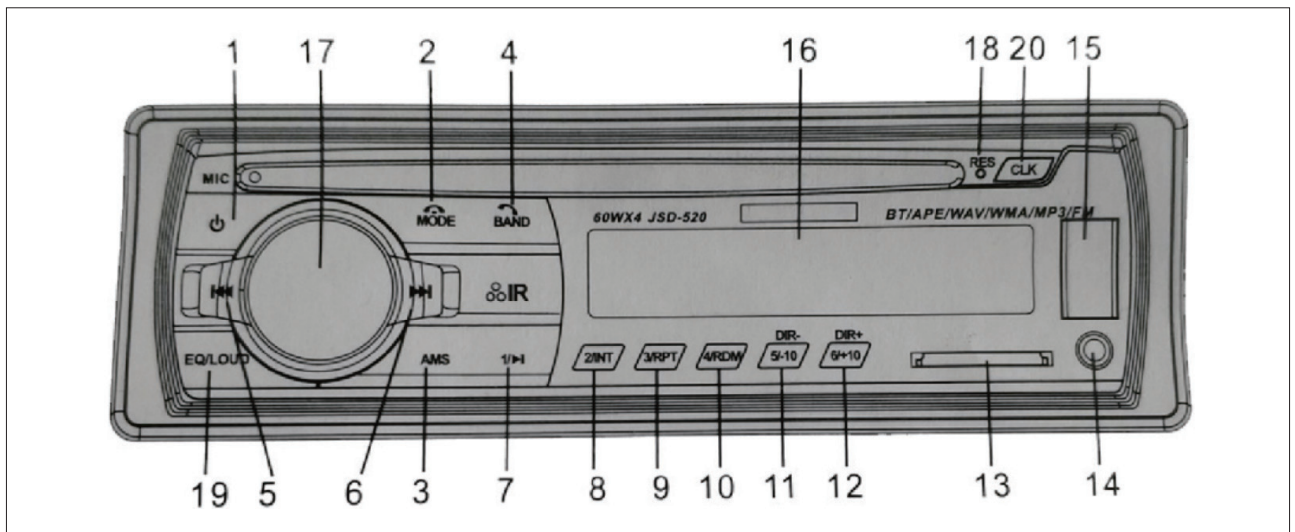
Camper trailer has a car radio with a built-in CD cassette mechanism to play CDs, two interior Hi-Fi speakers and two exterior waterproof speakers;

Operation of CD (BT610 BT202):

- (1) First close the switch K4 on the control panel in Fig. 3-1;
- (2) Long press the control knob for more than 3s to turn on the radio;

See radio instructions for specific functions.

Operation of CD (JSD520):



OPERATING INSTRUCTIONS

CONFIRM THE RADIO IS POWERED ON. THE FUNCTIONS OF BUTTONS ARE SHOWN BELOW:

1. POWER ON/OFF

Short press the button to turn on the radio; long press the button for 3s to turn off the radio.

2. MODE--FUNCTION SELECTOR

Press this button repeatedly and LCD will display the functions in the following order: RADIO→USB→SD→AUX-IN→BT. In BT mode, short press the button to end the call.

3. AUTO SEEK SEARCH TUNING (AMS)

In RADIO mode, short press the button to enter the browser; long press the button to automatically save radio stations. In play mode, the function is to select songs.

4. BAND BUTTON

In RADIO mode, press the button to switch FM1–FM2–FM3 in the round-robin in each wave band. In BT mode, short press the button to answer the call.

5/6. /BUTTON

In MP3 play mode, the function is to skip the tracks (USB/SD/MMC); press this button in the play to switch to the desired track. In RADIO mode, the function is to search radio stations; press this button to search the desired radio station.

7. 1/BUTTON

Radio stations are stored 1–6, and press the button to broadcast. Play the music via external devices such as USB or SD/MMC card. In the “play”, press the button to stop playing. Press the button again to continue playing.

8. 2/INT BUTTON

Press this button, and the screen displays "INT" and first few seconds of each track will be played. Press this button again to stop playing or play the track normally.

9. 3/RPT BUTTON

Press this button, and the screen displays "RPT", and the selected tracks will be played repeatedly; press this button again to cancel repeated playing.

10. 4/RDM BUTTON

Press this button, and the screen displays "RDM", and the selected tracks will be played at random; press this button again to cancel random playing.

11. 5/-10 BUTTON

In play mode, short press the button to -10, and long press the button to select the folder.

12. 6/+10 BUTTON

In play mode, short press the button to +10, and long press the button to select the folder.

13. SD CARDSLOT

Push SD/MMC card gently into the slot. Press the MODE button to select SD. Music will start playing automatically. Supported file formats: (.mp3), (.wma).

14. AUX IN JACK

Plug the portable player audio output into this jack and play the audio through the car speakers.

15. USB PORT

Play the music in the USB flash drive through the USB port.

16. LCD DISPLAY

LCD displays the current state in real time.

17. VOLUME/ SELECT CONTROL

Turn the volume knob to control the volume. Short press the button to select other functions, and the selected function is displayed on the screen.

18. RESET BUTTON

Restore factory defaults.

19. EQ& LOUD BUTTON

Loudness switch.

20. CLK BUTTON

Electronic clock button.

B. Stereo

Camper trailer has an HIVI stereo system with a built-in BT receiver, and is equipped with two sets of interior tweeter/woofer speakers and two sets of exterior tweeter/woofer speakers;

Operation of HIVI stereo:

- (1) First turn on the stereo;
- (2) Connect the stereo system via Bluetooth of mobile phone;
- (3) Select the songs to play;
- (4) Press the speaker switch button to switch interior or exterior speakers.

C. TV

- (1) Insert the power cord of TV into the DC outlet on TV bench;
- (2) Press the start button on the remote control to turn on the TV. See TV instructions for specific functions.

2.2 CAMPER TRAILER HAS A FRIDGE (FRIDGE MODEL OPTIONAL)

A. Operation of fridge powered by three energy sources (DC12V/AC110V/LPG or propane)

- (1) To use the fridge, first close the switch K7 on the control panel in Fig. 3-1, press the “Power” button on the control panel of fridge for 1s until the indicators (Auto, AC, DC, Gas Source, Temperature Setting) on fridge’s control panel flash and release the “Power” button;
- (2) Press the “Confirm” button on the fridge’s control panel for 2s, press the increase “>” or decrease “<” button to select the power source when any of Auto, AC, DC and Gas Source indicators is constantly on, and press the “Confirm” button for 2s to confirm the power source;
- (3) After the power source is selected, press the increase “>” or decrease “<” button to set the cooling level; there are five cooling levels and each box represents one level; one box represents the lowest cooling level and five boxes represent the highest cooling level; the higher the ambient temperature, the higher the cooling level required, and vice versa; when the temperature is between 15°C–25°C, the cooling level should be set to level 3; after the cooling level of fridge is set, press the “Confirm” button for 2s;
- (4) There is a three-position switch on the left side of “ON/OFF” button of fridge’s control panel, which is to dissipate heat of fridge condenser; when the switch is on “-” position, one fan is working, when on “=” position, two fans are working, and when on “0” position, no fan is working; the effective heat dissipation of condenser will accelerate the cooling of fridge, so the fans can be turned on based on the actual conditions;
- (5) When the fridge is no longer used, press “ON/OFF” button until all indicators on the panel are off, release the “Power” button and turn off the switch K7 on the control panel in Fig. 3-1.
- (6) Municipal power supply is preferred when it is accessible. When municipal power supply is not accessible, the batteries of trailer can be used as the backup power supply of fridge;

B. Operation of compressor fridge (DC12V/AC110V dual power supply):

- (1) First close the switch K7 on the control panel in Fig. 3-1;
- (2) Long press the control knob for more than 3s;
- (3) Fridge will start operating with the last settings;
- (4) Turn/press the control knob on the preferred settings and user mode options;
- (5) The indicator turns red when it is selected;
- (6) Press the button again to cancel it.

Compressor fridge (DC12V/AC110V) has other functions. See the fridge instructions for specific functions and operations.

C. Operation of portable fridge:

- (1) Press the power button “.”.
 - (2) Press button “+” or “-” button to set the temperature.
 - (3) Press the setting button “” to select ECO (energy-saving mode) or Max. (fast cooling) mode. Max. mode is the default setting.
 - (4) Long press the setting button “” for 3s until “H” is flashing on the screen; select the battery protection mode (H-High, M-Medium, L-Low), and press the setting button “” again to confirm the selected mode. H is the default setting.
 - (5) Connect APP to the fridge via Bluetooth. When “AP” is displayed on the screen, press the setting button “” to confirm the setting. This function is optional.
- The fridge has other functions. See the fridge instructions for specific functions and operation.

Description: When operating temperature of fridge is 10–32°C, start the fridge 8 hours in advance before storing the food in it to achieve the optimal performance;

After 8 hours, the temperature of freezer compartment is –10°C and the temperature of refrigerator compartment is 8°C.

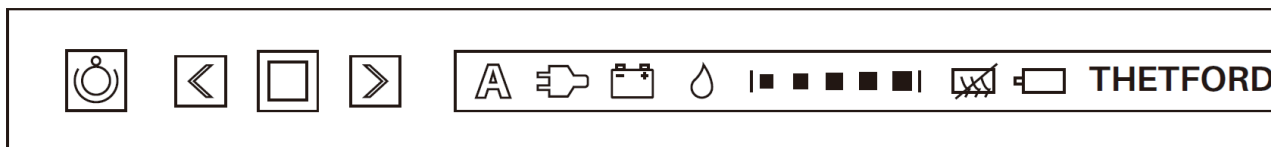


Fig. Control Panel of Fridge

2.3 MICROWAVE OVEN

- (1) Turn on the inverter switch;
- (2) Switch on the leakage protector QF2;
- (3) Ensure that the plug of microwave oven is inserted into the outlet and the outlet switch is on.
- (4) Select the function as needed, set the time and the microwave oven starts working. See microwave oven instructions for specific functions and operations.

2.4 WASHING MACHINE

- (1) Turn on the purified water pump switch K5 in Fig. 3–1;
- (2) Turn on the inverter switch;
- (3) Switch on the leakage protector QF2;
- (4) Ensure that the plug of washing machine is inserted into the outlet and the outlet switch is on.
- (5) Select the function as needed and the washing machine starts working. See washing machine instructions for specific functions and operations.

2.5 OVEN

Oven can be powered by liquefied gas (LPG or propane) or AC power supply. The stove on the upper left corner uses AC power supply for heating, and the others use LPG.

Steps to use AC power supply for heating:

- (1) Turn on the inverter switch;
- (2) Switch on the leakage protector QF2;
- (3) Ensure that the plug of oven is inserted into the outlet and the outlet switch is on.
- (4) Select the level as needed and the oven starts working.

Steps to use LPG for heating:

- (1) Open the valve of LPG cylinder;
- (2) Turn on the main switch of gas line (in the front compartment);
- (3) Turn on the switch on oven branch (beneath the oven).
- (4) Turn on the switch of corresponding stove as needed and ignite it to start heating or cooking.

See oven instructions (Attachment 6) for specific functions and operations.

2.6 WATER HEATER

A. Operation of water heater with dual energy sources (AC110V/LPG)

There are 2 switches K1 and K2 on panel in Fig. 3–1; K1 is for electrical heating and K2 is for LPG heating; when K1 is on “1” position, the electrical power supply is connected and the water heater is working in electrical heating state; when K1 is on “0” position, the electrical power supply is disconnected and the water heater stops electrical heating; K2 is the LPG heating switch; when K2 is on “1” position, LPG is connected and the water heater is working in LPG heating state; when K2 is on “0” position, LPG is cut off and the water heater stops LPG heating.

If K1 and K2 are both on “1” position, electrical heating and LPG heating are both enabled and the time for water temperature to rise to the same temperature is shorter compared to the situation where only one heating mode is enabled.

Caution: To use the water heater, first close the purified water pump switch K5 in Fig. 3-1, turn on the cold/hot water mixing faucet to ensure that water can flow out from the hot water pipeline, which means the water tank of water heater is full.

(1) Electrical heating conditions: a. AC municipal power supply is accessible; b. Leakage protector QF1 on control panel is on; c. Main control switch in Fig. 3-3 is on; d. K1 is on “i” position.

(2) LPG heating conditions a. LPG is accessible; b. Main control switch in Fig. 3-3 is on; c. K2 is on “i” position. Turn of the switch K1 (or K2, or K1 and K2) in Fig. 3-1 after use; close the “branch valve”.

B. Operation of LPG water heater

(1) To use the water heater, first close the purified water pump switch K5 in Fig. 3-1, turn on the cold/hot water mixing faucet to ensure that water can flow out from the hot water pipeline, which means the water tank of water heater is full;

(2) Close the switch K1 (only one water heater switch) in Fig. 3-1 when LPG is accessible, and the water heater is working in LPG heating state;

(3) Turn of the switch K1 in “Fig. 3-1” after use; close the “branch valve 4”.

Description: Water heater tank is installed with a temperature control switch (60°C); when the water temperature reaches the set temperature of temperature control switch, the energy source of heating will be cut off automatically; the heating time of water heater with a single energy source is generally 60min; if dual energy sources are used, the heating time will be shortened accordingly; the heating time will vary in different regions and seasons.

C. Operation of instant LPG water heater

(1) Turn on the purified water pump switch K3 in Fig. 3-1;

(2) Open the valve of LPG cylinder;

(3) Turn on the main switch of gas line (in the front compartment);

(4) Turn on the water heater switch on the branch (in the water heater compartment);

(5) Press the “Power” button in Fig. 3-2 and the water heater starts working with the last settings;

(6) Press “Up” or “Down” button in Fig. 3-2 to set the temperature; after temperature is set, press the “Confirm” button in Fig. 3-2 and the water heater starts working with the current settings.



Fig. 3-2

2.7 INVERTER

Camper trailer is equipped with a 2,000W inverter or 3,000W inverter.

(1) Turn the main power switch in the battery compartment to “ON” position, and close the inverter fuse;

(2) When municipal power supply is accessible, switch on QF1, and the inverter is working in AC→DC mode and the battery is being charged; as the inverter has the municipal power supply bypass function, the inverter will automatically transmit the municipal power to the electrical devices on the branches when municipal power supply is accessed and QF1 and QF2 both are switched on. When the municipal power supply is not accessible, close K1 and inverter is working in DC→AC mode; switch on QF2 at this moment and the outlets on the corresponding branches are energized; turn off K1 and inverter stops working. See inverter instructions for specific functions and operations.

2.8 HOOD

(1) Turn on the fan switch (on the bottom of hood);

(2) Turn on the light switch (on the bottom of hood).

See hood instructions for specific functions and operations.

2.9 ALARMS

(1) Gas leak alarm

Gas leak alarm detects low-concentration combustible gas in the surrounding environment through the gas sensor. When the concentration of combustible gas exceeds the set value of the alarm, the alarm will give alarm signals, prompting the user to detect the gas leak and take timely measures to eliminate the danger.

Gas alarm value: LPG: 0.1%~0.5%.

(2) Smoke alarm

Smoke alarm is also an important device in the camper trailer. It is installed on the ceiling of trailer to prevent any fire in the trailer caused by overloading of appliances or combustion of furniture. The device will immediately react to smoke and the speaker beeps to alarm.



Fig. 3-4 Gas Leak Alarm



Fig. 3-5 Smoke Alarm

2.10 SIGNAL LIGHTS

The tractor is standard equipped with a 7-pin outlet and the camper trailer is standard equipped with a 7-pin plug. Insert the 7-pin plug of the trailer into the 7-pin outlet of the tractor to synchronize the signal lights of the tractor and trailer.



- 1 From top to bottom:
 - Left steering light
 - Position light (stop light)
 - Side light
- 2 License plate light

Fig. 3-4 Gas Leak Alarm



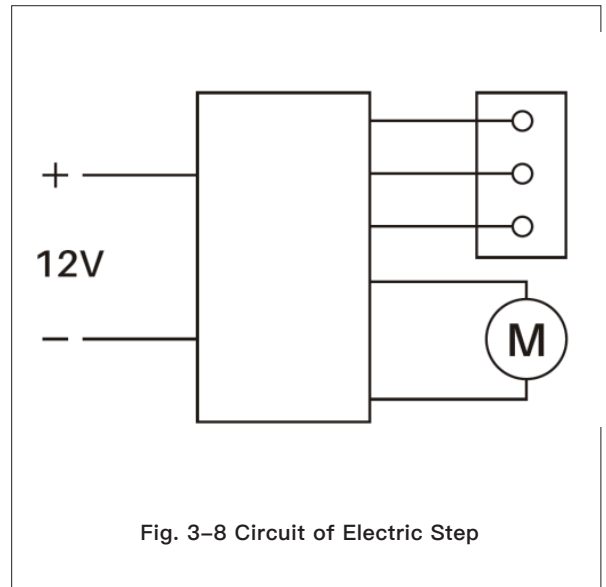
Figure: Picture of 7-Pin Plug

2.11 AIR CONDITIONER

- (1) Insert the charging cable of municipal power supply to municipal power input outlet of trailer;
- (2) Close the leakage protector switch QF1 in Fig. 3-1;
- (3) Turn on and off the air conditioner using the remote control.

2.12 ELECTRIC STEP

Camper trailer is equipped with a retractable electric step for passengers to get in and get off from the vehicle. The step is made of aluminum, lightweight, resistant to corrosion and has an anti-slip surface. The electric step is driven by a DC motor and controlled via a dedicated switch.



3. SWITCHES OF INTERIOR LIGHTS AND STRIP LIGHTS AND SWITCHES OF EXTERIOR FRONT, REAR, LEFT AND RIGHT LIGHTS

3.1 MAIN CONTROL SWITCH (FIG. 3-3)

The main control switch controls the DC relay, and the DC relay controls the DC load; except for the inverter and water pumps, all DC loads are controlled by the main control switch. Press the main control switch, and the DC relay will be energized and transmit power to the main control panel to control DC devices; press the main control switch again until the DC relay coil is de-energized and no longer transmits DC12V main power to the main control panel, and all DC devices stop working.

3.2 SWITCHES OF INTERIOR LIGHTS AND STRIP LIGHTS (FIG. 3-3)

- (1) Living room ceiling light control: Press the living room ceiling light switch to turn on the ceiling light; press the living room ceiling light switch again to turn off the ceiling light.
- (2) Living room strip light control: Press the living room strip light switch to turn on the strip light; press the living room strip light switch again to turn off the strip light.
- (3) Bedroom ceiling light control: Press the bedroom ceiling light switch to turn on the ceiling light; press the bedroom ceiling light switch again to turn off the ceiling light.



Fig. 3-3 Main Control Switch

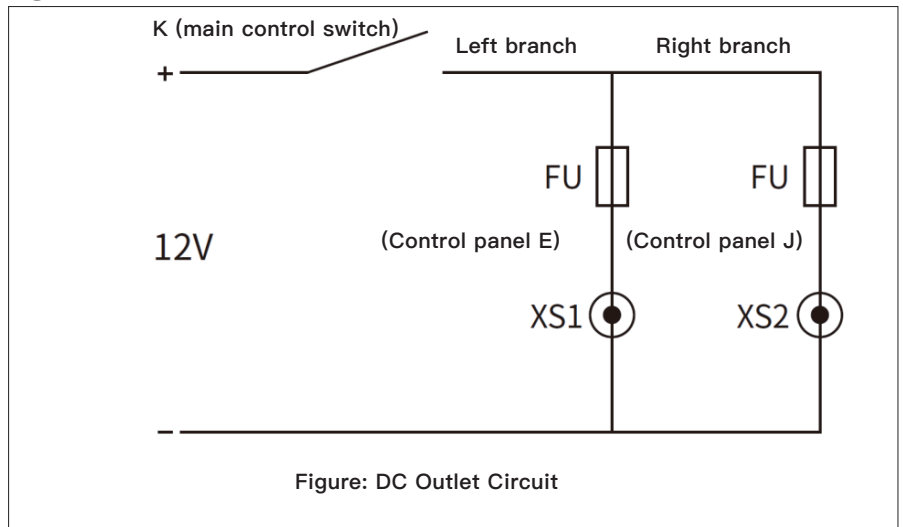
3.3 SWITCHES OF EXTERIOR FRONT, REAR, LEFT AND RIGHT LIGHTS (FIG. 3-3)

- (1) Exterior headlight switch control: Press the exterior headlight switch to turn on the headlights; press the exterior headlight switch again to turn off the headlights.
- (2) Exterior taillight switch control: Press the exterior taillight switch to turn on the taillights; press the exterior taillight switch again to turn off the taillights.
- (3) Exterior left light switch control: Press the exterior left light switch to turn on the exterior left light; press the exterior left light switch again to turn off the exterior left light.
- (4) Exterior right light switch control: Press the exterior right light switch to turn on the exterior right light; press the exterior right light switch again to turn off the exterior right light.

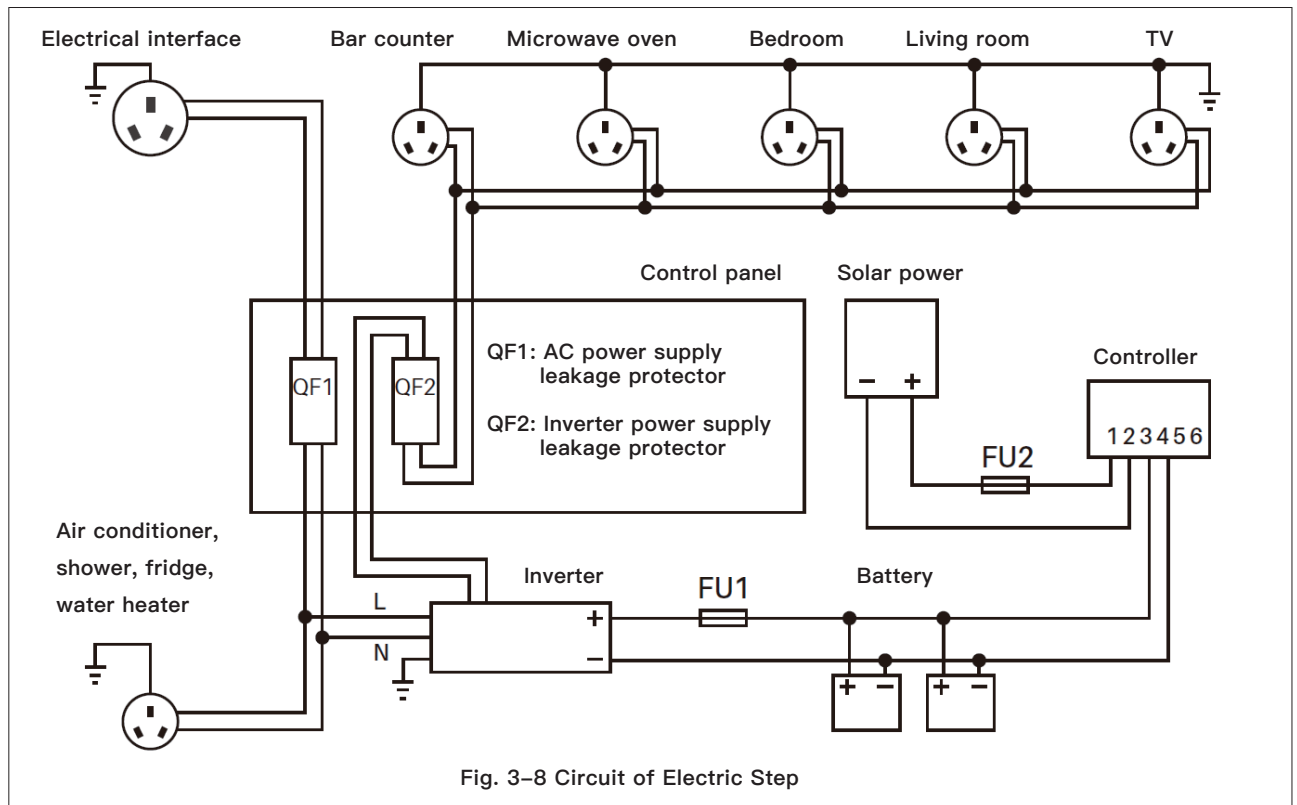
4. DC AND AC OUTLET CIRCUITS

(1) DC outlet circuit

When the main control switch (left in Fig. 3-3) is turned on, all DC outlets are energized to supply power to DC loads.

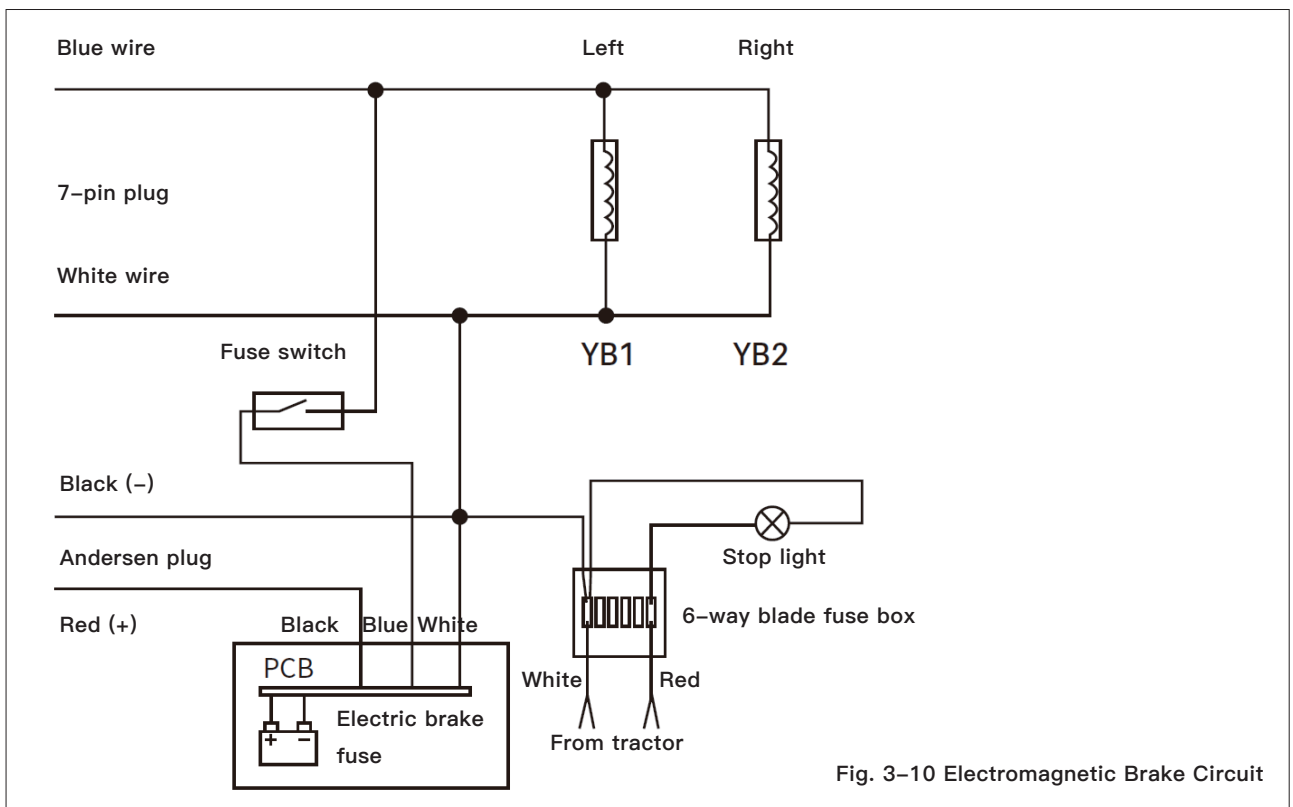
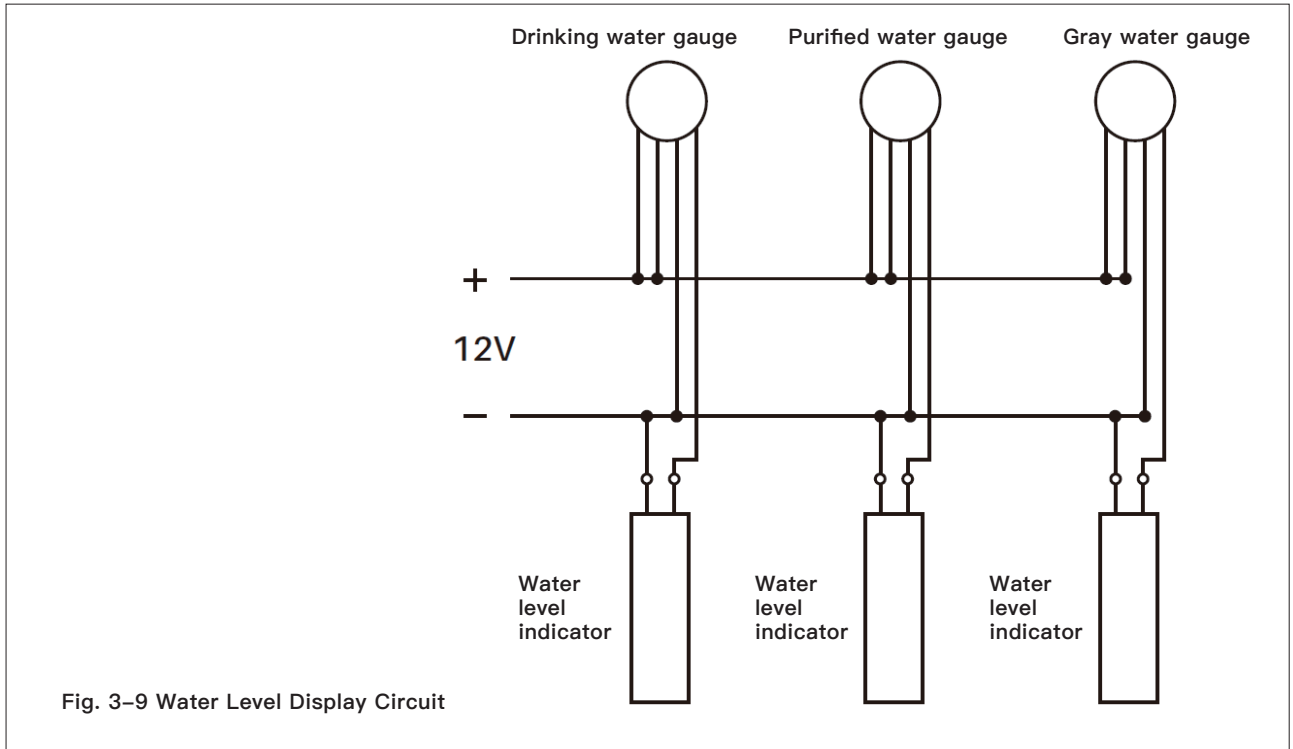


(2) AC outlet circuit



5. WATER LEVEL DISPLAY CIRCUIT

The chassis of camper trailer is equipped with 3 water tanks (drinking water tank, purified water tank and gray water tank), the water gauges corresponding to the water tanks are drinking water gauge, purified water gauge and gray water gauge, the water level indicators corresponding to the water gauges are drinking water level indicator, purified water indicator and gray water level indicator. Three water gauges are installed on the control panels respectively (see Fig. 3-1). The principle of water level display circuit is shown in Fig. 3-9.



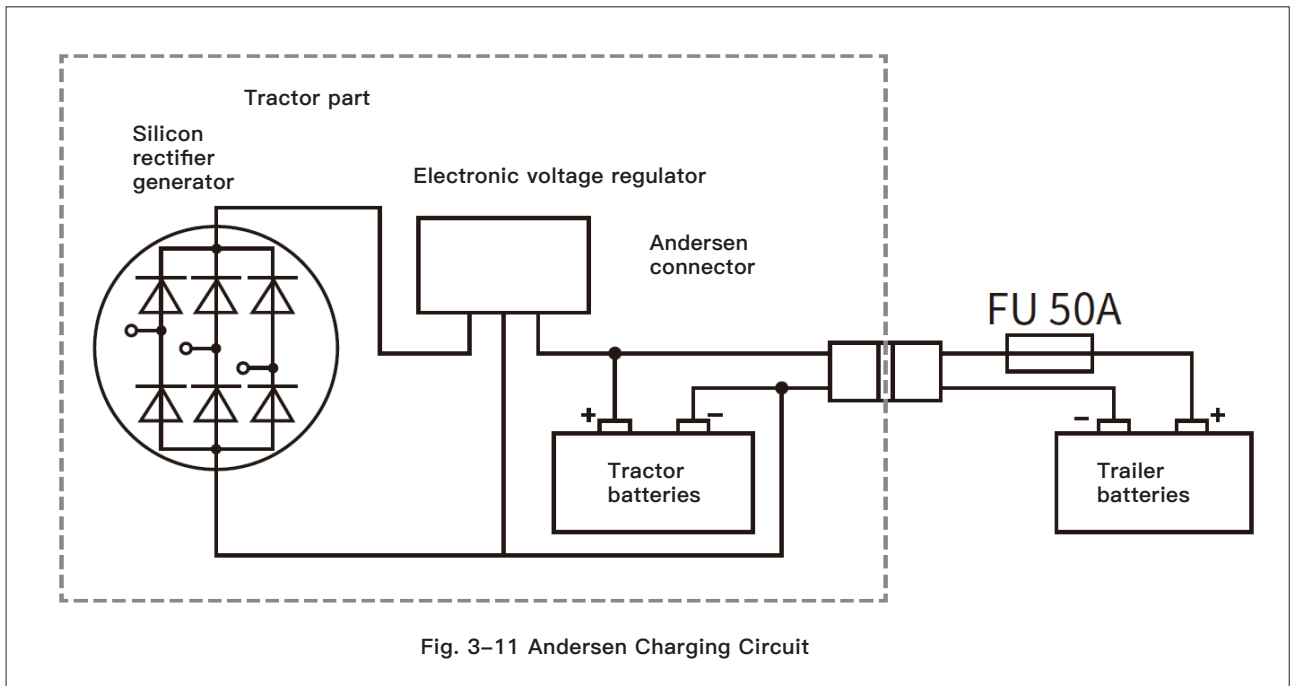
6. ELECTROMAGNETIC BRAKE CIRCUIT

Camper trailer adopts electromagnetic brakes. Step on the brake pedal of tractor, and the brake controller outputs a brake signal to the trailer's brake disc through the 7-pin connector to synchronize the braking of tractor and camper trailer.

To prevent any accidents caused by separation of tractor and camper trailer in the travel, the camper trailer has a separate emergency brake device to stop the trailer when the trailer is separated from the tractor.

7. ANDERSEN CHARGING CIRCUIT

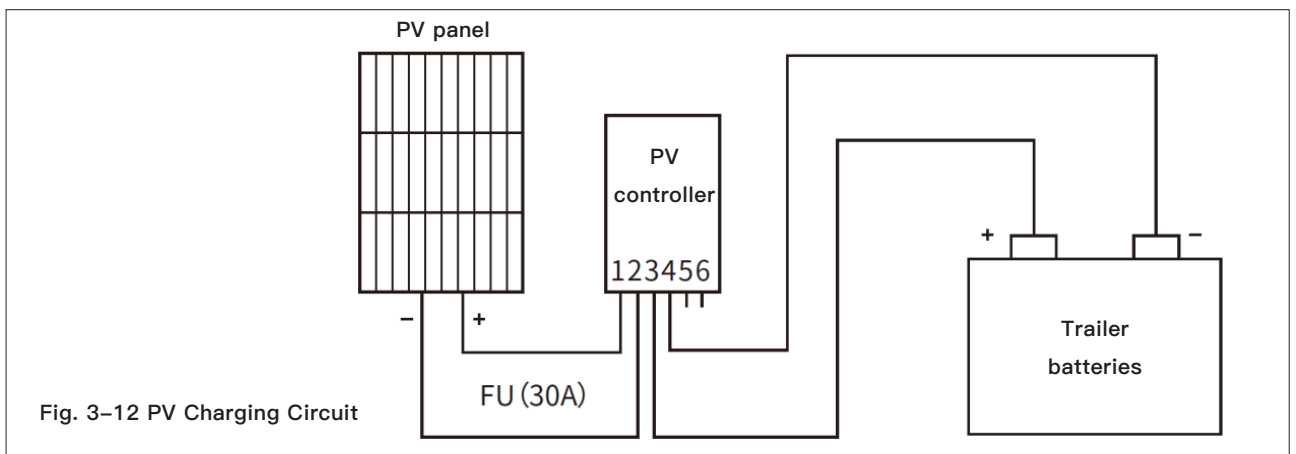
Camper trailer is equipped with four 100Ah colloidal batteries. To ensure that the batteries are in good working condition, the vehicle is designed with multiple charging modes, and different charging modes, including Andersen charging mode, can coexist. The principle of Anderson charging circuit is shown in Fig. 3-11.



8. PV CHARGING CIRCUIT

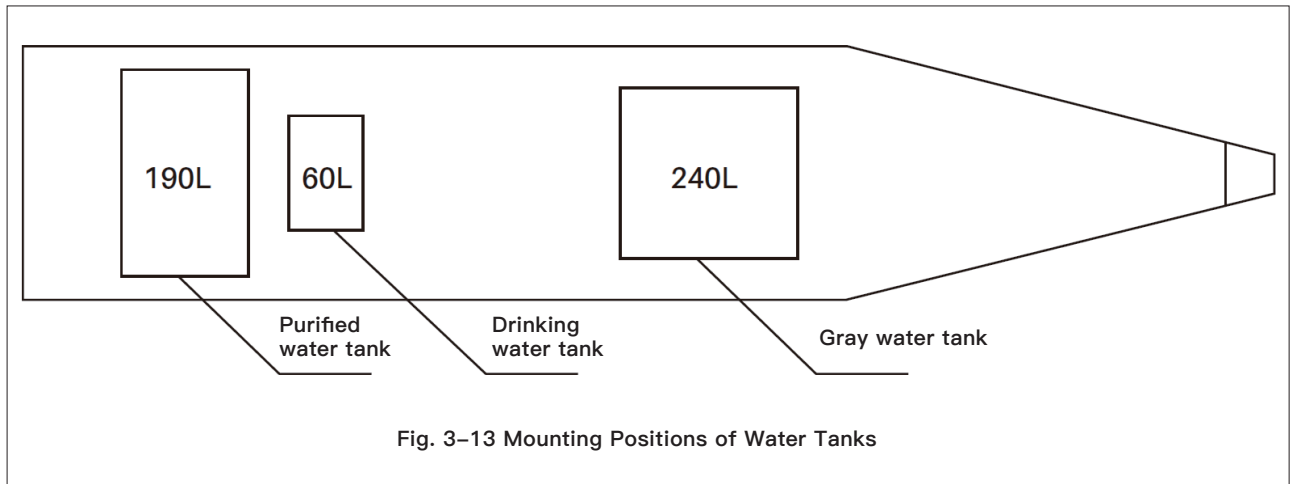
Camper trailer is equipped with PV charging devices. PV panels with different powers are optional according to customer's requirements. PV charging

is efficient, energy-saving and eco-friendly, and is one of the important charging modes of camper trailers. The principle of PV charging circuit is shown in Fig. 3-12.



II. OPERATING INSTRUCTIONS OF WATER SYSTEM

See Fig. 3-13 for mounting positions of water tanks.



Water Tank Quantity of Each Model

	HQ21	HQ15	HQ19	HQ17	HQ12	TH19	TH22	LJC	D1	F3
DRINKING WATER TANK	45L	45L	45L	60L	60L	100L	100L		0	0
PURIFIED WATER TANK	240L	240L	240L	190L	240L	200L	200L		200L	100L
GRAY WATER TANK	100L	100L	100L	240L	100L	100L	100L		-	-
BLACK WATER TANK	100L	100L	100L	-	100L	100L	100L		-	-

1. WATER FILLING OF DRINKING WATER TANK AND PURIFIED WATER TANK

Water filling ports are arranged side by side. On the left is the water filling port of drinking water tank. On the right is the water filling port of purified water tank. See Fig. 3-14.

1.1 WATER FILLING OF DRINKING WATER TANK

Remove the cap of water filling port of drinking water tank, add qualified drinking water into the tank and observe percentage value on the drinking water gauge at the same time, and stop adding until the tank is full (100%).

Caution: Disinfect and clean the drinking water tank before adding water.

1.2 WATER FILLING OF PURIFIED WATER TANK

The water filling steps of purified water tank are the same as 1.1.

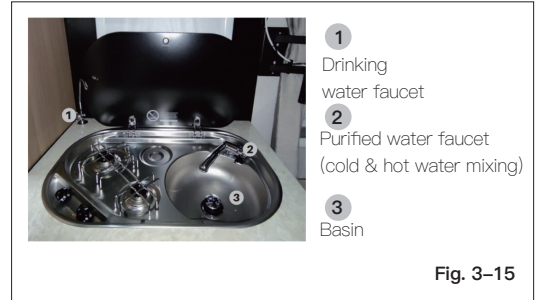


Fig. 3-14 Water Filling Ports of Drinking Water Tank and Purified Water Tank

1.3 INSTRUCTIONS FOR USE OF DRINKING WATER AND PURIFIED WATER

A. Instructions for use of drinking water

Camper trailer is equipped with 2 water pumps (drinking water pump and purified water pump) on the vehicle. To use the water in the two words tank, first turn on the drink water pump switch (“K4” in Fig. 3-1) on the control panel, and then the drinking water faucet in Fig. 3-15(turn the faucet clockwise to increase the water flow, turn the faucet anti-clockwise to decrease the water flow); wait for about 60s and then use water from the faucet (as the drinking water pipeline has a purified water filtration system, water supply is slightly delayed).



B. Instructions for use of purified water

To use the purified water, first turn on the purified water pump switch (“K5” in Fig. 3-1) on the control panel, and then the purified water faucet (cold & hot water mixing faucet) in Fig. 3-15; push it up to increase the water flow and push it down to decrease the water flow; purified water faucet mixes cold water and hot water; adjust the mixing ratio of cold water and hot water by rotating the faucet up and down to obtain the expected water temperature.

Description: The hot water is available only when the water heater is working normally.

2. OPERATING INSTRUCTIONS OF OUTDOOR STOVE

Camper trailer is equipped with a pull-out stainless steel outdoor stove, easy to operate and space-saving. To use the stove, first unlock it and then pull it out from the compartment; push it back into the compartment after use and it will be locked automatically. When the outdoor stove needs water supply (the water from the purified water can be used only, without cold & hot water mixing), first connect the stove to the “quick connector” of chassis water pipeline, then turn on the purified water pump switch (“K5” in Fig. 3-1) on the control panel, and finally turn on the purified water faucet in Fig. 3-16; push it up to increase the water flow, and push it down to decrease the water flow.



3. OPERATING INSTRUCTIONS FOR SHOWER DEVICES

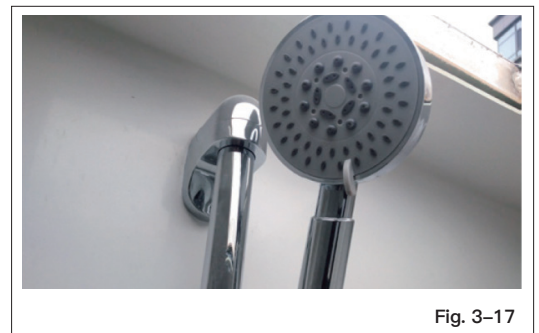
Shower devices are installed in the bathroom and outside the camper trailer.

(1) To take a shower in the bathroom, first turn on the purified water pump switch (“K5” in Fig. 3-1) on the control panel, and then take off the shower head in Fig. 3-17. There are two switches on the back of shower head for different spray modes; there is a cold & hot water mixing faucet below the shower head to adjust the mixing ratio of cold and hot water by pushing it to the left or right to obtain the expected water temperature.

(2) The operating instructions for the outdoor shower are the same as those for the indoor shower.

DESCRIPTION:

The hot water is available only when the water heater is working normally.



4. OPERATING INSTRUCTIONS FOR ELECTRIC TOILET

Camper trailer is equipped with an electric toilet in the bathroom. To use the toilet, first turn on the purified water pump switch (“K5” in Fig. 3-18) on the control panel, and then press the solenoid valve button on the toilet to open the solenoid valve and directly flush the human waste from the drain pipe into the waste container.



5. WATER TANKS

(1) OPERATING INSTRUCTIONS FOR DRINKING WATER TANK

Camper trailer has 1 drinking water tank, which is installed in the middle of mounting area on the chassis and has a 60L volume. Clean the drinking water tank of residues regularly to ensure the water quality in the drinking water tank.

Cleaning method:

First add proper amount of neutral detergent from the filling port of drinking water tank, and then add purified water until the tank is full;

Then open the outlet valve of the drinking water tank in Fig. 3-19, and close the valve until the tank is empty.

Fill up the drinking water tank again with water and then drain the tank. Repeat the above steps several times until the drinking water tank is completely clean.

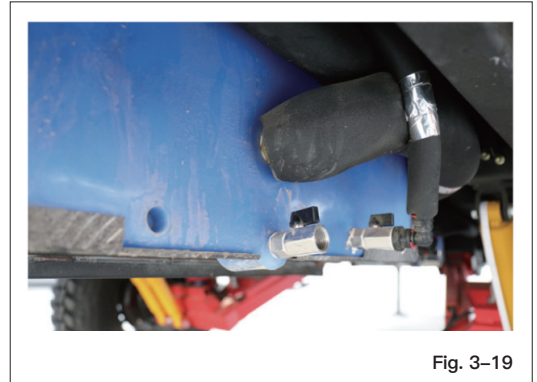


Fig. 3-19

(2) OPERATING INSTRUCTIONS FOR PURIFIED WATER TANK

Camper trailer has 1 purified water tank, which is installed on the rear end of mounting area on the chassis and has a 190L volume. Clean the purified water tank of residues regularly to ensure the water quality in the purified water tank. The cleaning method is the same as that of drinking water tank.

(3) OPERATING INSTRUCTIONS FOR GRAY WATER TANK

Camper trailer has 1 gray water tank, which is installed on the front end of mounting area on the chassis and has a 240L volume. The gray water tank is mainly used to collect water for washing face, brushing teeth, laundry and rinsing vegetables, fruits and cleaning kitchenware.

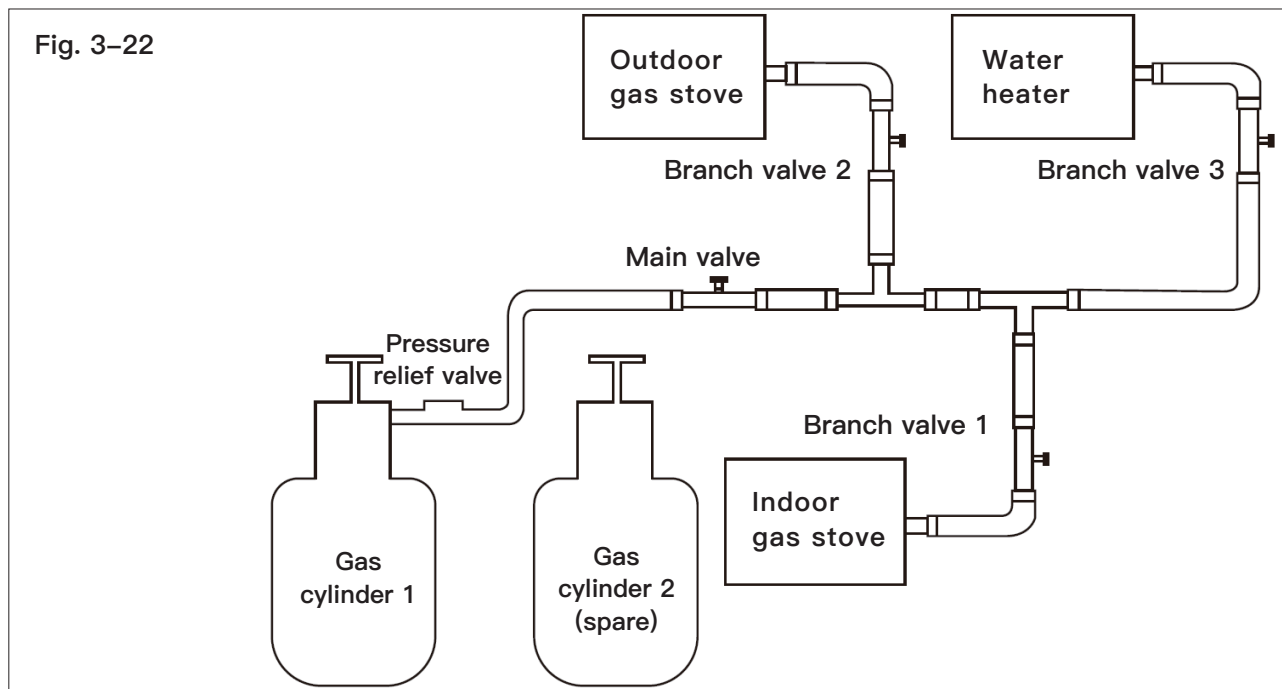
Gray tank stores domestic sewage, which contains chemical solutions such as detergent and must be discharged at a place with discharge conditions or at an RV campground.



Fig. 3-21

III. OPERATING INSTRUCTIONS OF GAS SYSTEM

Gas system consists of the camper trailer consists of gas cylinders, pressure relief valve, main valve, branch valves, T-shaped connectors, pipes, hoops and gas burning devices. Diagram of camper trailer's gas system is shown in Fig. 3-22.



The gas cylinder compartment in front of the camper trailer can accommodate two gas cylinders, which should be purchased by the user. The cylinder specification is 30kg and when filled up with LPG, it can support the user to live outdoors for one month.

LPG from the cylinder is high-pressure liquid and cannot be used directly. It should be de-pressurized before use. A main valve is installed after the pressure relief valve to ensure safety and facilitate repair. Gas system has many branches. Copper T-shaped connectors are installed at joints of branches. They are easy to install and have reliable performance. Gas system uses high quality and safe LPG hoses that are resistant to oxidation and erosion. In order to improve the tightness at the hose joints, the hose end is clamped onto the copper connector by a hoop using the hydraulic clamps.

OPERATING INSTRUCTIONS OF GAS SYSTEM

Before use of a gas burning device:

- (1) Check whether all valves are closed;
- (2) Open the gas cylinder valve;
- (3) Open the main valve of gas system.

1. OPERATION OF GAS BURNING DEVICES

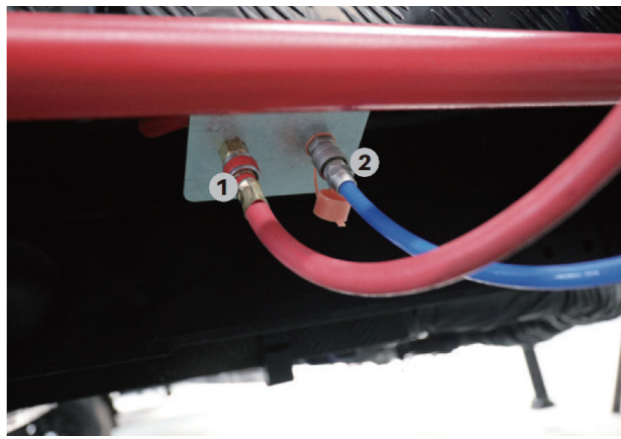
1.1 OPERATION OF INDOOR GAS STOVE

Open "main valve and branch valve 1" in Fig. 3-22, and then open "gas valve" of the gas stove successively; close the "gas valve" of gas stove, "branch valve 1 and main valve" in turn after use.

1.2 OPERATION OF OUTDOOR GAS STOVE

Connect the pipeline of outdoor gas stove to the quick connector, then open "main valve and branch valve 2" in Fig. 3-22, and then open "gas valve" of the gas stove successively; close the "gas valve" of gas stove, "branch valve 2 and main valve" in turn after use.

The correct method to connect the pipeline to quick connector is to align the "notch" on the quick connector to the "steel ball".



- ① Quick connector for gas pipeline
- ② Quick connector for water pipeline



- ① Main valve of gas cylinder
- ② Pressure relief valve 1
- ③ Pressure relief valve 2
- ④ Main valve 2 (for water heater, fridge and oven)
- ⑤ Main valve 1 (for indoor and outdoor gas stoves)

SAFETY PRECAUTIONS FOR GAS SYSTEM

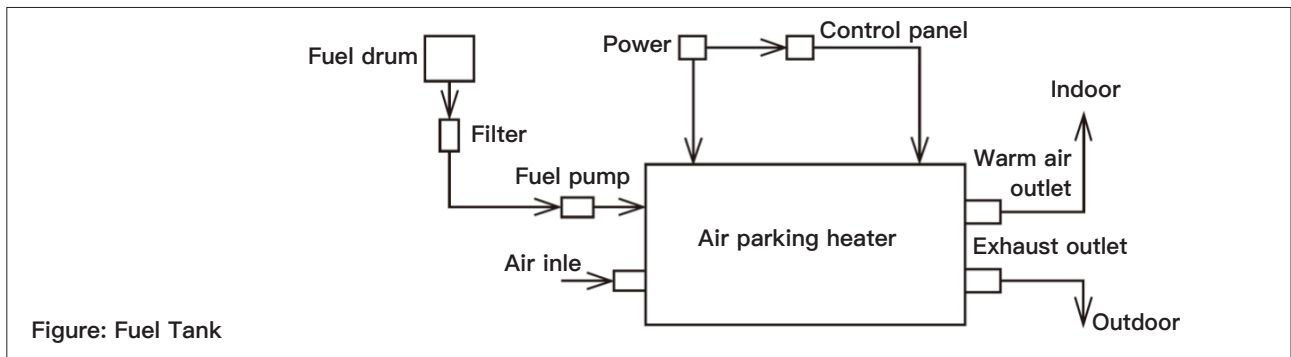
- The steel gas cylinders used for the trailer must comply with local regulatory requirements, and be regularly inspected according to relevant provisions. The cylinders whose service life has expired should not be used.
- Cylinders should be installed vertically and secured firmly in the cylinder compartment in front of the camper trailer.
- Check the cylinder body, cylinder valve, pressure relief valve and connections for leaks before first use. Check leaks by using suds (or gas leak detector). Open flame is forbidden.
- Ignition method: The correct ignition method is to first open the cylinder valve, main valve and branch valve of gas system, and then open the electronic ignition switch of the gas stove; use a gas lighter to ignite the ordinary gas stove.
- Gas stove flame regulation: Regulate the gas stove flame according to different needs in use to satisfy cooking requirements.
- Do not leave the stove unattended to avoid spilling of soup or water, which will lead to gas leaks and thus result in poisoning or fire accident.
- Complete combustion of LPG requires large amount of air, so keep kitchen and area around the gas stove well ventilated.
- Leaking LPG will be deposited in low-lying areas, not easily dissipate, and may be ignited when exposed to open flame or sparks, resulting in fire or explosion and causing serious injury and property damage, even death. Therefore, once LPG leak is noticed (LPG has a special smell, so leak is very perceptible), emergency measures should be taken immediately:
 - (1) Extinguish any open flame;
 - (2) Close cylinder valve, main valve and branch valve;
 - (3) Open door, windows and other vents;
 - (4) Do not touch any electronic switches;
 - (5) Leave this area and notify professional service personnel for timely maintenance.
- Make sure the leak of gas system has been eliminated before reuse.
- Once a fire occurs in use, immediately take effective measures to extinguish the fire. First, quickly close the cylinder valve to cut off the gas source, and then cover the fire point with a wet towel or wet quilt to isolate it from the air and the flame will be extinguished, and finally move the cylinder to a safe place, promptly ask the professional service personnel to check the cause of the accident, and troubleshoot the hidden danger.

IV. OPERATING INSTRUCTIONS OF FUEL SYSTEM

Camper trailer is fitted with an air parking heater, which uses diesel fuel as the combustion energy. The fuel system includes fuel drum, filter, fuel pump, heater, air inlet line, exhaust gas discharge line, warm air output line and control panel.

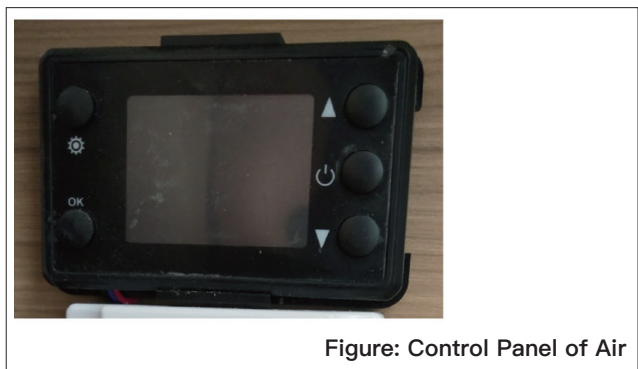
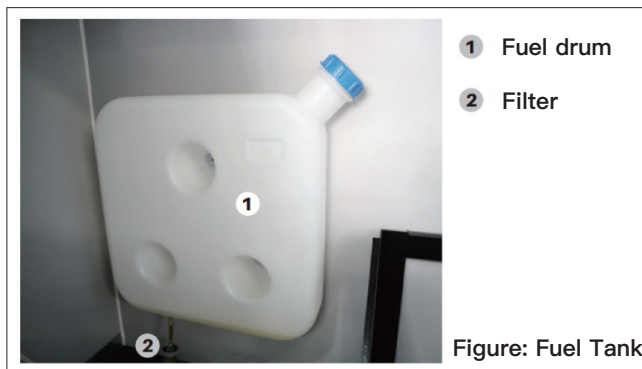
A 5L fuel drum is installed in the fuel tank compartment in the right front of the camper trailer. Air parking heater can be used in winter for people to stay warm. The fuel consumption varies according to the heater model and is generally about 0.3L/h. The filter screens out impurities in the fuel and ensures the air parking heater system work consistently. The fuel pump is installed after the filter to ensure the fuel supply of heater. Heater is the core component of the entire system. It burns the fuel supplied by the fuel pump to release heat. Air inlet line is to supply combustion air for the heater. The hazardous gas produced in the fuel combustion will be discharged outdoors through the exhaust pipe. The heat produced from the fuel combustion in the heater will be supplied to the carriage through warm air outlet line. Air parking heater is turned on and off on the control panel.

The operating principle of fuel system is shown in Figure: Fuel System.



OPERATING INSTRUCTIONS OF AIR PARKING HEATER:

- (1) Fuel filling: Add diesel into the drum using a fueller until it's full before using the heater. Select the fuel type according to the region and season;
- (2) Close the main control switch in Fig. 3-3 and then the air heater fuse (installed at the heater), and the air heater control panel is illuminated;



- (3) Press and hold the power button on the control panel of air parking heater until "on" is displayed on the panel, indicating the air heating system starts working;
- (4) Press and hold the power button on the control panel of air parking heater until "off" is displayed on the panel, indicating the air heating system stops working.

The accompanying technical data includes one copy of operating instructions of air parking heater. See the instructions for specific operations.

Since the pipeline of the system is long, it takes a while to exhaust gas and pump the fuel in first use of air heater. If the first ignition fails, first turn off the power button on the control panel of air heater, disconnect the air heater fuse switch, and then close the air heater fuse switch again, and turn on the power button on the control panel; under normal circumstances, repeat these steps twice and the heater can be ignited.

V. OPERATING INSTRUCTIONS OF AWNING

A manually operated awning is installed on the side of carriage of camper trailer. It can be unfolded in hot weather to block the sun. To use the awning, first take out the handle crank, insert the hitch end into the rotating ring, grip the handle rod with left hand, rotate the crank anti-clockwise with right hand and the awning is slowly unfolded. When the awning is fully unfolded, place two poles upright at front of the awning, adjust the height and secure the poles.

First release the fastening bolts of poles, remove the poles, rotate the crank clockwise to fold the awning slowly. When the awning is fully folded, take off the handle crank and put it into the storage compartment.



Figure: Manually Operated Awning



Figure: Step Switches

VI. OPERATING INSTRUCTIONS OF ELECTRIC STEP

Camper trailer is equipped with an electric step. Press down switch “II” in Figure: Step Switches to unfold the electric step. When the electric step is in place, the limit switch will cut off the motor power automatically. Press up switch “I” in Figure: Step Switches to retract the electric step. When the electric step is fully retracted, the limit switch will automatically cut off the motor power.

VII. OPERATING INSTRUCTIONS OF STABILIZER LEGS AND GUIDE WHEELS

1. OPERATING INSTRUCTIONS OF STABILIZER LEGS

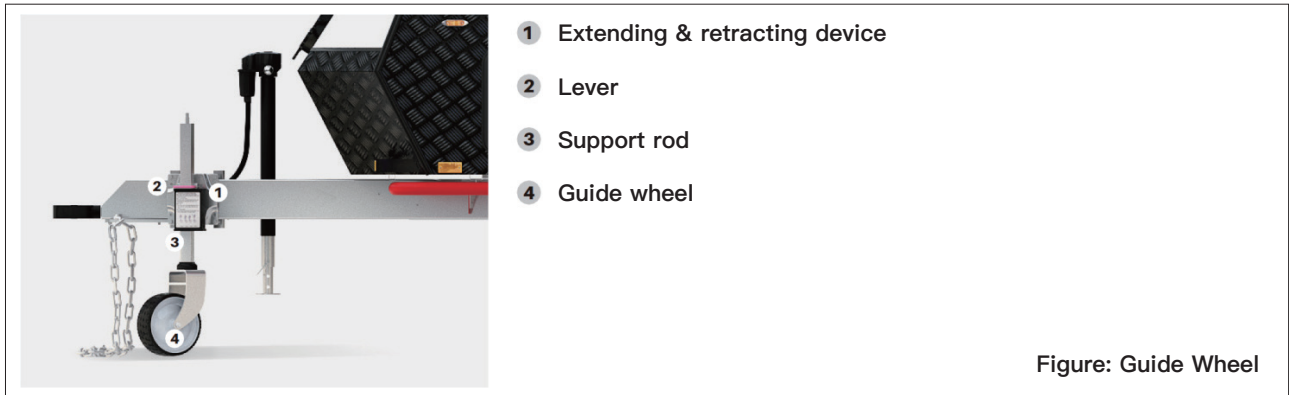
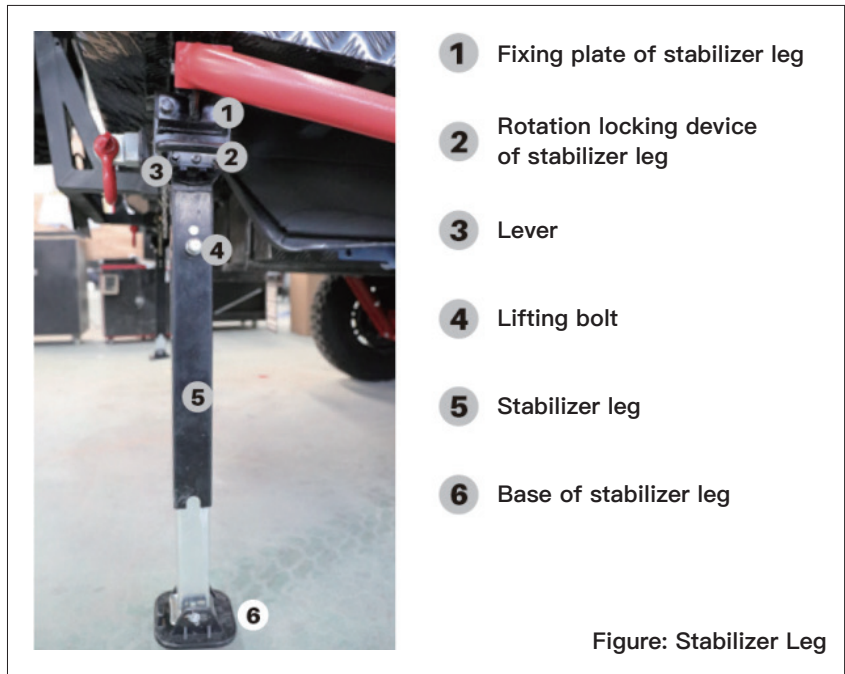
Camper trailer is equipped with 4 manually operated stabilizer legs with a height of 650mm, and the height can be adjusted up to 880mm using the lifting bolt. Base of stabilizer leg can be turned within a certain angle to balance the vehicle; the rotation locking device of stabilizer leg is used to lock the stabilizer leg firmly when it is extended or retracted.

Park the trailer on the level, solid and flat ground before using the stabilizer legs. Do not use stabilizer legs to support the trailer on the slope or soft ground. When the vehicle is fully stopped, lay down the stabilizer legs in turn (pull the lever outward with force, place upright and lock the stabilizer leg firmly), and then adjust the height of stabilizer legs in turn, so the loadings evenly distributed on 4 legs.

Retract the stabilizer legs in turn (pull the lever outward with force, place the stabilizer legs in the horizontal position and lock them firmly) after the use.

WARNING:

- (1) The stabilizer leg must be vertical to the ground, or it will be deformed or damaged.
- (2) Balance the load evenly on 4 stabilizer legs, or the trailer will be deformed.
- (3) Start the vehicle after confirming that all stabilizer legs are placed in the horizontal position.



2. OPERATION OF GUIDE WHEEL

Camper trailer is equipped with guide wheels. See Figure: Guide Wheel for specific operations.

OPERATING INSTRUCTIONS OF GUIDE WHEEL:

Step one (placing guide wheel in right position): pull the lever outward to place the guide wheel upright; step two (fast lowering): rotate two bolts on the side clockwise using the crank to lower the guide wheel rapidly on the ground; step three (locking): rotate two bolts on the side anti-clockwise using the crank to lock the guide wheel firmly (a little bit hard); step four (tuning): rotate the top bolt using the crank to lift guide wheel to a suitable height.

PRECAUTIONS:

Lock the guide wheel firmly anti-clockwise, and press it down with proper force. Guide wheel should be vertical to the ground, or it will be deformed or damaged. Handbrake of trailer must be secure when trailer is supported by guide wheels. Start the vehicle after confirming the guide wheels are placed in horizontal position.

Park the trailer on the level, solid and flat ground before using the guide wheels. Do not use guide wheels to support the trailer on the slope or soft ground. Retract the guide wheels (pull the lever outward with force, place guide wheels in the horizontal position and lock them firmly) after use.

WARNING:

- (1) Guide wheel should be vertical to the ground, or it will be deformed or damaged.
- (2) Handbrake of trailer must be secure when trailer is supported by guide wheels.
- (3) Start the vehicle after confirming the guide wheels are placed in the horizontal position.

CHAPTER IV

SAFE OPERATION OF VEHICLE VEHICLE HAZARD MANAGEMENT INSPECTION RULES FOR VEHICLE OPERATIONAL SAFETY

THE CONTENTS OF THIS CHAPTER ARE CRITICAL TO SAFE DRIVING AND OPERATION OF TRAILER. FOLLOWING THESE SAFETY RULES AND MAKING THEM A HABIT IS THE ONLY EFFECTIVE WAY TO AVOID SAFETY ACCIDENTS.

I. UNSUITABLE VEHICLE

The towing force required for the trailer should not exceed the maximum towing capacity of the vehicle. If the towing capacity of the vehicle is not enough, a heavy trailer will become unstable and get out of control, resulting in injury, death or serious safety accidents. In addition, the stresses attached to the vehicle may cause serious damage to the engine and drive system.

&DANGER

A low-load vehicle will make the trailer out of control, resulting in injury, death or serious safety accidents. Please make sure a vehicle that is suitable to your trailer is used.

II. SPEEDING

The recommended maximum speed to safely tow the trailer is 80km/h on the highway. If you drive too fast, the trailer is likely to wobble, increasing the likelihood of losing control. Moreover, the tires will overheat, increasing the likelihood of a blowout. When the tire bursts at high speed, it's highly likely to lose the control of trailer.

&WARNING

Speeding can lead to loss of control of the trailer and injury, death or serious safety accidents. Precautions for towing the trailer: When you're towing a trailer, the turning radius is larger due to the longer braking distance. The trailer alters the operating characteristics of the tractor, making it more sensitive to steering and more likely to be unstable in windy conditions. Therefore, following requirements must be observed:

- Beware of slippery conditions. Driving a vehicle towing the trailer is more prone to be affected by slippery conditions than driving a vehicle without towing a trailer.
- Foresee the "wobbling" of trailer. This is crucial. Harsh steering and wind gusts will make the trailer wobble. Pay full attention to the reaction of the trailer to the pressure waves generated by passing trucks and buses.
- When the trailer is wobbling, take your foot off the accelerator pedal, steer as little as possible and drive in a straight line. Steer the vehicle by "tuning". Do not speed up to stop wobbling (you will escalate wobbling only). Do not use brake of trailer to stop trailer from wobbling.
- Check the trailer and traffic frequently in the rear view mirror.
- Drive in a low gear on a steep slope or a long slope. Use the transmission as a brake. Do not apply the brakes because they will overheat and fail.
- Pay attention to the height of your trailer, especially when approaching bridges and areas with roofs and near trees.

&WARNING

In order to ensure driving safety and avoid rollover caused by speeding and other violations, you must drive according to the following speed requirements: The maximum speed of vehicle is 80km/h on paved and straight roads. Slow down in advance according to traffic regulations to turn the corner.

III. TOWING DEVICES OF TRAILER AND TRACTOR MUST BE PROPERLY AND FIRMLY CONNECTED.

Towing devices of the trailer include: 12,000lb towing device, retaining pin, pin circlip, two safety chains, U-shaped buckle, 7-pin connector, Andersen plug, and emergency brake switch.



Figure: Retaining Pin and Circlip



Figure: Safety Chain



Figure: U-Shaped Buckle



Figure: Andersen Plug



Figure: Emergency Brake Switch

Proper coupling of towing device of vehicle and tractor is a decisive factor for driving safety.

Check the following before using the camper trailer:

- (1) Connect the towing device fixed to the front end of the towing frame of the camper trailer to the corresponding connector of the tractor, insert a pin at the connection of the connector and the towing device, and then insert the lower end of pin into the circlip;
- (2) Connect the safety chains on the front end of towing frame of camper trailer and switch wire rope of emergency brake to the corresponding connecting rings on the tractor using U-shaped buckles;
- (3) Connect the 7-pin connector and Andersen plug of tractor to the 7-pin connector and Andersen plug of camper trailer respectively;
- (4) Retract the front and rear stabilizer legs and guide wheels of trailer, place them in the horizontal position and lock them firmly.

&WARNING

The selection and use of buckles (connecting rings) and connectors (hitches) on the tractor to connect to safety chains and towing device on towing frame of trailer is essential for the safe towing of the trailer. Separation of buckle and connector (hitch) may result in death or serious injuries. The connector and buckle (connecting ring) of the tractor must be strong enough to tow the trailer. Insufficient strength may cause injury, death or serious safety accidents.

&WARNING

Improper coupling between trailer and vehicle may cause injury, death or serious safety accidents.

The following inspections and maintenance must be performed before driving:

- Lock the towing device of trailer and connector of vehicle firmly;
- The safety chain must be in good condition and secured to the corresponding connecting ring on the vehicle, providing sufficient slack to allow for sharp turns; the safety chain can secure the trailer to the vehicle if the towing vehicle fails to connect to the towing device. Use the properly assembled safety chains to prevent the trailer from hitting the road even if the hitch of the vehicle is disconnected from the trailer.
- Firmly connect the switch wire rope of automatic emergency separation and brake system to the corresponding connecting ring on the tractor;
- Check whether the emergency brake of trailer works normally. Trailer has an emergency brake and separation system and the switch is installed on the right inner side of the towing frame of trailer. When the trailer is separated from vehicle for any reason, the emergency separation brake is activated automatically. Test the function of separation system before towing the trailer. If the separation systems does not work, do not tow the trailer.

Separation system includes a controller, a battery and a switch wire rope with a pull pin. Separation system is chargeable and can be energized by the trailer. If the electrical system of vehicle is unable to supply power to the separation brake battery, charge the battery regularly to ensure the separation and brake system works normally. It's extremely important to check the charging state of emergency separation battery before each trip. If the trailer and vehicle are separated, separation switch wire rope separately connected to the hitch of tractor will pull the pin in the emergency electrical separation switch on the trailer to activate the emergency brake system and apply electric brakes to the trailer, and the safety chains will guarantee the connection with vehicle.



Check and test emergency separation and brake system

- (1) Visually inspect whether any component of separation system is damaged or missing. Repair or replace the worn, damaged or missing parts before towing the trailer.
- (2) Pull out the retaining pin of separation switch in the test and then try to pull the trailer. If you feel great resistance, then emergency brake system works normally. Do insert the pin back into the separation switch. Keep the separation brake cable (switch wire rope) slack enough so that the switch is activated (pin is pulled out) only when the connection between trailer and vehicle becomes loose.

CAUTION:

When the pin is pulled out, the battery of separation system will discharge rapidly. Insert the pin back into the separation system immediately. Connect the separation brake cable (switch wire rope) to the vehicle instead of the safety chain or other components. Only in this way will the retaining pin of separation system be pulled out to apply electric brakes before all the slack part of safety cable is tightened.

- (3) Do not tow the trailer when the separation system is activated because the brakes will overheat and fail permanently.

- Visually inspect whether safety chains and hitches are worn or damaged. Replace the worn or damaged safety chains and hitches before towing the trailer.

- Make sure the stabilizer legs of trailer are fully retracted.

- Visually inspect whether towing device is firmly secured to the towing frame of trailer and whether all fasteners are firmly secured to the trailer frame. Wipe clean inside and outside of the towing device, and visually inspect the device for any cracks and deformation and for wear spots and dents inside the device. Replace the towing device if it has any damages or cracks.

- Wipe clean the connecting block in the towing device, and visually inspect the block for cracks and excessive wear. Replace the damaged connecting block in a timely manner.

&WARNING

Do not support the trailer on any part of the axle or suspension system. Do not stay under any trailer unless it is properly supported on jack stands with a rated load. The vehicle that is not properly supported may fall down and cause serious injury or death.

IV. BRAKES

The trailer brakes are designed to work in sync with the tractor brakes. Do not apply the brakes of the vehicle or trailer alone. The vehicle brake controller must be set according to the manufacturer's instructions to ensure proper synchronization between the vehicle and trailer. In addition, you may need to make small adjustments occasionally to accommodate changing loads and driving conditions. Please call Customer Service Department when you need help.

V. TRAILER LIGHT (AND BRAKE) CONTROLLER

It is a device that transmits power from the trailer to the vehicle. Electricity is used to power on the brake lights, driving lights and steering lights. Moreover, if your trailer has a separate brake system, the electrical connector will also supply power to the trailer brakes from the tractor.

VI. PROPER USE AND MAINTENANCE OF TIRES

The tires and wheels of a trailer are important items to guarantee the safety. Therefore, it is necessary to check the trailer tires every time before towing the trailer. If the tire has bald spots, bulges, cuts, cracks, or exposed thin cords, replace the tire before towing. If the wear on the tire tread is uneven, seek professional diagnosis in timely manner. Uneven tread wear may result from unbalanced tires, misaligned axles or incorrect inflation. Tires with narrow tread do not provide enough friction on wet roads and may lead to loss of control.

Improper tire pressure may increase tire wear, reduce the stability of the trailer and result in a blowout. Check the tire pressure every time before towing the trailer. Check the tire when it is cold. Cool the tires for 3 hours before check the pressure.

It is better to have tires roll on the road than sit idle. Improper inflation is one of the main causes of tire failure. Check the inflation pressure of cold tires at least once a week to keep proper inflation pressure. "Cold" means that the temperature of the tire is the same as the temperature of the surrounding air, and if the inflation pressure of tire is below the recommended pressure, the carrying capacity of tire will be seriously affected. If the inflation pressure of tire exceeds the recommended pressure, the maneuverability of trailer/tractor combination will be effected. A drop in tire pressure may cause the tires to overload and overheat. If the trailer tires are under-inflated even for a short period of time, the tires will be damaged from inside. High speed towing at a high temperature can significantly reduce the performance of trailer tires and impair their strength. Please drive at moderate speed.

CAUTION:

Under normal use and maintenance, the average service life of off-road trailer tires is about 20,000–30,000km, or the tires must be replaced every 3 years, whichever comes first. Trailer tires should be replaced after 3 years even if the trailer is rarely used or never used and tires have adequate tread depth.

1. SAFETY COMES FIRST – BASIC MAINTENANCE OF TIRES

(1) Proper maintenance of tires can improve steering, parking, traction and carrying capacity of the vehicle. Overloading is one of the main causes of tire failure. To prevent a blowout or other tire failures, keep proper tire pressure and observe the load limits of tire and vehicle. Proper tire pressure is the "recommended cold inflation pressure". Cold tire means that the tire hasn't been used for at least three hours. When you're driving the car, the tires will heat up, and the tire pressure will increase. To get accurate tire pressure readings, it is important to measure tire pressure when the tires are cold and to check the tire pressure at least once a month. It is usually impossible to determine whether the tires are under-inflated by visual inspection, so for your convenience, purchase a tire pressure gauge and put it on the vehicle.

(2) To keep your tires safe, please purchase new tires that have the same size as the original tires on your vehicle or another size recommended by the manufacturer.

(3) To avoid vibration or wobbling of the vehicle when the tires are rolling, the tires must be properly balanced. Align the wheels by adjusting their angles so that they are correctly positioned relative to the frame. This adjustment will maximize the service life of the tires. Replacement tires must conform to the specifications of the original tires. Mismatched tires and rims may separate due to unbalanced forces, thus causing personal injury to you and others. Mismatched tires and rims may result in a blowout and cause serious safety accidents due to loss of control of the trailer. Improper tire pressure may make trailer unstable and result in a blowout and cause injury or serious safety accidents.

TIRE SAFETY INSPECTION TIPS:

- Check tire pressure regularly (at least once a month), including the spare tire.
- Check the tire tread for cracks, foreign objects, excessive wear or damages.
- Remove glass fragments and foreign objects embedded in the tread.

- Make sure the tire valves have caps.
- Check the tire pressure before a long trip.
- Do not overload your vehicle.

Tire inflation pressure is the most important factor that affects its service life. Inflation pressure should conform to the recommended value for the load, but in no case should it exceed the rated maximum pressure of the tire or rim. Check the inflation pressure when the tires are cold before the operation. Do not deflate the tires when they are hot. Check the inflation pressure every week during use to maximize the service life of tires and reduce tread wear.

VII. CORRECT TIGHTENING TORQUE OF HUB NUT IS CRITICAL TO DRIVING SAFELY

&WARNING

Under-torqued hub nuts may cause wheels to fall off when the trailer is being towed, property damage, injury or serious safety accidents. The overall size, weight and center of gravity of a recreational vehicle puts the wheels under trailer-specific stresses. During a normal turn, the tires and wheels are subjected to considerable stress known as "side load". Therefore, the nuts should be re-tightened periodically.

The following steps must be taken to maintain proper nut torque and guarantee the driving safety:

(1) Check nut torque every time before a trip. It is very important to check the tightness of the nuts every time before towing the vehicle to ensure they are tightened to the proper torque.

(2) Use proper tools.

(3) Pre-tighten the nuts along the diagonal in turn.

Always tighten the nuts along the diagonal in turn to ensure proper torque.

Pre-departure procedures:

(1) Set the torque wrench at 150N.m.

(2) Apply torque to all the nuts along the diagonal in turn to ensure proper torque.

(3) Complete the nut torque tightening procedure for each wheel.



&WARNING

Properly tighten the nuts after the wheel is re-installed for any reason. Remember that the only way to apply proper torque to the nut is to use a torque wrench. Do not use sockets or any other type of wrench that cannot measure the actual pressure applied to the nut. You must follow the two-step process:

A. Wheel re-installation procedure; B. Re-tightening procedure for road test

A. Wheel re-installation procedure:

When the wheel is being re-installed, the nuts must be tightened in 3 phases. This will ensure that the wheel bolts are centered in the wheel bores and will help the nuts maintain proper torque.

(1) Phase 1: Set the torque wrench at 60–80N.m.

(2) Apply torque to all the nuts along the diagonal in turn for hexagon bolts of the wheel.

(3) Phase 2: Set the torque wrench at 80–100N.m.

(4) Apply torque to all the nuts along the diagonal in turn for hexagon bolts of the wheel.

(5) After phase 2, the wheels are able to support the weight of trailer and the jack can be removed.

(6) Phase 3: Set the torque wrench at 145–150N.m.

(7) Apply torque to all the nuts along the diagonal in turn for hexagon bolts of the wheel.

B. Re-tightening procedure for road test:

Re-torque after 20, 50 and 80km.

- Tow the trailer to a safe area after re-installed wheels run 20km.

- Set the torque wrench at 145–150N.m.

- Apply torque to all the nuts along the diagonal in turn for hexagon bolts of the wheel.

- Repeat the steps above with torque of 145–150N.m after the re-installed wheels run 50km and 80km respectively.

- Re-tightening procedure for road test is completed.

&Warning

The hub nuts tend to loosen after the wheel tires are first installed and re-installed for any reason. This may cause the tire to fall off during driving, thus resulting in injury, death or serious safety accidents. Check whether the hub nuts of the trailer are tight after driving 20, 50 and 80km respectively after first installation or re-installation of wheels.

VIII. OVERLOADING PROHIBITED

&WARNING

Overloading of a trailer may lead to trailer failure or loss of control, injury or serious safety accident. The weight on the trailer should not be more than its rated load.

Proper load distribution of the trailer is critical to safety. Overloading may cause failure of tires, wheels, axles or structures. Improper distribution of front/rear loads and left/right loads may cause the trailer to wobble, become unstable or lose control. Please make sure the load is evenly distributed on the trailer. Towing stability also depends on keeping the center of gravity as low as possible.

Overloading is prohibited. Weight of water, fuel as well as gas also needs to be considered. The weight of a full load of water, fuel and gas is part of the trailer load. If more cargo is being transported, the water can be unloaded to keep the total amount of cargo on the vehicle within the rated load limit to avoid overloading the vehicle.

A recreational vehicle with correctly distributed cargo will achieve efficient, trouble-free towing. Load the trailer as evenly as possible. When loading the vehicle, please make sure the goods are evenly distributed to prevent overloading the front, rear, left or right part of the vehicle. Weights should be placed lower, as close to the axle as possible, and evenly distributed from front to rear and from side to side. Placing too many items on one side may overload the tires. Overloading/ or under-inflation may overload the tire, thus resulting in abnormal flexing of the tire. This will generate excessive heat inside the tire. Overheating of tire many results in tire failure. Therefore, proper tire pressure is crucial.

Failure to properly select a vehicle and its hitch to match the gross weight and rated load of the trailer may result in the trailer eventually going out of control in motion, and thus causing injury, death or property damage. Please know the rated load of your vehicle and ensure that the rated capacity of the trailer is less than the rated towing capacity of the vehicle. It is important to match the trailer with the right vehicle. An unsuitable vehicle may suffer mechanical failures and fail to provide adequate traction stability.

Determine the correct load limit for the tractor

If your vehicle will be towing a trailer, the load on the trailer will be transferred to your vehicle.

- (1) Find "The total weight of passengers and cargo must not exceed xxx" on your car's placard.
- (2) Determine the total weight of the driver and passengers who will be riding in your vehicle.
- (3) Subtract the total weight of the driver and passengers from xx kg.
- (4) The resulting figure is equal to the allowable cargo and baggage load. For example, if the number "XXX" is 1,400kg and there will be 5 passengers of 150kg in your vehicle, the allowable load is 650kg ($1400 - 5 \times 150 = 650$).
- (5) Determine the total weight of luggage and cargo loaded on the vehicle. If this weight exceeds the allowable load calculated in step 4, driving safety cannot be guaranteed, the vehicle will not be able to effectively control the trailer, and the trailer will lose control in sudden and unexpected situations, thus causing serious safety accidents, injury or death.

IX. PROPERLY DISTRIBUTE LOAD WHEN LOADING THE TRAILER

&WARNING

Improper load distribution may lead to loss of control of the trailer and result in injury, death or serious injury accidents. Evenly distribute the load from front to rear and from left to right to avoid overloading the tires. Maintaining a low center of gravity is critical to reduce the risk of rollover.

LOAD THE TRAILER

Improper loading of trailer may lead to many accidents and injuries or deaths. To safely load the trailer, you must ensure:

- Proper total load weight; correct distribution of load weight;
- Proper towing frame weight of trailer;
- Proper fastening of load.

To be sure you have loaded the trailer within its rated load, you must consider the weight distribution and the total weight of the trailer and its contents. Overloading is prohibited. The rest of the total weight is carried by the vehicle hitch. Trailer towing frame and trailer hitches carrying the proper load weight is critical to safe towing, otherwise the trailer may sway undesirably or the rear of the trailer may be overloaded. Please read the "Trailer hitch weight" below.

The load distribution must ensure that weight of any part of the trailer will not exceed its rated load. You must ensure that the front and rear load distribution does not make any axle overloaded. Proper load distribution is also essential to predictable processing. If the weight of towing frame is too small after trailer is loaded, the trailer will suddenly wobble when running at high speed on the highway. Towing stability also depends on keeping the center of gravity as low as possible. When loading the trailer, distribute the weight evenly on the left and right sides. Your trailer has an independent suspension. Therefore, the trailer must be level from front to rear in order to maintain equal weight distribution on the axles while towing.

If the front of the trailer is higher than the rear, the rear axle may be overloaded. If the front of the trailer is lower than therear, the front axle may be overloaded. This will overload the axles, wheels and tires and may cause one of these components to fail. In addition, a non-level trailer condition may also make the trailer unstable during towing, and cause it to wobble. Place the cargo as far forward as possible. Excess weight in the rear of the trailer will make it unstable during towing. Heavy load on the top is forbidden, as it may lead to steering issues and hard braking issues. They have a tendency to make the trailer "swoop" in hard braking conditions. This will increase the weight on towing frame. Do not hang heavy objects on the rear bumper or additional device. Otherwise, they may collide with each other. The weights placed on the rear axle will also impair the stability. A bike may be placed in the rear but not a motorcycle.

&WARNING

Ensure that goods will not move inside the trailer when it is running. Goods moving in the trailer will damage the trailer and make it out of control, thus resulting in injury, death or traffic accidents. Fasten all the items with ropes or straps to prevent them from moving when the trailer is running.

X. TOWING FRAME OF TRAILER IS CRUCIAL TO DRIVING SAFETY

Vehicle carrying part of trailer's load is of great importance. This means that the trailer's towing frame must exert a downward force on the hitch. This is necessary because first the vehicle needs the proper weight of trailer's towing frame so as to maintain control of the trailer. In addition, if there is not enough weight on the trailer's towing frame, the trailer will also become unstable at high speed. Remember that the faster you drive, the greater the likelihood of the trailer wobbling. When the vehicle is running, the front wheels may be underloaded and lose the steering control and traction.

XI. TEST WORKING STATE OF ELECTRIC BRAKES AND TRAILER'S SIGNAL LIGHTS BEFORE DRIVING

Trailer has an electric brake controller, which transmits power to the brakes of trailer. Test the brake controller to check whether electric brakes work normally before you hit the road. When the trailer is being towed at speed lower than 10km/h, manually operate the electric brake controller in the cab, and you can feel the brake force of trailer. Check whether all the exterior signal lights of the trailer work normally every time before you hit the road.

XII. HAZARDS OF MODIFICATIONS TO TRAILER

Any modification of your Black Series camper trailer without authorization of the Company will destroy the structural integrity of the vehicle. It will damage circuits, gas line or other functions of the trailer. These illegal modifications may lead to unpredictable major safety accidents.

XIII. PRECAUTIONS FOR GENERATOR

&WARNING

Injury or death risks of generator:

- (1) Do not operate the generator without a carbon monoxide detector to prevent carbon monoxide poisoning.
- (2) Do not refuel the running generator to prevent fire and explosion.
- (3) Do not refuel the generator near ignition sources to prevent fire and explosion.
- (4) Do not overload the circuit and do not use an extension cord to connect to the vehicle power supply.

XIV. DANGEROUS GAS EQUIPMENT

&WARNING

You will lose consciousness and even die after inhaling carbon monoxide. Fire or explosion may cause injury or death. Do not connect propane system to the natural gas supply system. Turn off all indicator lights, appliances and cylinders before filling up the cylinder with fuel or propane. Do not refill propane cylinder to more than 80% of capacity. Do not store fuel gas cylinders in the trailer. If flammable gas (propane) is detected, do not touch appliance switches. Extinguish flames and indicator lights, open the door to ventilate the carriage, and cut off the gas supply of fuel gas cylinder. Leave the area until the smell disappears. Do not locate the leak source of fuel gas with flames.

It is unsafe to stay warm using the stove.

Do not operate generator, portable grills, portable stoves, portable heaters or portable lanterns in the trailer. Do not use the trailer for transportation of flammable, explosive, poisonous or other hazardous items. Ensure that exhaust gas of gas burning devices is discharged outdoors.

XV. GUIDE ON SAFE TRAILER TOWING

- Recheck the load ties to ensure that the load does not shift during towing.
- Check connectors, safety chains, safety brakes, tires, wheels and lights before towing.
- Check whether the nuts or bolts are tight.
- Turn on the signal light a long time before steering.
- Allow sufficient parking distance for the trailer.
- Do not exceed the speed limit to accommodate unfavorable highway and wind conditions so that the trailer will not wobble at high speed. Do not drive faster than 90km/h on the highway. As the speed of the vehicle increases, driving stability, braking ability and the ability to perform emergency maneuvers are greatly reduced.
- Leave enough space for passage. The distance traveled with a trailer is 4 times the distance traveled without a trailer.
- When driving in the city, shift from automatic gear to a lower gear. Get familiar with the position of the tractor and trailer on the road and always allow extra room for turns and lane changes.
- Drive at lower speed when going uphill and downhill. Change to a lower gear when going uphill to avoid overheating or excessive engine load. Change to a lower gear when going downhill to control the speed using engine brake. Do not brake continuously or frequently. Added weight on the trailer will lead to overheating and failure of brakes.
- Do not apply the brakes when going downhill. The brakes will stop working because they are too hot and the trailer may go out of control. Slow down in advance before going downhill (even on a short slope). Stability of vehicle will decrease when going downhill.
- Slow down when there are bumps ahead. Take your foot off the brakes when going over bumps.
- Do not brake on curves unless absolutely necessary. Slow down before entering a turn and do not apply brakes hard during the turn. Apply brakes hard on curves so that the tractor can “control everything”. The weight of trailer on the tractor will affect the manoeuvres of tractor. Avoid fast steering movements that may impair the stability of the vehicle.
- Do not use the brakes to correct violent wobbling of the trailer. Using trailer brakes alone will straighten the entire vehicle combination, especially when going downhill.
- Stop and take a rest about every one hour.

&WARNING

Do not use trailer to transport people. This is life threatening and illegal. Do not store flammable, explosive, poisonous and other hazardous materials in the trailer.

&WARNING

Failure of the brakes of trailer and vehicle will result in injury, death or major safety accidents. Perform road test of brakes at speed no more than 50km/h in a safe area every time before towing the trailer.

XVI. CHECK TRAILER EVERY TIME BEFORE TOWING AND DURING TOWING

PRE-DEPARTURE INSPECTIONS

EXTERIOR:

- (1) Connect to the battery and check its condition.
- (2) Check for any liquid leaks.
- (3) Check whether tires and wheels are damaged and properly inflated. Check tires for any cuts or other damages.
- (4) Check tires for abnormal tread wear. Check tire pressure. Always keep tires in good conditions.
- (5) Check the tightness (torque) of the hub nuts.
- (6) Check whether the towing devices of trailer and connectors of the vehicle are fastened firmly.
- (7) Check whether safety chains are correctly connected to the vehicle.
- (8) Check the batteries of trailer.
- (9) Check all the driving lights, taillights and electrical system.
- (10) Test the brake system of the trailer.
- (11) Check whether rope of safe separation switch is properly fastened on the vehicle.
- (12) Make sure goods are properly loaded, balanced and fastened.

INTERIOR:

- (1) Fasten all the loose items.
- (2) Close all the drawers, cabinets and fridge door.
- (3) Check whether the access door is locked up.

SYSTEMS:

- (1) Check whether fresh water tank is full.
- (2) Drain the water storage tank and fasten the drain cover.
- (3) Check the operation of interior lights and appliances in the vehicle.
- (4) Check the lines of gas system for possible leaks.

CLEANING AFTER EVERY TRIP

- (1) Clean all devices and check for any damage.
- (2) Drain the waste storage cylinders.
- (3) Clean waste water drain hose and fasten the drain cover.
- (4) Drain and flush the fresh water tank.
- (5) Close the outlet valve of gas system.
- (6) Switch off the battery cable.

XVII. CAMPGROUND REQUIREMENTS

&WARNING

Exhaust gases such as carbon monoxide are deadly. Do not block the roof vent of the vehicle or place the vehicle two words gases are likely to accumulate outside, underneath, inside or anywhere near the vehicle. Air flows from the outside will bring the exhaust gas into the vehicle through windows or other outlets away from the exhausts. Operate generator and other equipment only when the exhaust gas is safely diffused, and monitor the outdoor conditions to continue diffusing the exhaust gas. Do not leave the generator operating under any circumstances during sleep. Beware of poisoning symptoms of exhaust gas (carbon monoxide): dizziness, headache, weakness and drowsiness, nausea, vomiting, muscle twitching, inability to think coherently.

Inspect the exhaust system during routine maintenance and repair any leaks, damage or blockages prior to further operation. Do not modify any exhaust system in any way.

XVIII. FIRE AND SAFETY

RV is a kind of complex equipment composed of multiple materials, some of which are flammable. Fires of RV are usually caused by unattended food in the stove or oven, fault or damage of wiring and electrical equipment, fuel leaks or carelessness. The most common careless behaviors include smoking in bed, leaving children unattended, and cleaning with flammable liquids.

FIRE SAFETY PRECAUTIONS:

Turn off all appliances in the trailer before refueling the trailer or any tanks near the trailer. All occupants of the trailer should be familiar with the alarms of smoke, propane and carbon monoxide detectors. Find the cause if the alarm goes off. Do not remove the detectors in an attempt to silence the alarm.

(1) Fire extinguisher

Fire extinguisher is located near the main entrance to your trailer. Your fire extinguisher needs to be replaced immediately after use. The fire extinguisher that comes with the trailer is rated for Class B (gasoline, grease, flammable liquids) and Class C (electrical) fires, as these are the most common types of fires in RVs. Read the instructions on the fire extinguisher. Learn how and when to use the fire extinguisher. You and your family should know how to operate the fire extinguisher. If you find it necessary to use the fire extinguisher, please stand at a 45-degree angle to the flames and do not stand upwind or uphill.

(2) Smoke detector

Most fire injuries and deaths are caused by the inhalation of toxic fumes from the fire rather than the flames. The smoke detector responds to smoke entering the carriage. It does not sense gas, heat or flame. Battery powered smoke detector mounted on the ceiling is in your living/kitchen area. Please read the smoke detector instructions for more information on testing and maintaining this important safety device.

Test the smoke detector before each trip and at least once a week during use. Do not disable the smoke detector due to nuisance or false alarms caused by cooking smoke, dusty stoves, etc. The alarm will stop after the trailer is ventilated. Do not disconnect the battery. Replace the battery once a year or as soon as the smoke detector “beep” due to low battery every minute. The detector uses a standard 9V battery. Test the operation of the smoke detector after replacing the battery. If the smoke detector does not operate with new battery, replace the detector with a new one.



Figure: Smoke Detector

&WARNING

To reduce the risk of carbon monoxide poisoning or combustible gas explosion, test the sensitivity of the alarm after trailer has sat idle for a long time, before each trip, and at least once a week during use.

&WARNING

Do not use a cigarette lighter to test for gas alarm. Butane gas may damage the sensor.

Do not attempt to test the alarm by using anything other than the TEST/RESET button. Do not attempt to trigger the alarm by producing carbon monoxide. TEST/RESET button is used to test all functions of the alarm and is the only safe way to ensure that the alarm is working properly.

Test the alarm at any time. TEST/Mute button is on the front of the alarm. Press and hold the TEST button for 1s. If the green light turns red and the alarm sounds 4 beeps, the alarm is working properly. The LED should also flash red.

(3) Carbon monoxide alarm

Carbon monoxide/propane gas alarm has an easy-to-use design. The alarm has two indicators that display a specific color for each monitored condition. There is also a sound pattern that matches the alarm conditions.

The red CO LED of the alarm will flash and the alarm will sound 4 beeps and then be silent for 5s. These signals indicate that CO level exceeds 70 ppm. Immediate action is needed. This cycle will continue until the TEST/Mute button on the front of the alarm is pressed. Ventilate the trailer. The red indicator will remain on until the carbon monoxide clears, or if carbon monoxide is still present, the alarm will reactivate after approximately 6 minutes. Do not re-enter the trailer. Alarm will recover normal operation after the trailer is well ventilated.

(4) Actions to be taken when gas alarm sounds

Activation of the device indicates the presence of carbon monoxide (CO) or propane gas, which could cause any injury or death. If signals appear (4 beeps and flashing or red indicator is constantly on), turn off all the gas burning devices and ventilate the trailer immediately. Evacuate the site immediately. Check whether all personnel have evacuated. Do not re-enter the trailer until the problem has been resolved. Correct the problem before restarting any device.

Turn off all devices, extinguish all flames and cigarettes or cigars, and open all doors and major windows to ventilate the trailer. If the alarm sounds again after being re-activated, turn off the gas system and implement the necessary repairs to eliminate the leak source. Note the difference between a propane leak and propane escaping from an unlit open burner. Pure propane leaking from pipes or fittings is heavier than air and will first form the heaviest concentrations on the floor. Propane from an open burner is mixed with air to cause combustion and dissipates into the air.

The detector is intended to detect propane leaks. Propane from an open burner is mixed with air (oxygen) for combustion. When mixed with air, propane becomes only a little heavier than air and may not sink to the floor. If the burner is left on, the burners, stoves and adjacent counter space nearby are combustible and can cause injury and damage if ignited. This may continue for a long time before the propane reaches the detector's location and is detected. The detector only indicates the presence of propane at the sensor. Propane may be present in other areas.

The detector is powered by a 12V DC system and is always energized as long as the trailer is connected to a tractor, rechargeable battery or 110V AC power supply. The fuse for the detector is in the power distribution center.

CAUTION:

Detectors use power constantly. If you're not using the trailer, please disconnect the battery. Detectors can significantly deplete the trailer battery.

CHAPTER **V**

CAMPER TRAILER EQUIPMENT AND FACILITIES

Devices and functions described herein do not cover all Black Series camper trailer models. Some functions may be optional in your model.

The Black Series camper trailer has a laminated roof that allows you to walk from front to back. The top layer is an aluminum–plastic panel supported by aluminum frames. When walking on the roof, please wear board shoes rather than leather shoes, which may be slippery and leave marks on the deck. Take care and do not slip or fall when on the roof. Take care and do not damage the seals when working on the roof.

Otherwise, your warranty will be invalidated.

I. PANELS

Various panels provide general storage of some electrical appliances and controls. The outer hatch may not be waterproof in all weather and road conditions. Anything that may be damaged by water or dirt should be placed in a trailer or tractor.



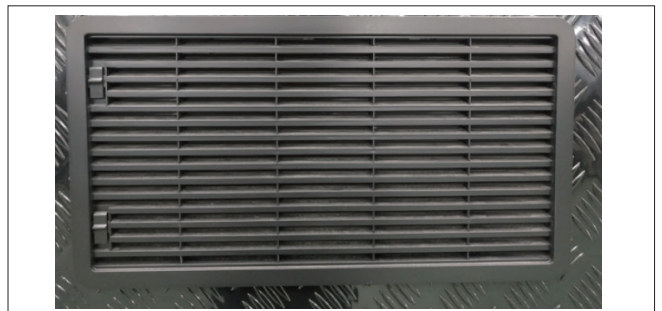
II. WATER HEATER ACCESS PANEL

The water heater access panel provides a maintenance tunnel for the water heater



III. FRIDGE ACCESS PANEL

The refrigerator vent/panel provides access to the rear of the refrigerator for maintenance, as well as inlet ventilation to guarantee proper operation.



IV. VENTS

All external vents and louvers guarantee air ventilation. Do not block these vents as this may cause equipment damage or personal hazard.

V. ROOF VENT

The roof vent is operated from the inside and provided with a built-in screen. Users may turn the crank in the center of the vent clockwise to open or adjust the vent. The bath vent may be equipped with 12V exhaust fans. The fan control switch is on the vent. These vents may be slightly open during travel. However, attention must be paid to the driving with limited vertical clearance. The ventilation cover may crack in the event of a long mileage.

The large capacity electric roof vent is designed to quickly expel hot air.

OPERATING INSTRUCTIONS:

1. Turn the knob counterclockwise to open the vent approximately 3" or more (the ceiling vent is provided with a built-in safety switch that disables the motor unless the dome is partially open).
2. Turn the 3-speed switch to the desired performance level (0 Off, 1 Low, 2 Medium or 3 High).
3. Open the window for door for ventilation. For best results, please close all roof vents and open the window farthest from the ceiling fan.
4. Select the desired temperature or comfort level on the thermostat. The fan motor will start or stop automatically when the temperature inside the trailer exceeds or falls below the selected level.



VI. EXTERIOR LIGHTS

Your trailer is equipped with external lamps not normally found in cars. Do not change lighting or reflection marks. Check external lamps frequently and replace non-working or damaged lamps as soon as possible.

VII. DOOR

Door locks and latches are identical. The double-sided key can fit into the lock from either direction.

Turn the key a quarter turn clockwise to lock the door lock. Then remove the key. To unlock, please insert the key and turn it a quarter turn counterclockwise. The door locked from the outside can still be opened from the inside by pulling the handle. It will be locked if you leave the trailer and close the door. You can lock the lock tongue by turning the key a quarter turn counterclockwise. Then remove the key when it reaches the origin point. The lock tongue may be locked by rotating the latch clockwise from the inside or unlocked by rotating the latch counterclockwise.

Make sure all passengers on the trailer know how to operate door locks and lock tongues and emergency exits in an emergency. Keep the latch locked in the trip. You can operate the safety door independently by releasing the buckle on the safety door and unscrewing the safety door from the main door.



VIII. WINDOWS

Windows in the trailer are slider or torque pane style. You may open the slide window by rotating the locking lever and sliding the window. You may open the torque window by turning the crank located at the bottom of the window frame clockwise, or close the window by turning the crank anticlockwise.



IX. EMERGENCY EXIT WINDOW

The emergency exit window is identified by a red handle and exit label. Please read and understand these instructions before using such window. The emergency exit window provides an escape route in case evacuation is required in an emergency and the path to the main entrance is blocked. Pull the red handle and swing the window outward to operate the emergency exit window. The windows are hinged at the top. The sliding window serves as an emergency exit in some models. Make sure the exit window is not blocked by trees or other obstacles when parking.



X. ACRYLIC WINDOW

The trailer is provided with “lightweight” acrylic windows. To open this type of window, please locate the locking rods on the sides and bottom of the window. Rotate the control lever to unlock the window. There are supports on each vertical strut of the window to hold it open in the desired position. To close the window, simply lift the window gently and return it to the closed position, then rotate the control lever to the locked position.



XI. AWNING

Guidance on the operation and maintenance of awning is included in the owner's information package. It includes instructions to open and close the awning, and on maintenance.

You should ensure that your fellow traveller is also familiar with the operation of the awning. Please close the awning in the event of a gale or forecast a strong breeze. Damages to the awning due to the strong breezes or water on the canvas, such as bent pipes, torn canvas, or broken arms, are not covered by the warranty.

XII. EXTENSION

The slide-out cover extends and retracts with the slide chamber. It helps to divert water from the roof of the slide chamber and keep the roof clean and free of debris. If the slide chamber roof is not kept clean, leakproofness of the room may become less effective or even damaged.



XIII. EXTERNAL WASHING FACILITY

Located on the side or rear of the trailer, the external washing facility provides hot and cold water. The water comes from the fresh water tank or municipal water supply pipelines. The shower head is equipped with flow control devices for the purpose of water saving. Flow control is not permanently off. Water must be cut off at the control valve after use.



XIV. ACCESS STEP

To extend the double step, please pull out the complete step assembly and lower it completely. Unroll the bottom step from the top step and lower it completely. Take it back in a reverse direction.



XV. BATHROOM

The bathroom wall is waterproof; so take it easy if water spills on it. The bathroom may be provided with the electric roof vent in some models.

XVI. TOILET

The toilet is designed to flush with minimal water while providing proper handling and odor control. Toilets need to add degradants to deal with dirt, and paper towels are not allowed to be thrown into the toilet, Check the electric toilet instructions for proper use, maintenance and chemical use.

XVII. ARC SOFA

The arc sofa is reversible.

The dining area may be converted to a sleep area by lowering the table parallel and level with the arc sofa. Seat cushions and back cushions of the sofa are arranged as shown in the photo.



XVIII. SOFA/BED CONVERSION

The sofa may be converted into a bed by the following steps:

1. Remove handrails and storage parts of the sofa.
2. Grab the sofa back component and pull it back in your direction.
3. The built-in spring mattress has built-in hinges.
4. Unfold the mattress and place it on the bedstead and sofa components.

The sofa may be converted back to the seat status by the following steps:

1. Fold the mattress in half and place it on the bedstead.
2. Grab the front edge of the back cushion component and hinge it to its original position.
3. Restore sofa handrails.



XIX. FREE-STANDING FURNITURE

When preparing for the trip, secure the free-standing furniture. Unsecured lamps, chairs, tables or other items may move within the trailer during travel and may damage other furniture, cabinets or floors.

XX. MINI LOUVERS

To lift the mini louver, please loosen the bottom of the louver from the retainer. Pull the rope down vertically and release it at the desired height. There is no need to pull the rope to one side or the other to secure the louver.

To lower the mini louver, please gently pull the rope down, move it about 45 degrees to the left or right, and then lower the louver. To stop the louver halfway, please move it back straight down. Reinstall the louver to the retainer while traveling. To adjust the angle, turn the lever in either direction.

XXI. FOLDABLE DIVIDER

The separator slides on the nylon roller. It is kept always closed by a latch. When the separator is open, a locking latch is required to prevent it from sliding back and forth.

XXII. FOLDABLE BED

Please pull the latches at both ends to lower the berth. Place loose panels over door openings and lay a double mattress. Rated capacity of the bunk bed is 200kg.

WARNING:

Keep all flames and heat sources away from the tent fabric.

Tents made of flame retardant fabrics satisfactory to specifications are not fireproof. The fabric will burn if in continuous contact with any source of flame. Any foreign matter applied to the tent fabric may invalidate the flame retardant property.

Make sure lamps in the tent room are turned off. Heat from the lamps may damage the tent fabric and lead to a fire.

&WARNING:

Do not use any flammable equipment in the trailer.

The combustion consumes oxygen and produces carbon monoxide, which may cause serious injury or death.

Do not place flame sources in or near the tent. Maintain adequate ventilation in the tent at all times. Otherwise, suffocation and/or severe burns or even death may occur.

When setting up trailers at campsites, please carefully consider the possibility of potential hazards, such as tree branches and strong breeze, so as to reduce the damage to tents or injury to occupants.

XXIII. ELECTRICAL SYSTEM

The electrical system consists of a primary 12V DC system and a 110V AC system. The 12V system is powered by the battery supply similar to that used in cars. The 110V system requires 220 volts of power through a power cord or an optional generator.

These systems are connected by power converters. When connected to a 110V power supply, the converter converts the 110V AC input to the 12V DC power output and charges the storage battery during installation.

DC SYSTEM

The 12V system powers the following components:

Electric socket, indoor lighting, outdoor lighting, water pump, high power range hood, hair dryer, refrigerator lamp & water heater, stereo /CD/DVD player, TV antenna, system monitoring panel, fan, power vent starter generator, accessories for plugging into 12V power outlet, fuel distribution system (van)

XXIV. BATTERY AND COMPARTMENTS

Your trailer is equipped with batteries, which are charged by the tractor, generator or shore power.

We provide a circuit breaker to disconnect the battery if you are not going to use the trailer for a long term (such as seasonal storage). You may remove cable from battery terminal in the event of no circuit breaker.

1. BATTERY INFORMATION

The battery must be fastened at all times. When the tractor is in motion, the battery is charged by the tractor's charging system or connected to the 110V power supply through a power converter. The battery will be charged by the on-board generator if any when running through a power converter.

Check whether the battery is normal (once a week in warm season, once a month in cold season). Don't forget to check your trailer's batteries. Clean battery terminals and cables regularly with a wire brush and baking soda. Make sure the cover is firmly secured in the cleaning process. Make sure the butterfly nuts on the top of the battery are tightened. Loose butterfly nuts may cause electric arc or intermittent loss of 12V power supply. Do not touch the battery terminal to the metal door frame during assembly or disassembly of the battery.

Disconnect the negative (-) cable and then reconnect it.

Remove rings, metal watch bands and other metal jewelry before handling the battery. Be careful with metal tools. Tools in contact with battery terminals or metal connected to battery terminals may lead to a short circuit, resulting in personal injury or fire. Do not let the battery electrolyte contact skin, eyes, fabric or paint surfaces. The electrolyte is a solution of sulfuric acid, which may cause serious injury or property damage. Wear goggles when using batteries.

2. PRECAUTIONS FOR BATTERY STORAGE

Make sure to disconnect the battery when you store the trailer for a week or more. Electronically tuned radios and carbon monoxide detectors both consume a small amount of current when connected to the battery. A disconnected battery also naturally “self-discharges” about 1% of its capacity per day. Remove the battery if you plan to store the trailer for an extended period of time. The battery should be stored in a cool and dry place and charged once a month. The battery discharges itself. Charging also helps to prevent battery sulfate problems, which may lead to premature battery failure.

3. BATTERY CIRCUIT BREAKER

Your trailer is equipped with a battery circuit breaker. Switching the control lever to the “OFF” position will disconnect/isolate the battery from the rest of the 12V electrical system.

4. BATTERY CHARGING

Typically, the battery is charged by the tractor’s charging system during driving, or by an AC/DC power converter when plugged into an AC power supply.



Please follow the following safety guidelines when the battery needs to be charged from different charging sources: Disconnect both cables to prevent damage to the electrical system of the trailer.

Do not smoke near the battery that is being charged or recently charged. Please note that the battery is charging when connected to a 110V AC power supply through the power converter/charging circuit or when you are driving.

Be careful when connecting or disconnecting booster wires or cables while charging. Poor connection is a common cause of explosive arc. Check and adjust the electrolyte level before charging.

Make sure to remove the ventilation cover (if any) before charging the battery.

Do not expose the battery to open flames or sparks. Chemical actions in the battery may generate flammable and explosive hydrogen. Turn off all electrical components to avoid sparks before connecting battery cables. Connect the black cable to the positive (+) terminal of the battery. Connect the white cable to the negative (-) terminal of the battery.

The 30A main circuit breaker located on the chassis of the vehicle connector junction box will not enable charging to the trailer or battery in the event of overload or short circuit. To reset the circuit breaker, please disconnect the battery and reconnect with the white negative (-) cable.

Trip of the circuit breaker indicates a short circuit or overload condition. Have system checked by qualified personnel.

XXV. SYSTEM MONITORING PANEL

The system monitoring panel involves controls over water and water tank levels, battery conditions, and water pumps. It can also be used to control the water heater.

1. WATER PUMP CONTROL SWITCH

This switch controls the water pump. The water pump is pressure-sensitive and starts when the faucet is turned on (the switch is on), causing the pressure in the pipe to drop. When the faucet is closed, pressure builds up in the pipeline and the pump stops.



2. MONITORING PANEL – FLUID LEVEL GAUGE SWITCH

When the monitor switch is pressed, black (liquid waste), gray (water sink), fresh water tank and battery status indicators will light up to indicate the existing status of each component. In checking of the liquid level, false indications may be caused by water with low mineral content. Liquid level is measured by very low electrical signals passing through the liquid. Some water with low mineral content may not transmit signals properly. This unusual condition is possible. Check panel reading when the fresh water tank is full. Materials lodged on the side of the water tank may give a full reading when the tank is actually empty. Flushing the dumped tank with a spray may help to prevent this situation.

CAUTION:

If the sensor probe installed in the storage cylinder is greased, the monitoring panel may indicate incorrectly or not at all. Greases, oils or similar substances should not be poured into drains or toilets. If this is unavoidable, the water storage tank should be cleaned with soap solution.

3. WATER HEATER IGNITION SWITCH

Your trailer may be provided with a dual power water heater with direct spark ignition (DSI). There is a DSI switch to ignite the heater and turn on the electric heating element in the water heater.

XXVI. INTERNAL FUSE PANEL/FUSE

The power distribution center is fitted with a 12V internal fuse panel to protect the internal circuit. If the fuse is blown, find out the cause and correct it. Turn off all lights and motors, then install a fuse of the same rating. Blowing of the new fuse indicates a short circuit. Have system checked by qualified personnel.

All circuits in the trailer are provided with fuses to prevent short circuits or overload. If any electrical appliance in the trailer stops working, you should first check if the fuse is blown. Determine the fuse that controls the electrical appliance against the diagram on the fuse panel. Check the corresponding fuse first, and check all fuses before excluding the blown fuse as the root cause.

Do not install a fuse with a rated current greater than that specified on the label. The fuse with a higher rating will greatly increase the chance of damaging the electrical system. If you do not have a replacement fuse with a suitable rating for the circuit, you may install a fuse with a lower rating until you can replace it with a suitable rating fuse. If the new fuse of the same rating blows out in a short time, your trailer may have an electrical problem.



XXVII. INTERIOR LIGHTS

Internal lighting is powered only by a 12V DC power supply. The power converter converts 110V to 12V when connected to a 110V power supply or when an electric generator is used. However, when the power converter is not connected to a 110V power supply, the full load of lamps, pumps, exhaust fans, etc. is on your 12V battery.

&WARNING

Some lighting devices may be equipped with halogen bulbs. Bulbs and fixtures may get very hot when turned on. Do not touch these lamps when they are on. Allow bulbs to cool before replacing or cleaning them. Replace with the bulb of the same wattage as originally installed or as indicated in the manual.

XXVIII. HDTV ANTENNA ON ROOF

The HDTV antenna on the roof is designed to receive digital channel signals. Please refer to manufacturer's instructions for proper use. The TV jack is in the TV position. If you are camping, turn the switch to the "OFF" position when you are not watching TV so as to prevent the battery from running out, as the indicator will consume a small amount of current. If you're using a 12V TV, you may also need to unplug it, as some TVs consume a small amount of power even they are not in use.



To use the TV antenna, please turn on the switch on the TV jack. The indicator light will light up to indicate that the antenna amplifier is energized. As long as the switch is on, a small amount of 12V current will be consumed continuously. If you turn the switch to “OFF”, the antenna operation will suspend and the TV will stop, and no current will be consumed.

CAUTION:

The 12V socket next to the TV jack is rated at 7.5A. Electric appliances with higher ratings are not recommended.

XXIX. LCD TV

Your trailer is equipped with a LCD TV, and its instructions is included in the owner’s information package.

XXX. EXTERNAL SPEAKERS

Your trailer is equipped with external speakers. If a CD/DVD player is installed, the external speakers should be connected to the “C” speaker control of the stereo.



XXXI. AC SYSTEM

The AC electrical system powers the following components:

Ac to DC power converter, 110V socket (internal and external), refrigerator, roof-mounted air conditioner, microwave oven. Never operate a 110V electrical system without proper grounding.

110V POWER CABLE

Your trailer is equipped with power cables for connecting to external 110V service. Ropes are often referred to as “shore ropes”. The power cable and plug are molded together to form a weatherproof assembly. Do not cut or alter the power cable in any way. Do not remove the grounding pin from the connector. Grounding is a must if you require to use an adapter for power services.

&WARNING

Shore power is risky in electrocution. Grounding connection is a must. Do not connect to ungrounded shore power. Do not remove the “third pin” from the shore power plug.

&WARNING

Fire danger.

Ensure that only the correct voltage source is connected. Do not overload the circuit. Do not connect extension cables to the shore power. Replace with a fuse of similar rating. Do not use two-core extension cables or any wires that fail to guarantee proper and adequate grounding continuity. Use a 30A RV extension cable with a maximum length of 8 meters. Do not plug the 110V power cable into an ungrounded socket.

XXXII. POWER DISTRIBUTION CENTER

The power distribution center consists of 110V AC panels, 12V DC panels and power converters. The 110V AC switch panel contains a 30A main circuit breaker and 15A and 20A branch circuit breakers. These breakers will interrupt the power supply in the event of overrated current. If the circuit breaker trips repeatedly, reduce the load on the circuit and have the system checked by your dealer.

When the power cable is plugged in or the generator is turned on, the 110V AC power will be converted to 12V DC power automatically. This supplies power to the 12V switch panel and the connected circuit is protected by a mounted fuse. The battery will be charged automatically when the 110V AC power is used. There are two 30A fuses on the front of the converter. They protect the power converter from polarity reversals caused by accidental battery and power cable short circuits, or accidental battery cross-connections. The black wire is positive (+) and the white wire is negative (-). The power converter has a cooling fan that runs at the appropriate time to cool the converter.

CAUTION:

The converter may shut down due to the heat during normal operation. The converter has a built-in automatic reset thermal circuit breaker, which will be reset after the cooling period. If this happens frequently, please have the problem resolved by your dealer or qualified personnel. Do not store items in front of air vents.



XXXIII. GROUND-FAULT CIRCUIT INTERRUPTER

The ground fault circuit interrupter may protect 220-volt outlets in the bathroom, kitchen and patio. This device is designed to protect you from the dangers of wire to ground electrical failures and leakage shocks when you use electrical appliances in wet areas.

CAUTION:

The ground fault circuit interrupter cannot prevent electric shocks. It cannot protect you from electrical overload. For operation at 110V AC power supply, the GFCI should be tested at least once per month.

GFCI test:

Press the test button. The RESET button should pop up, which indicates that the protected circuit is disconnected. If the RESET button does not pop up when you press the test button, it indicates that the ground fault protection is invalid. Do not use sockets or other sockets on the same circuit. Do not use the system until the problem is resolved. To restore power supply, press the RESET button.



CAUTION:

Please check the GFCI if the outlets in the bathroom, kitchen and patio do not work. Press the RESET button when necessary. If the GFCI trips continuously, please have electrical system of the trailer checked by professionals.

XXXIV. GENERATOR

If your trailer is equipped with an electric generator, the generator manufacturer’s instructions on safety, operation, troubleshooting and maintenance must be followed.

&WARNING

- Carbon monoxide • fire and explosion • electric shock
- Do not operate the generator without a working carbon monoxide detector.
- Do not fuel a running generator.
- Do not fuel the generator near ignition sources.

Check fuel oil and oil level before starting the generator. The generator may need to run for two to three minutes before power can be drawn from it.

Read generator instructions. Do not exceed the generator capacity. Before turning off the generator, please remove the electrical load and allow the engine to run for two to three minutes to cool the generator.

For automatic transfer relays (ATS), when the generator starts, the relay will automatically switch to generator power. When the power cable is connected to shore power, the relay will switch to shoreline power. Operation of the trailer from the on-board generator requires startup of the generator. After the generator has stabilized for a delay of about 20 seconds, the relay will engage, transferring all 110V AC loads to the generator.

LOADING GENERATOR

The generator can power AC motors, air conditioners, AC/DC converters and other electrical appliances. Specific loads provided depend on the generator power rating, temperature and altitude. The generator will shut down or its relay will trip in the event of a total loads beyond the generator power. Manual operation may result in overload. Excessive power load can damage the generator and shorten its service life.

To prevent generator overload, sum up the wattage ratings of all electrical lighting, appliances, tools and motor loads that the generator supplies at one time. The result should not be greater than the wattage capacity of the generator. If the electrical equipment nameplate only indicates volts and amps, multiply the volts by the amps to get the watts (volts x amps = watts). Some motors require more watts of power (or amperes of current) to start than to run continuously.

TYPICAL EQUIPMENT LOAD

Electrical appliance	Load (watts)	Load (amps)
Air conditioner	1400–2000	12–17
Mixer	600	5.50
Coffee maker	550–750	4–6.50
Computer	50–100	0.05–0.90
Converter	300–350	2–3
Hair curler	20–50	0.20–0.50
Electric blanket	50–200	0.50–1.50
Electric frying pan	1000–1500	8–13
Hair dryer	800–1500	7–13
Iron	500–1200	4–10
Microwave oven	1000–1500	8–13
Refrigerator	600–1000	5–8
TV	200–600	1.50–4
Bread maker	750–1200	6.50–10
Video tape recorder	150–200	1–1.50

XXXV. POWER VS ALTITUDE

The air density decreases with the increase of altitude and ambient air temperature, resulting in lower generator power. Power rating decreases by approximately 3.5% for every 300m increase in altitude, and 1% for every 10°F (5.6°C) increase in temperature.

XXXVI. GAS SYSTEM

Please pay attention to the warnings and precautions contained in this section, as well as the instructions for the gas stove.

The fuel is stored in liquid form in high-pressure cylinders and delivered to the appliance as gas.

Fuel containers cannot be placed or stored in vehicles.

Do not check for leaks with open flames. Check connections for leaks only with approved leak detection solutions or non-ammoniated, non-chlorinated soap solutions. If you cannot locate the leaking point, please have the system checked by qualified personnel.

Be careful when drilling holes or fixing objects to the trailer. A nail or screw can pierce components of the gas supply system, such as the air supply hose.

SAFETY PRECAUTIONS

Fuel gas is highly flammable and heavier than air. It is processed to have a smell similar to garlic for the purpose of leakage detection. In the event of a leak, gas will accumulate in grooves in the floor. If not taken care of, it could result in suffocation or explosion.

&CAUTION

IN THE EVENT OF GAS LEAKAGE

1. Put out open flames, indicator lights, and anything smoking. Do not touch electrical switches. Close gas supply valve. Open doors and other vents. Leave the area until the smell disappears. Check the system again and correct the source of the leak.
2. Do not use wrenches or pliers to close the service valve. Such valve is designed to be manually closed, and free from leakage. If a tool is required to stop the leak, the valve may need to be repaired or replaced.
3. Do not place vertical cylinders in a horizontal or upside down position when transporting, installing or using them.
4. Do not carry or store stacked or empty gas containers in the trailer.
5. Always use a dust cap when transporting or storing disconnected containers (full or empty).
6. All gas containers must be secured in place.
7. Avoid pipe bending. Bent hoses can limit or cut off the flow of gas in the system. A slight gas odor is normal when the valve is first opened. A leak test is necessary in the event of persistent odor.

The dual fuel cylinder is provided with a two-stage automatic changeover regulator that automatically supplies fuels from the second cylinder when the first cylinder is empty. Both outlet valves must be opened for proper operation. Turn or slide the cylinder selection knob and select the cylinder you desire. The regulating valve has a small glass window, in which a clear or green strip will appear to indicate the pressure. When all the fuels have been used from that cylinder, the regulating valve will automatically switch to another cylinder. The window will display a red strip with an arrow pointing to the empty tank.

VEHICLES WITH PROPANE GAS FUEL SYSTEM

PROPANE IN LOW TEMPERATURE

The propane system may be frozen in very cold weather. It is a common misconception that the conditioning agent or the propane itself will freeze. It's actually water vapor that gets trapped in the system, or gets absorbed and frozen by the propane. Where does the water come from? It comes from various sources. When propane is transported from a natural gas plant or refinery, it becomes saturated with water unless it is carefully dehydrated. Propane storage cylinders may contain water, which can be absorbed by the propane during transportation. Frozen and accumulated water can partially or completely cut off the propane supply.

Freezing can be prevented in the following methods:

1. Make sure the propane cylinder is completely free from moisture before inflating.
2. Make sure the propane cylinder is not filled to full. This is also for the sake of safety.
3. Keep the valve of the empty cylinder closed to prevent moist air from entering.
4. In the event of freezing, have the cylinder cleaned by professionals.
5. Ask the propane service station to fill approved antifreeze or deicing agent.

In the event of freezing despite preventive measures, try to melt ice cubes by warming the regulator with a cloth soaked in warm water or tap water. Do not use open flames. If the problem persists, ask the propane supplier to repair the cylinder or regulating valve as needed.

COMBINED CARBON MONOXIDE AND PROPANE LEAK DETECTOR

Propane combustion produces odorless exhaust gas that, if inhaled, can cause injury or death or severe brain damage. Exhaust gas from the propane unit must be directed outdoors. You must have a combined carbon monoxide and propane leak detector installed in the accommodation area of the trailer.



DANGER

Carbon monoxide may cause injury or death or brain damage. Ensure the exhaust gas of the propane unit is directed outdoors. Install an effective carbon monoxide leak detector in the accommodation area of the trailer before using any propane gas equipment. Do not operate portable grills, portable stoves, portable lanterns or portable heaters in the trailer.

When first used or stored for a period of time, propane gas pipelines will be filled with air that must be removed to keep the pipeline clean. The propane gas system can only use propane gas rather than natural gas.

WARNING

Risk of death or injury due to fire or explosion. Do not connect the propane gas system to the natural gas supply system. Turn off all indicator lights and appliances before filling the cylinder with fuel or propane. Do not store propane cylinders in the trailer.

Keep the shutoff valve on the propane cylinder closed at all times unless you are operating the propane cylinder. Turn off all propane gas appliances before opening propane shutoff valves. If the appliance is on when you open the shutoff valve, propane gas will build up in the trailer and cause an explosion. Do not open or close the shutoff valve with a wrench. Replace the shutoff valve if it fails to completely stop propane gas flow when manually tightened.

The propane gas leak can cause a fire or explosion. If your trailer is provided with a propane gas system, a propane gas detector is also required. The propane gas detector should be located near the floor to detect propane gas that is heavier than air. If a leak is suspected, use soap solution to look for leaks. Do not use solutions containing ammonia or chlorine (compounds commonly used in household cleaning such as the window cleaning), which may cause corrosion to propane pipelines.

WARNING

If propane gas is detected (by odor or through a propane gas detector) as a danger of fire or explosion:

- Do not touch electrical switches
- Extinguish flames and indicator lights
- Open the door for ventilation
- Shut off the propane gas supply of the propane cylinder
- Leave the area until the smell disappears.
- Correct the source of propane gas leakage before using propane appliances
- Do not locate the source of propane gas leaks with flames

CAUTION

Propane gas can operate at temperatures as low as minus 44 degrees Fahrenheit (-44°F).

XXXVII. SHOWER

The shower head, which may be detachable and handheld, is equipped with water flow control devices for the purpose of water saving. After a shower, some water will flow from the faucet of the sink. This is a normal phenomenon as the water may drain from the shower hose through the anti-siphon valve in the faucet.

CAUTION:

For your safety, this faucet is equipped with a vacuum breaker (backflow preventer) to prevent contamination to your drinking water supply. When the faucet is turned off, water in the handheld shower hose will drain out through this vacuum breaker. It is not a leak. This drainage is inherent in the design of the vacuum breaker, which serves as the evidence that the breaker works.

The shower head has a built-in leakage function with a leakage rate no less than 1 liter per 30 minutes. This leakage is not a defect but is intended to reduce the possibility of scald accidents due to temperature changes caused by water pressure fluctuations.

OUTDOOR SHOWER

The outdoor shower is located on the outside of the carriage. Its water comes from the fresh water tank and it can also connect with the municipal water supply system. The shower head is equipped with flow control devices for the purpose of water saving. Such flow control is not permanently off. After using the shower, you must turn off the control valve, otherwise it may damage the nozzle and/or hose. For camping in inclement weather, bypass valves are provided to shut off water from the external washing facility and prevent the system from freezing.



XXXVIII. SEWAGE SYSTEM

The waste storage system in the trailer consists of sinks, showers, toilet drains and exhaust pipes, “gray water” tanks and “black water” tanks. The storage reservoir makes the system completely self-sufficient and allows you to deal with wastewater when convenient. A flexible sewage hose connects the outlet of the water storage tank to the inlet of a municipal sewage system.

The water tank is made of seamless plastic and there are two tanks, one to hold waste from the toilet and the other to hold waste water from the sink and shower. Wastewater should be discharged at an approved site.

1. INSULATED AND HEATED WASTE STORAGE CYLINDERS

Your trailer may be equipped with insulated and heated waste storage tanks. To prevent the waste water tank and discharge valve from freezing, an insulation cover is installed to seal the waste water tank and valve to ensure normal operation below freezing temperatures.

CAUTION:

In extremely cold weather, non-toxic antifreeze should be added for the purpose of maximum protection.

2. TOILET FLUSHED WITH PURIFIED WATER

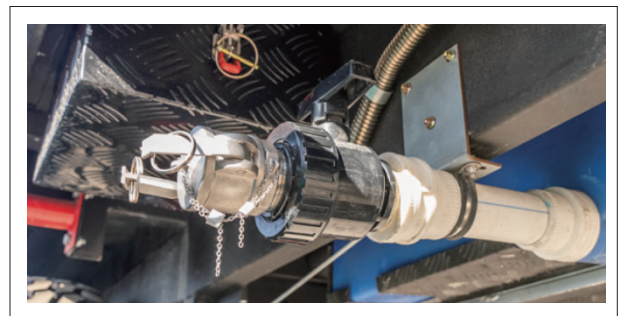
The trailer is equipped with a toilet, which is specially designed to use the least amount of water. Please follow the instructions for proper use and flushing of the electric toilet.

3. WASTEWATER STORAGE TANK

The tank must be filled with water and odor-controlling chemicals at each initial use. More odor-controlling chemicals may be added before dumping if needed.

There is a valve at the end of the water tank, which is called “blade valve”. A blade closes the opening of the sewer drain. The blade is connected to an extension handle that is pulled out to release the contents of the cylinder.

In self-sealing use, the sewage outlet pipe should be covered with a safety helmet, and the valve should be closed to prevent waste leakage to the ground or road surface.



The water tank has a closed sewer system. Both black and grey water storage tanks must be drained and thoroughly flushed to prevent the build-up of harmful or toxic substances. It is recommended to fill the water tank to 2/3 full to ensure that the waste is fully flushed into the municipal sewer.

The outlet of the water tank goes with a removable fitting used to lock the outlet. When the storage tank is drained, the sewer pipe is clipped on this fitting.

TO DRAIN WASTEWATER FROM THE WATER TANK:

- (1) Connect the sewage pipe to the sewage draining exit.
- (2) Extend the hose and insert one end into the drain. In some cases, an adapter may be required between the hose and the inlet.
- (3) Tilt the sewage pipe evenly and support the pipe to maintain the slope.
- (4) Drain the water tank first. Grip the handle of the black blade valve and open the valve smoothly.
- (5) Flush the water tank and drain it completely.
- (6) Close the valve when the tank stops draining.
- (7) Remove the sewer hose, and flush the sewage pipe with clean water.
- (8) Take back the sewage pipe properly.

CAUTION:

To facilitate drainage, the trailer should be horizontal fore and aft. If the trailer is parked in an area with a sewer, you can fill the tank with enough water to cover the bottom. This helps in the decomposition of solid waste and prevents blockage of the outlet during drainage.

XXXIX. WATER TANK MAINTENANCE

Since the operation of the water tanks does not depend on any sophisticated machinery, they are virtually problem-free. The most common and unpleasant problem is blockage.

You can reduce the likelihood of blockage by the following measures:

- (1) Keep blade valve of the black tank closed. Make sure to cover the bottom of the tank with water after dumping.
- (2) Use only toilet paper for septic tanks or sanitation systems.
- (3) When using the system on the road, keep both blade valves closed and locked and drain caps in proper place.
- (4) Use only detergent approved for septic tanks or sanitation systems.
- (5) Use special deodorant chemicals in black and gray tanks for septic systems. These chemicals help break down the waste and make the system easier to use.
- (6) Do not put tissues, paper, oil, ethylene glycol, automobile antifreeze, sanitary napkins, or household toilet cleaner into the container.

Do not put any solid matter in both tanks as this will scratch or puncture the tank.

IF THE DRAINAGE SYSTEM IS BLOCKED:

Use a hand probe to loosen stubborn scale deposits.

You may need to remove a badly clogged water valve. Do not make the valve over-tightened during reassembly.

Do not use coarse household drain cleaning agent. Do not use an electric drain snake.

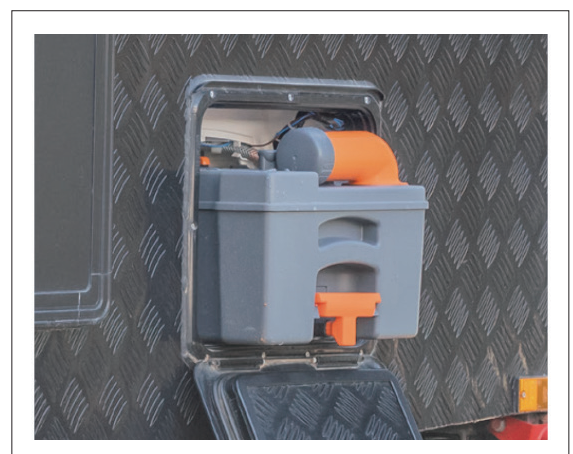
Sometimes the storage cylinder valves are blocked. A manual drain snake is required in this case. Close the valve quickly once the blockage is cleared. Damaged seals must be replaced.

BLACK WATER TANK FLUSHING

With the blade valve open, connect the hose to the tank flush inlet. The inlet is directly connected to the flushing system to flush the black storage tank. Place an injector head in the tank to spray water in a fan-shaped pattern for maximized coverage of the most of the residue upon tank flushing and probe cleaning. Flush the tank with water for about 3 minutes. Cut off the water supply, disconnect the hose and close the blade valve.

&CAUTION

Do not choose the same hose used to connect the drinking water tank or municipal water supply system. Different hoses may prevent contamination to the fresh water supply.



XXXX. EXTENSION SPACE SYSTEM

The extended room moves through an internal mechanism. It is driven by two 12V DC motors powered by trailer batteries. A switch mounted on the wall controls the movement of the room.

1. SYSTEM OPERATION

During the stretching or retracting of the extended awning, you may hear noises related to motors, mechanical systems, or room sliding through seals. These sounds are normal. Some slide-out components require a “run-in” period so that they can settle in better. These noises are supposed to decrease over time. Please note that some noises from electrical and mechanical systems are always evident during the slide-out operation. In the event of huge noises, please contact Black Series After-sales Service Department for assistance. When the tent extends outside the trailer, elements such as rain, snow, dirt, or other debris may adhere to the exterior surfaces of the room, affecting the function of the extended room. When the retractable awning is retracted, material attached to the exterior surface may be brought into the trailer.



Before retracting the extension system, check its exterior surface, remove excess water, snow, dirt, or other debris, and keep exterior surface as clean and dry as possible.

CAUTION:

THE TRAILER MUST REMAIN LEVEL UNTIL OPERATION OF THE EXTENSION SYSTEM.

Any obstacles that may limit the movement of the extension system must be removed. Vents, windows, or doors should be opened before extending or retracting of the extension system. The operation of the extension system may create enough vacuum or pressure to damage doors and windows.

&CAUTION

DO NOT MOVE THE TRAILER WHILE STARTING THE EXTENSION SPACE.

Push the start switch to IN or OUT when sliding out the awning. When the room is fully extended or retracted, the switch will be disabled automatically.

2. MANUAL OPERATION

Manual operation is required in case of power failure or other system failures. When manual extension is performed, the confined workspace can pose a danger of being squeezed. Obstacles inside the trailer should be removed to ensure a smooth slide-out path. If the extension system does not move when the switch is pressed, please check the following items:

- The battery is connected and fully charged.
- There are no other obstructions in the way of the room.
- The trailer is horizontal and not in a rack or twisted position.

Follow the following steps if the extension system fails to work upon two words troubleshooting:

1. Find the control panel.
2. Unplug the two motor connectors on the control panel.

Expansion space can be pushed in or out as needed. Larger slide-out awning may be pushed by several people. In start up of the extension system, the system should be pushed and retracted with equal force on both sides to ensure equilibrium of the system.

&CAUTION

DO NOT MOVE THE TRAILER UNLESS THE MOTOR IS PLUGGED INTO THE CONTROL PANEL.

3. ELECTRIC SYSTEM MAINTENANCE

All powers must be disconnected before any service work is performed for the system. This is applicable to the 110V AC power converter, the battery and the camper in connected state.

The extended awning requires a minimum battery voltage of 12 volts. The battery should be fully charged for maximum performance. The battery should be maintained according to the regulations for the battery of the electrical system. Wiring terminals of batteries, fuses and control panels, and other connections should be checked. Connections should be tight and clean, free from damage or corrosion.

MACHINERY MAINTENANCE

The extension system mechanism is virtually maintenance-free. Seals should be lubricated with a sealing dressing at the extended room during long term storage to make it easier to stretch and retract. A protective agent can be used to further maintain good condition.

SYSTEM TROUBLESHOOTING

The trailer body, the retractable awning and the retractable awning mechanism constitute an extension system. Each of them works in conjunction with others, and each unit has its own characteristics. Different failures may share a same symptom. However, troubleshooting and resolution of the problem must include a thorough examination of all relevant components. The drive mechanism is designed to stop when something limits the travel of the sliding awning. If the awning is restricted, the system may place undue stress on the trailer body, extension system or mechanism. Improper room sealing may lead to premature system failure. Please ensure that the battery is fully charged and there is no obstacle for awning movement before system troubleshooting or contacting authorized after-sales service.

ELECTRICAL TROUBLESHOOTING

There are no field repairable components in the motor or control system. Therefore, for the owner, electrical troubleshooting and maintenance are limited to a thorough inspection of wiring, connections, and fuses, and proper battery maintenance. For more services, please contact the Black Series dealer or After-sale Service Department.

XXXXI. OPERATION, EQUIPMENT AND SAFETY OF MULTI-PURPOSE SPORTS TRAILER

Trailers equipped with cargo loading ramp doors and fuel delivery systems are often referred to as multi-purpose sports trailers.

1. WEIGHT DISTRIBUTION

Overloading is prohibited. However, proper load distribution is particularly important to TOY HAULER. These trailers are designed to carry a variety of vehicles and cargo in cargo storage areas. We have to consider loading of the cargos due to their heavy weights. The critical point lies in the method to maintain a correct suspension percentage as most of the storage area is in the rear of the vehicle. Improperly loaded vehicles may result in underweight of suspension and instability in hauling. Tongue load should be kept between 10% and 15% of the total weight of the trailer.

&WARNING

Overload is forbidden. Efforts should be made to keep the goods as far forward as possible. Excess weight in the rear of the trailer will make it unstable during towing.

2. GOODS PLACEMENT

Heavy goods should be loaded as far in front of the vehicle as possible. Big and heavy goods should be packed in places where they can be securely tied down. Heavy goods should be loaded first. It is not safe to tie them up directly, and they need to be tied up at several angles. Otherwise, they may tip over during sudden changes in vehicle speed or direction. Smaller items can be used to fill the surrounding space.

Check the hook weight once you have heavy goods. If the hanging weight is significantly greater or less than the "TOYHAULER weight distribution" guidelines, necessary changes are required. Then smaller items can be placed. All items should be fixed in place so that they do not move during travel. We must focus on the balance of the camper trailer, and prevent one side of the trailer from being heavier than the other. Otherwise, the tires may fail. Overloading tires can also cause very serious problems, or even overturn of the trailer in a sudden steering.

Heavy load on the top is forbidden, as it may lead to steering issues and hard braking issues. They have a tendency to make the trailer "swoop" in hard braking conditions. Heavy objects should not be hung on the rear bumper or additional device for the sake of safety. Otherwise, heavy goods may collide with each other. The weights placed on the rear axle will also impair the stability. A bike may be placed in the rear.

3. LOADING SAFETY

Cargo doors/loading ramps give you full access to the cargo area of the trailer. With the cargo door/loading ramp, you can easily load rolling cargo, bicycles, motor scooters, all-terrain vehicles, and small vehicles. This section outlines the safety precautions for cargo and vehicle handling, as well as the procedures and techniques for cargo and vehicle handling.

Take care when using the loading ramp/door area. This area is for multiple purposes, and attention should be paid to the following items:

- Ramp/slope

- Different surfaces that may be wet/slippery
- Clumsy, heavy/unbalanced loads

The following effective methods should be adopted to prevent serious injury and property damage and enjoy recreational activities safely:

- Identify risks. Equipment, materials, debris, other vehicles, children, pets, or anything else may get in your way when you handle cargos or vehicles.
- Predict what might happen and think about the consequences of your actions. Make sure your body is capable of handling the load in a safe manner.
- Decide what to do based on your abilities and the capabilities of your equipment.
- Ensure that your cargo is not beyond the capacity of your loading ramp and trailer.

4. LOADING EQUIPMENT

The loading equipment for your trailer include fixed connection points on the ramp door and cargo area floor.

The wheel block is a wedge-shaped block placed in front and behind the rear wheel of a trailer to prevent the trailer from moving while it is loaded. In loading and unloading of a trailer, the trailer should be attached to the vehicle, and wheel blocks or other vehicle limiting devices should be used. Woods, cinder blocks, rocks or other temporary objects should not be used to secure the vehicle.

TIE DOWN FITTING

Rated straps should be used according to the weight of the object to be secured. Connection should be guaranteed, and straps should not be loose or released during trailer running. In addition, edge protection measures should be taken for the straps in contact with items or goods.

Caution: excessive fastening may cause damage to accessory hardware, floor structure, and goods.

The load limit for the tie down fitting, associated connector or connecting mechanism depends on the minimum load limit for any of its components (including any tensioning device), and the load limit for the anchor point to which it is connected should be subject to the minimum limit. In binding of hardware, items that are strong enough should be selected to withstand the load you desire. The load limit for each strap used is at least half the load limit for each strap from the anchor point of the trailer to the attachment point of the cargo. In all cases, sufficient straps should be used to ensure that the cargo does not move in any direction. Heavy-duty tool cabinets or machine cabinets may need to be secured at the bottom, middle and top. Drawers of these cabinets should be locked so they would not be released during trip. Handles and mirrors, etc. should be kept away from interior walls of the trailer. Walls may be damaged if in contact with hard and sharp objects.

&WARNING

Storage or transportation of any motor vehicles or any flammable liquid powered motor equipment in a recreational vehicle may lead to fire, explosion or suffocation. Such risks may be lowered by the following methods:

- (1) Do not ride in vehicle storage areas when there are vehicles inside.
- (2) Do not sleep in vehicle storage areas when there are vehicles inside.
- (3) Use the fuel stored in the vehicle's engine after closing the fuel tank.
- (4) Do not store, transport or distribute fuel in the vehicle.
- (5) Open windows or air ventilation systems to ventilate the transport area when vehicles are present.
- (6) Do not operate propane appliances or other electrical equipment.

Failure to comply with the above regulations may result in fire, explosion, suffocation, death, or serious injury.

&WARNING

Carbon monoxide gas may kill or injure people.

Fuel burning installations, such as all-terrain vehicles and motorcycles, produce carbon monoxide when they burn gasoline, diesel, or other fuels. Carbon monoxide gas may fill the entire trailer without being detected, whether by sight, smell, or taste. Even small amounts of carbon monoxide can cause carbon monoxide poisoning or suffocation, which can lead to death, serious injury or permanent disability. Exposure to high levels of carbon monoxide for just a few minutes can also lead to death, serious injury or permanent disability.

&WARNING

Improper use of loading ramps is a risk of serious personal injury. If the electric cargo loses traction and spins sideways, it could slide off a ramp, tip to one side and potentially land on the rider, thus causing injuries. Always follow ramp loading instructions for electric cargos.

5. OPERATIONS ON LOADING PLATFORM

The trailer should be attached to the vehicle prior to the cargo handling at the rear. A parking spot should be selected to keep the edge of the loading ramp completely on a flat surface. Soft sand or mud surfaces should be avoided. When the trailer is loaded, it may be stuck due to the increased cargo weight.

&WARNING

- The trailer must hook with the vehicle before movement of cargo or use of the loading ramp. Otherwise, the trailer may tip over when the cargo moves to the rear of the cargo area, resulting in property damage, personal injury and/or death.
- Parking braking should be set for the trailer, and wheel blocks should be installed on the front and rear of the tires of the axle on each side of the trailer. Do not use the emergency brake disengagement switch on the trailer.
- Lower the front and rear jacks of the trailer to keep it stabilized.
- Take out and carefully lower the rear door loading ramp to the ground.
- Lift both electric rack if any.
- Remove anything in your way whether you are loading or unloading.
- Use proper lifting techniques when loading and unloading items from the cargo area.
- Extreme attention should be paid to the handling of beach buggies, scooters or other vehicles (“motor goods” or “motor vehicles”). These heavy machines are hot when running, and are covered with dirt, oil, or other substances that might make them smooth.
- Ensure that the door seal and hinge area is free of any debris, such as sand or snow, before closing the rear door loading ramp. Check hinges, auxiliary springs and locking devices for signs of wear or damage before each loading and make necessary repairs to ensure operation safety.

6. HANDLING OF MOTOR GOODS

Handling of beach buggies or motorbikes may lead to accidents and injuries. Steep slopes, unstable ramps, power and short parking areas can all make it difficult to load motor goods. There is no absolutely safe way to load your motor goods into a trailer. The following steps may help reduce the risks associated with transporting, storing or occupying of trailers, motor equipment and vehicles.

- Wear personal protective equipment, which includes, but is not limited to, motor vehicle helmets, leather boots, appropriate gloves and goggles when loading and unloading vehicles from the trailer.
- Do not stand in the path of equipment movement and keep bystanders away from the ramp when loading and unloading equipment with ramps.
- Keep your body away from the ramp door hinge clamp area at all times.
- Check the parking brakes of vehicles and trailers.
- Check ramps and trailer floors/loading areas for cracks, damage, oil, or other debris that could cause sliding.
- Remove carpets from areas where oil-fueled vehicles or motor equipment are stored.

7. RAMP POSITIONING

The slope angle from the trailer floor to the ground affects the risk of cargo handling. The risk will be reduced if the slope angle is reduced and all other conditions remain the same. The angle of the loading ramp should be minimized; the smaller the ramp angle, the easier it is to load. The trailer should be positioned, and terrain conditions should be utilized to reduce slope angles. In all cases, both ends of the ramp door must be fully supported. The loading angle should be kept to ensure that both ends are level with the ground or at the same height. Uneven slopes may cause goods to tip over during loading and unloading.

8. LOADING OF MECHANIZED CARGO (LOW POWER)

1. Change to the lowest gear before going uphill.
2. Align the wheels with the ramp during loading and unloading.
3. Go straight rather than diagonally. If you turn to one side, where the slope touches the ground is uneven and there will be an imbalance. The operator should step on the accelerator smoothly to go through the ramp at low speed. Excessive or sudden acceleration can make the vehicle more difficult to control and may cause the vehicle to impact the trailer cargo area ahead or roll over.
4. No overload. Handles and mirrors, etc. should be kept away from interior walls of the trailer. Walls may be damaged if in contact with hard and sharp objects.
5. Turn off the fuel valve after oil filling and start the engine until it stops (motorcycles and all-terrain vehicles). Turn off the ignition key and take it out. Install parking brake. Engage a gear for vehicles with manually operated clutches.
6. Secure the vehicle with straps. The attachment points you choose on the equipment must be strong enough to support the weight of the equipment. The attachment point is usually low and located in the center of the equipment frame. Attachment to decorative chrome or plastic will not lead to a correct fixing point. Any possible movement should be taken into consideration. The connection point of the equipment beyond the center of the equipment may cause the equipment to rotate or overturn when the vehicle is moving. In this case, the equipment may be damaged, and the trailer may shake, lose control or even roll over causing personal injury or death.

For loading safety, blocking devices should be installed on both sides of the wheel to prevent it from rolling. The number of straps used to bind the vehicles should not be reduced due to this additional safety precaution. At least three straps are required, with four straps (one on each corner) being preferred.

The hook should be attached to the frame, rather than mirrors, handles, pedals, etc. The hook at the other end must be attached to the cargo anchor mounted on the trailer. For transportation, electric goods with manual transmissions should be kept in the first gear. Vehicles with automatic transmissions should be in the “stop” position. Turn off and remove the ignition key of the vehicle, place the parking brake group and run/stop switch in the stop (or off) position, and place the fuel rod in the off position.

&WARNING

FAILURE TO SECURE GOODS PROPERLY MAY RESULT IN PROPERTY DAMAGE OR INJURY.

9. UNLOADING OF MOTOR GOODS

THE SAFEST UNLOADING METHOD:

push the vehicle down the ramp and brake carefully to ensure control of the vehicle. Reversing motor vehicles on slopes is not recommended. A slight turn of the handle or a sliding wheel may cause the vehicle to drop, tilt or roll, and you may get injured or killed if you are in or on the vehicle.

Safe unloading methods:

1. Ensure the rear tires are aligned with the ramp and there are no people, pets or obstructions in the ramp unloading area. Make sure the ground can support the vehicle and the vehicle cannot roll out of control.
2. Stand in front of the vehicle.
3. Push the vehicle back in line with the ramp.
4. When the rear wheels start to descend the slope, brake slowly and control the speed without slipping out of control.

10. FUEL DELIVERY SYSTEM

A fuel delivery system allows you to store gasoline for motorcycles, snowmobiles, all-terrain vehicles, or other vehicles and equipment when in a camp. The system consists of a fuel tank, a fuel tank fueler, a fuel gauge, a fuel transfer pump, a fuel transfer valve and a hose with a filler nozzle. Your trailer is equipped with a timer switch that allows the pump to run every 5 minutes. To top up the tank, please remove the filler cap and fill the tank with gasoline of the grade required by your equipment. When replacing the refueling cap, ensure that it is tightly installed, and lock it firmly on the refueling tube neck.

&WARNING

No smoking. Before dispensing fuel, shut down all engines, fuel burners and their igniters (see instructions). Ground RV. Do not distribute fuel within 10 meters of ignition sources or other recreational vehicles or structures. Failure to comply with the regulations may result in fire, casualty, or serious injury.

SAFETY OF FUEL DELIVERY SYSTEM

Electrostatic related accidents are forbidden during refueling. They often occur in cool, cold and dry climates. On rare occasions, these static-related events may cause a brief flash fire at the refueling point. You can minimize these and other potential refueling hazards by following safe refueling procedures.

Refueling, especially in cool, cold and dry weather, may lead to accumulation of static electricity. If you return to the refueling tube during refueling, static electricity may be emitted at the refueling point, causing a brief fire. Here are some additional safety guidelines for refueling. When refueling your vehicle or gasoline storage container:

- Turn off the vehicle engine. Disable or turn off any auxiliary ignition source, including the trailer stove, water heater, cooking unit, and any indicator lights. Close valve of the main gas system.
- Do not smoke, light matches or use lighters when operating the refueling system or using gasoline.
- Use only the refueling latch on the nozzle of the gasoline distributor.
- Do not lock or try to open the refueling latch.
- Do not re-enter the vehicle during refueling.
- Do not top up the tank as this will cause gasoline to spill out.
- Children under driving age are prohibited from operating the water pump. Avoid prolonged inhalation of gasoline vapor. Use gasoline only in open areas where you can get plenty of fresh air. Keep your face away from the nozzle or container opening.
- Do not suck gasoline with mouth. For whatever reason, never put gasoline in your mouth. Ingestion of gasoline is harmful or fatal. Do not induce vomiting on anyone who has swallowed gasoline, contact emergency medical providers immediately.
- Keep gasoline away from eyes and skin, as it can cause irritation. Remove gasoline-soaked clothes immediately.
- Do not wash hands with gasoline or take it as a cleaner.

OPERATION OF FUEL DELIVERY SYSTEM

To operate the fuel delivery system:

1. Lower the tongue orifice to the ground, which will ground the trailer statically to reduce the possibility of electrostatic discharge during refueling.
2. Set the main disconnect switch to ON.
3. Close the vent on the side of the trailer just in case.
4. Turn on the fuel transfer pump switch and run the pump for 5 minutes. When the pump stops, turn it on again if necessary and run for another 5 minutes.
5. Insert nozzle into equipment refueling device and squeeze handle to make fuel flow. Be careful not to overfill the fuel tank. Wipe up the spilled fuel.
6. Then release the nozzle handle, put the nozzle back into the chamber, and turn off the pump switch.
7. When you have finished refueling, turn off the main pump switch.
8. Lock the fuel transfer nozzle compartment to prevent illegal use. The compartment must always be locked when no refueling is made.

&WARNING

If a fuel leak occurs in the storage area of the trailer, open the windows and side wall vents and wipe the fuel with clothes or paper towels. Dispose of towels in hazardous waste containers. Do not flush the trailer with water, clean the spill area with grease/oil dissolving cleaner and dry the spill area thoroughly. Do not place fuel-soaked rags or other materials containing inflammables or explosives in the trailer or any other vehicles. Do not modify the fuel delivery system of the original vehicle. Any unauthorized modification or replacement of any part of the fuel delivery system may compromise the integrity of the system and may result in serious casualties.

11. ELECTRIC BED LIFTING SYSTEM

Rear cargo area of the trailer may be equipped with an electric bed lifting system.

Safety precautions:

- Generally speaking, children under 6 years of age should not sleep in the elevated bed or jump layer of the bed.
- Get your child to use the electric bed lifting system properly and ensure they are supervised while playing in the trailer bedroom/sleeping area with the electric bed. Do not play on or under the electric bed, do not hang belts, ropes, towels or other items in any part of the electric bed.
- Place a night light in the bedroom/sleeping area so that you can see it when coming in and out of bed at night.
- No more than one person should lie on the electric bed at a time, follow the weight limits on the warning label beside the bed.
- Do not allow children to operate the electric bed lifting system in the rear cargo hold of the trailer. Lifting of the electric bed can only be carried out by adults. No one should be on the electric bed when the bed is lifted up or down.

&CAUTION

Each vehicle with an electric bed system comes with a warning label listing its maximum load capacity. Failure to meet the load capacity may result in bed failure and injury. The bed must be placed in an upward position during travel. The electric bed, which may involve fall hazard, may result in injury.

CHAPTER VI

UPKEEP AND MAINTENANCE

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- I. Upkeep and Maintenance of Exterior and Auxiliary Components
 - II. Interior Maintenance
 - III. Upkeep and Maintenance of Tent
 - IV. Anti-Freeze Upkeep and Maintenance
 - V. Compulsory Maintenance
 - VI. Effects of Long-Term Stay and Upkeep & Maintenance

Regular maintenance of your camper trailer is the best way to protect your investment. Scheduled maintenance is essential to maintain high level of safety and reliability for the camper trailer.

&WARNING

Do not get under your trailer unless it is on solid and level ground where the jack bracket is secured in place.

I. UPKEEP AND MAINTENANCE OF EXTERIOR AND AUXILIARY COMPONENTS

1. EXTERIOR WALL, ROOF

Some of the trailer's exterior components are made of fiberglass, metal, rubber and plastic materials. Their coating is durable but not indestructible. Exposed to pollutants from sunlight, moisture and air, any material or decoration will deteriorate over time, changing the surface of the material, resulting in dimming and fading. In general, changes in finishing due to weathering are superficial. They are on the surface of the component and will not affect its strength. Daily maintenance is the best solution in this regard. If the finish is not thoroughly cleaned and waxed, the surface will deteriorate rapidly. The following guidelines can help reduce effects of the weathering:

1) Wash the surface at least once a month with a mild liquid detergent. Do not clean the outer surface with strong abrasive tools. Do not use solid or granular cleaners as they can damage the finish. Do not use highly acidic or alkaline cleaning solutions, and the recommended pH is between 3 and 11. The cleaning solution should not contain strong solvent or alcohol. Avoid contact with window cleaning agents that contain ammonia. Wash the trailer in a cool place without direct sunlight, do not wash until the exteriors of the trailer cool down. Chemical solvents and strong cleaning agents may damage the trailer's siding, roof, metal and plastic trimming. Rinse the trailer thoroughly with cold water to remove loose dirt. Use a mild detergent, such as dishwashing liquid or a product made specifically for car or camper trailer cleaning. Clean the trailer with clean water and mild detergent solution, as well as a soft brush, sponge or soft cloth. Start at the top and work your way down.

After rinsing the entire exterior, dry with suede or a soft towel. Please note that drying naturally can cause exterior darkening and water spots. It is also important to check and repair the surrounding seal when drying the trailer.

2) Wax the surface at least once a year, preferably twice. Use automotive wax/polish, rather than abrasive cleaners or abrasive compounds. Wash and dry the entire trailer before waxing.

3) Clean the roof every two months. For general cleaning, use a mixture of mild liquid detergent and water, rather than solid or granular cleaners, which may damage the finish. Use mineral alcohol-soaked clothes to clean stubborn stains. Do not apply mineral oil in large areas, and do not soak mineral oil on the roof membrane.

&CAUTION

Wet roof is slippery.

2. DAMAGE INSPECTION

It is important to check the enclosure regularly for damage. Attention should be paid to the following items:

- Waste cylinders and pipes.
- Gas cylinder and assembly.
- Sealants applied around doors, roofs, vents and windows.
- External lighting.

3. SEALANT RENEWAL

The adhesives and sealants used in the trailer are meant to remain waterproof against the constant effects of weather and vibration. Even the best materials eventually dry out and fail under the constant heat of the sunlight, the erosion of other factors and the vibrations of the road. To protect the camper trailer from water invasion and damage, it should be thoroughly inspected and resealed for any defects found. Roof wiring, and sealants around doors and windows should be inspected at least every six months.

The affected area must be re-sealed if any of the following circumstances are found during the inspection:

- (1) Weathered or dried sealant.
- (2) Cracked or peeling sealant.
- (3) Hollow sealant.
- (4) Shrunken or separated sealant.

Clean all areas that require resealing. Ensure that all areas to be resealed are absolutely dry before applying the new sealant.

Check and tighten any loose fasteners. Do not make them over-tightened, or they will peel. If areas on the roof require resealing, remove any loose or cracked sealant, and do not damage the roof. Use wooden or plastic scrapers to prevent gouging, puncturing or otherwise damaging the roof. The roof may be cut or punctured by sharp objects. Continuously apply new sealant to the joints and flanges, and do not leave anything behind. Apply enough sealants to flow over the heads of all fasteners. Wait at least 48 hours for the sealant to set completely before cleaning or waxing the trailer.

4. DOOR AND WINDOW

Clean window frames and rails to ensure easy operation. Clean glass windows thoroughly with glass cleaners. Wipe all glass with a soft cloth or paper towel. Clean the seals every 3 months with a damp cloth or mild detergent, rather than strong solvents as they may damage the seals. Apply a layer of natural silicone lubricant on the dry seal to keep it elastic. Frequent lubrication is required if the trailer is exposed to salty air.

ACRYLIC WINDOW

Make acrylic windows look like new by using appropriate care, products and techniques. Prevent scratching acrylic windows with rough cloths, harsh soaps or cleaning products. Remove frosted dirt as far as possible without touching the surface when cleaning the window. Ideally, rinse the surface with water to soak the accumulated residue, and add mild cleansing solution to the water. Use non-abrasive soap, detergent and water. Use a soft sponge, cloth, or suede. Rinse frequently to keep it free of grit. Wash up and down or left and right, not in a circular motion. Finally, rinse with more water and dry with a clean soft cloth. Start at the top of the window, and use the clean side of the cloth after the other side gets dirty. Do not work in a circular motion.

&WARNING

Do not use abrasive, corrosive cleaners, alcohol or solvents as they may cause permanent damage to the finish. Do not use any petroleum cleaners or corrosive chemicals on acrylic windows. Do not use WD-40 (because it is petroleum-based). Never use a high-pressure nozzle to clean windows. Do not wash windows in direct sunlight.

5. AIR CONDITIONER

Check whether the air conditioner installation bolts are tightened after 1,000km driving. Remove the inner cover and inspect the four bolts located at the corners of the roof openings. These fasteners, which secure the air conditioner on the roof, also exert pressure on the sealing gasket between the air conditioner and the roof. Loose fasteners may lead to water intrusion around the roof opening.

6. TOP HOLD VENT

The vent can be cleaned from the top of the trailer. The filter mesh can be vacuumed or brushed gently to remove the accumulated leaves or other debris.

Lubricate gears and components annually with waterproof grease.

7. SKYLIGHT

Rinse the skylight with warm water at least four times per year. Wash gently with a soft cloth or sponge and mild soapy water to soften dirt. Do not scrub with a brush or scraper. Rinse repeatedly and dry with a soft cloth to prevent water accumulation.

II. INTERIOR MAINTENANCE

1. INDOOR ODOR

In hot weather, the new trailers may have strong odors, which may even irritate the eyes due to the glue used in cabinets and paneling. This situation may disappear over time. However, in extreme cases, you can open the access door and all windows for air ventilation for several hours.

2. FURNITURE AND CURTAINS

Curtains, mattress covers, indoor upholstery and wall mats are all made of quality materials and should be dry-cleaned only. Vacuuming regularly or cleaning with a soft brush can help prevent buildup of dirt and grime. Water- or detergent-based cleaners may cause shrinkage. Water damage can be permanent. Small spills should be cleaned up quickly to avoid contamination. Affected areas should undergo soil pick-up rather than friction to prevent the stain from entering deeper into the fabric. You may remove dirt and dust from vinyl interiors with a vacuum cleaner. Wipe with a soft cloth and soak with mild soap and water. Use the same solution in areas that are difficult to brush. Use a spray type or foam type vinyl cleaner.

&WARNING

Do not use paint thinner, nail polish remover, carbon tetrachloride, gasoline or naphtha for any cleaning, as these products may cause damage to the material being cleaned and are highly flammable or toxic.

3. WALLS AND CEILINGS

Do not use coarse scale inhibitor or abrasive on walls or ceilings. Most surfaces can be cleaned with a soft cloth dipped in a mild liquid cleaner in warm water. Do not use large amounts of water, as it may saturate the material.

4. FLOOR

Vinyl floors only require cleaning and regular waxing. Vacuum carpets regularly to remove dirt.

5. MAINTENANCE OF WOOD PRODUCT

Remove dust with a clean and slightly damp rag. Apply quality furniture polishes with a soft and dry cloth. Do not use harsh detergents or solvents.

6. MAINTENANCE OF LAMINATED BOARD

Clean the top of laminated board with mild dishwashing liquid and warm water. Use a soft cloth for washing and drying. Abrasive cleaners, steel wool or grit cleaners may damage the surface.

7. REFRIGERATOR

Clean the inside with a mild cleanser and water after each trip. Thaw the refrigerator and empty the ice tray. When thawing, place dry towels in the refrigerator to absorb moisture. Place the tray with hot water in the freezing chamber. After defrosting (when the freezing chamber and condenser are frost-free), dry the refrigerator with a clean rag.

8. SEWER

Do not use lye or any strong chemicals if the sink or shower drain gets clogged. Strong chemicals may damage plastics in the waste system. A standard drain is recommended.

9. BATHROOM MAINTENANCE

Non-abrasive cleaners are used for daily cleaning. Household fiberglass cleaners are recommended. Do not use harsh cleaners or abrasive cleaners. Do not clean surfaces with steel wool.

10. SINK MAINTENANCE

Do not use abrasive cleaners or washing powders. Abrasive cleaners may dull or damage product surfaces and may leave scratches. Do not use wash pads, steel wool or any other abrasive scrubber. Wipe with a soft cloth or sponge only. Always use a cutting board or sink protector when using knives or sharp objects. Cool the pan before placing it in the sink.

III. UPKEEP AND MAINTENANCE OF TENT

1. ANTI-MILDEW

Not drying a wet tent as soon as possible is one of the most likely reasons for damage to the tent. Mildew is likely to start forming on the fabric of a wet tent which has been stored for 24 hours in warm weather. Mildew can cause the waterproof coating to separate from the fabric, which can cause permanent damage.

Mildew is permanent. It cannot be removed without potential damage to the fabric coating and damages in this regard are not covered by warranty. Even if your tent looks dry after use, it is better to unfold it indoors and make sure it's completely dry before storage. Open the tent regularly to prevent odor accumulation and clothing deterioration.

2. CLEANING

There is no need to clean your tent unless it smells bad or becomes very dirty. If it is heavily contaminated, wash it by hand with warm water, sponge, and mild detergent-free soap. Do not use dishwashing liquid, detergent, bleach, pre-soak solution or stain remover. Wash with clear water. Prop up your tent until it dries. Never dry clean, machine wash or dry your tent, as each of these methods may remove the waterproof coating from the fabric.

3. SUNLIGHT AND ULTRAVIOLET RAY

Ultraviolet ray is one of the most harmful elements to your tent. Tents are often used under sunlight, and prolonged exposure may cause the fabric to fade, lose strength, and eventually tear. This effect is more evident at higher altitudes. Place your tent out of direct sunlight if possible. Damages due to ultraviolet ray are not covered by the warranty.

4. ANIMALS

Never store food in a tent to prevent animals from biting holes in the fabric.

5. JOINT SEAL

Superior fabrics and construction make your tent extremely waterproof. Seal only certain areas if anything goes wrong. Keep the joint seal inside and coat the shiny side. Prevent dried sealant adhering to other parts of the tent with baby powder or talcum powder.

6. CONDENSATION

Condensation is moisture that forms inside a tent due to the difference in temperature between inside and outside. It comes from three sources:

- Weather condition: high humidity. Cold and rainy conditions produce the most condensation.
- People: evaporation through respiration and skin.
- Humid environment: humid ground.

The key to reducing condensation is ventilation. Fresh air has to enter, while warm and moist air has to escape the tent. No tent can completely eliminate condensation in all conditions and good ventilation is the only effective way of eliminating condensation on a daily basis.

7. ZIPPER

Sand in the zipper teeth will cause wear and damage to the zipper slider. To use the tent in this case, please rinse the zipper teeth with water. Care for the zipper slider may extend the service life of zipper. Align the rails before zipping up.

IV. ANTI-FREEZE UPKEEP AND MAINTENANCE

Maintenance of internal temperature helps prevent water from freezing in storage cylinders, water cylinders, pumps and pipes. Turn on the hot air system to circulate the hot air through the water system component. Adding non-toxic antifreeze to the plumbing system is the most effective method. Install winter cover plate on the air conditioner. The equipment is powered by propane.

There are holes in the windows to drain water out of the window rails. During heavy rain and high winds, water can be blown into the trailer through these holes. Place a sponge on the track of the hole to prevent this situation.

1. ANTI-FREEZING MEASURES DURING VEHICLE STORAGE

SHORT TERM TRAILER STORAGE

- (1) Wash the external surface.
- (2) Park the trailer as horizontally as possible.
- (3) Before disconnecting the battery cable, check the battery level and charge it if necessary.
Power off the battery while cleaning the battery and battery case.
- (4) Drain reservoirs, toilets and fresh water reservoirs. Turn off the water pump and water heater.
- (5) Close gas cylinder valve.
- (6) Turn off the refrigerator, stove and oven burner valves.
- (7) Remove all food from the refrigerator and kitchen cabinets. Leave the refrigerator door open to reduce the accumulation of odors.
- (8) Open a roof vent (1/4).
- (9) Close and lock all windows. Ensure that the exhaust fan and range hood fan switches are turned off.
- (10) Cover and close the drain pipe, water inlet and fresh water inlet of the storage tank.
- (11) Turn off all radios, televisions, indoor and outdoor lights.
- (12) Close mini louvers and day/night window shades.
- (13) Disconnect 110V power cables and store in the compartment.
- (14) Check the trailer per week.
- (15) Inject non-toxic antifreeze into the waterway system pipeline, including the water heater pipeline.

LONG TERM LOW TEMPERATURE STORAGE

- (1) Perform two weeks short term storage steps.
- (2) Operate the air conditioner periodically to lubricate the compressor seal.
- (3) Remove the battery and store it in a cool and dry place. Check the battery level every 30 days. Charge it when necessary.
- (4) Check sealants of roof joints, vehicle body joints and sealants around windows, re-apply sealants when necessary.
- (5) Prepare the electric generator (if any).
- (6) Remove battery of the smoke detector. Keep the cover open, so as to replace the battery when necessary.
- (7) Enclose external vents, water heater, electric stove, air conditioner hood, range hood cover to keep insects and small animals out of the trailer.

Remove all covering material before using appliances and vents.

STORAGE AT SUBZERO TEMPERATURE

To prevent damage to pipes and other components, the trailer pipeline system should be drained and protected against freezing.

The following anti-freezing steps must be followed:

- (1) Perform all steps in long term and short term storage process.
- (2) Open the drain pipe of the water tank, empty the tank and keep the drain pipe open.
- (3) Turn on all hot and cold water faucets. Open the low point drain of the hot and cold pipes.
- (4) Open the drain plug at the bottom of the water heater and open the pressure relief valve to drain the water from the heater.
- (5) Press the flush pedal or hand lever. Close all faucets, water pipe drain valves, fresh water tank drain valves, water heater drain valves and pressure relief valves.
- (6) Disconnect the hose from the faucet and drain the shower head and hose from the inside out of the shower.
- (7) Discharge waste water in accordance with normal procedures for tank drainage.
- (8) Ensure all pipes are drained completely.

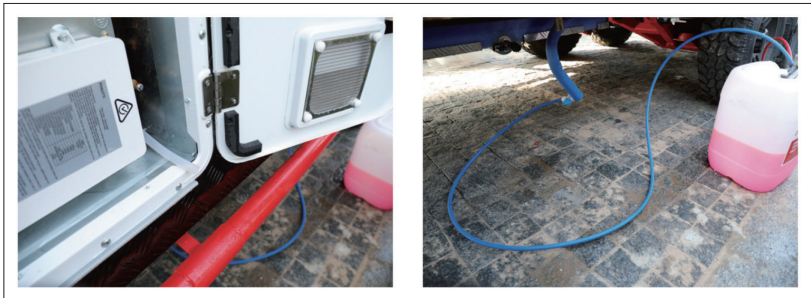
Finally, inject non-toxic antifreeze into the waterway pipes.

The drainage system alone fails to provide adequate protections against cold weather. Antifreeze is a must.

Do not use automotive antifreeze or windshield cleaner antifreeze in the water system of the trailer as these are hazardous to health.

2. ANTI-FREEZING MEASURES FOR SUBSYSTEM COMPONENTS

WATER HEATER AND TANK



- (1) Ensure that the pump switch is off.
- (2) Insert the hose from the antifreeze valve into a non-toxic antifreeze container.
- (3) Turn the water heater bypass valve to bypass position and drain water from the heater by removing the drain plug and opening the relief valve. Turn on the faucet to relieve pressure. Open the low point drain of the hot and cold pipes.
- (4) Open the drain pipe of the water tank, empty the tank and keep the drain pipe open.
- (5) After the system is drained, close all faucets and low point drain valves.
- (6) Turn the anti-freezing valve to "anti-freezing" position.
- (7) Turn on the pump switch.
- (8) Turn on the hot water faucet furthest from the tank. When the waterway pipe is filled with antifreeze, let at least one cup of water flow into the drain to prevent the P-trap from freezing. This also applies to other hot and cold drainage outlets, including showers, toilets and outdoor showers.
- (9) Turn off the pump.
- (10) Turn on the faucet to relieve pressure, then turn it off.
- (11) Complete operation.

WATER HEATER SHUNT (IF ANY)

The water heater shunt valve located behind the water heater is used to protect the water heater from freezing. Rotate the handle to the shunt position, and the antifreeze will not enter the water heater. A small amount of antifreeze may protect the water system pipeline.



CAUTION:

Make sure to open the drain plug at the bottom of the water heater and open the pressure relief valve to drain water from the water heater.

- (1) Fill the tank with water.
 - (2) Adjust the anti-freezing valve to the normal flow position.
 - (3) Turn the water heater bypass valve to "bypass" so as to prevent antifreeze from entering the water heater.
 - (4) Turn on the pump switch.
 - (5) Turn on the faucet farthest from the tank and store the antifreeze in the container until clear water appears. Turn off the faucet.
- This applies to other faucets and shower heads, including outdoor shower heads.

- (6) Set water heater bypass valve to normal flow position.
- (7) Turn on the hot water faucet until water runs out.
- (8) Inject antifreezes.

You are assumed to carefully store the trailer and take effective anti-freezing measures in the above procedures. Failure to follow above steps may lead to extensive freezing damages or other serious damages.

EXTERNAL AREA

- (1) Thoroughly inspect the outside of the trailer and open all doors and windows. Check for animal or insect invasion or other damages.
- (2) Remove all appliance vents, ceiling vents and air conditioning covers.

Make sure openings of the stove, water heater and refrigerator are clean and free of debris, insect nests, cobwebs, etc.

CAUTION:

Spiders and other small insects may crawl into the burner tube. Spiders may spin webs, build nests or lay eggs there. These webs and nests may be very small, but strong enough to stop the gas flow.

V. THE FOLLOWING MANDATORY UPKEEP ITEMS MUST BE IMPLEMENTED BY BLACK SERIES CAMPER 4S STORES OR PROFESSIONAL UPKEEP OR MAINTENANCE SERVICE PROVIDERS TO GUARANTEE THE TRAVEL SAFETY.

Compulsory maintenance item	Maintenance content	First maintenance	Maintenance period
Wheel hub assembly	Check whether the wheel retaining bolts and nuts are loose, check bolt wear, and retighten or replace hub nuts or bolts according to the inspection result. Replace the bolts and nuts if there is a potential hazard related to wear. Replace wheel hubs with cracks, pits or other damages.	First maintenance at 1,000km mileage	Receive maintenance once for every 5,000km mileage, or at the 6th month if the mileage is less than 5,000km
Tires	Check for wear, bulge, cut or other damages, and replace the tire in case of any hidden danger. The tire pressure must meet the requirements of the selected tire specification.		
Brake assembly	Disassemble the brake hub to check the fastening and wearing conditions of the fastener, the loss of lubricating grease and check if the bearing is working normally. Check whether the brake wiring is exposed or worn. Check whether the bearing is corroded or worn, clean or reassemble it, and readjust the brake operating clearance. Replace the bearing every 10,000km mileage, and		

Compulsory maintenance item	Maintenance content	First maintenance	Maintenance period
	replace it immediately in case of any abnormality during maintenance.		
Damper	Check for leakage, and test damper performance.		
Hand brake	Check the brake performance, adjust the brake wire.		
Towing device	Check bolt status and lubricate the spring fixing part of the towing device.		
Brake synchronizer	Check its performance against standard requirement.		
Electromagnetic brake system	Check whether the brake pad, electromagnetic system and circuits are worn, whether such wear is normal, and check contact sensitivity. Clean the system again. Check the electromagnet wear, electric current attraction, and replace with new brake parts in case of any hidden danger.		
Electric system	Check the electric system and equipment, ensure they are operating normally, repair and upgrade the electric system.		
Gas system	Check and maintain gas system, equipment and safety components.		
Water system	Check whether the water pump and water level gauge are normal and whether the pipeline leaks.		
External signal light of trailer	Check whether the turn light, brake light, clearance lamp, parking light, fog light, reversing light, license plate light and alarm light are working properly.		
Indoor light	Check whether all indoor lamps are working properly		
Gas alarm	Test the sensitivity in gas leak alarm, and battery level.		
Air conditioning system	Check whether the air conditioner works properly, whether the air conditioner is clean, and whether the air conditioner components are damaged.	First maintenance at 1,000km mileage	Receive maintenance once for every 5,000km mileage, or at the 6th month if the mileage is less than 5,000km
Control panel	Check whether the control switches on the control panel work normally.		
Electric step	Check whether the electric step and component function are normal.		
Stereo system	Check whether it is working properly.	First maintenance at 1,000km mileage	Receive maintenance once for every 5,000km mileage, or at the 6th month if the mileage is less than 5,000km
Water tanks	Check for damages or leaks.		
Fuel tank	Check for damages or leaks.		
Battery	Check batter charging and discharging functions, and check whether the electric power storage capability is normal.		
Inverter	Check whether it is working properly.		
Power supply system circuit	Check whether external cables are in good condition, whether connection terminals are fastened, and whether sockets are normal.		
Charging system	Check whether the solar charging and solar panels, modules/Andersen charging system/shore power charging system are working properly, check functions of components.		
Electric leakage protection	Check whether it is working properly.		
Spare wheel carrier	Check whether it is fastened firmly.		
Chassis bolt	Check whether it is fastened firmly.		
Balancing of tires	Dynamic balance check		

Remarks: warranty period of consumables and wearing parts is 6 months.

&WARNING

A change to metal stress between the hub and the fastening nut (bolt) will cause loosening of the fastening. Wheels falling off may result in serious safety accidents or even casualties. Check and tighten nuts (bolts) before each trip.

&WARNING

Reinstalled hub assembly nuts are easy to loose and must be checked for the tightness of clamp nut in the first 20km, 50km and 80km mileages.

HUB NUT FASTENING (TORQUE)

Ensuring fastened wheel mounting nuts and proper torque for the trailer is an important safety responsibility that users need to familiarize themselves with and practice. The user must perform maintenance on the hub assembly for the sake of safety. Insufficient or inappropriate torque (tightness) of the wheel nut is the main reason for the loosening of the bearing nut in use. Loose nuts can quickly lead to wheel separation with serious safety consequences. However, excessive tightening will lead to bolt fracture or permanent deformation of bolt holes installed on the wheel, which will also cause serious safety accidents and even casualties related to wheel shedding.

- Check hub nut tightness before each trip.
- The only way to ensure tightness or torque of the nut is to use a torque wrench. Tools like a four-way wrench can be used for short-term emergency repairs, but they are not suitable tools for checking nut torque accurately. The torque wrench is a must to indicate exactly how much torque you are applying to the nut.
- Note the mileage when you check nut torque. Determine the time of the next maintenance.
- Please immediately resort to professional maintenance service providers in case of any persistent nut loosening.

CAUTION:

Tighten the nuts in the sequence shown in “Nut Tightening Sequence”. Nuts loosen easily after the first assembly. For the installation and fastening procedures of hub nuts, please follow Section 7, Chapter IV of the manual “Correct Tightening Torque of Hub Nut Is Critical to Driving Safety”.

Never install non-original wheel hubs or nuts on your trailer. The non-original hub and nut cannot meet the load bearing and offset of the original equipment, and other safety technical requirements. Do not install aluminum wheels on hubs/studs designed for steel wheels. The stud length required by aluminum wheel is larger than that required by steel wheel.

TIRES

&WARNING

Please check the tire pressure before driving and make it reach the standard value. Check tire pressure when it is cold. Do not check the tire pressure immediately when the trailer stops after traveling a certain distance (even if only 1–2km), keep the tire cool for at least 3 hours. Check the sides of each tire for bubbles, cuts, or bulges. An inflated side with bubbles or cuts could cause the tire to burst. Worn, damaged or underinflated tires can cause the vehicle to lose control. Replace the broken tire before towing the trailer. Off-road trailer tires are replaced every 20,000–30,000 km mileage or 3-year service life under normal conditions, whichever comes first.

Replacement tires must conform to the specifications of the original tires. Mismatched tires and rims may cause tires to fly out and blow out due to unbalanced forces, resulting in serious casualties.

For precautions on tire installation and maintenance, please follow Section 6(1) of Chapter IV of the manual “Safety comes first – basic maintenance of tires”.

RIM

&WARNING

If the rim of the trailer gets hit or hits a hard curb, check the rim for damage (roundness); replace damaged rims. Check the rims for damage during regular professional maintenance even if no apparent collision has occurred.

WHEEL BEARING

&WARNING

Loose, worn or damaged wheel bearings are the most common causes of braking system failure, as well as one of the important causes of tire shedding. Check the bearing. Replace the bearing if it can shake the rim or swing the wheel. Bearings are high-precision safety parts, and ordinary users may fail independent maintenance due to limited knowledge or experience. Therefore, the lubrication, inspection and maintenance of bearings must be carried out by professional institutions.

ELECTRIC BRAKE

There are two different types of electric brakes on the trailer. One is the emergency electric separation system, which only works if the trailer detaches from the towing device and the separation pin is pulled down. The other is the electric brake system, which starts to work when the trailer's brake is activated. The brake system has been trialed and tested when leaving the factory. The maintenance of the brake system is of vital importance. The friction disc, electromagnetic system and friction clearance must be kept in normal working state. It must be maintained by professional maintenance service providers every 5000km mileage, and professional overhauling and maintenance are required immediately in case of any abnormal braking in daily driving.

&WARNING

If the electric separation brakes do not work when the trailer is separated from the towing vehicle, casualties or serious safety accidents may occur. Check the emergency separation brake system before each trip. The electric brakes running with the tractor brakes must be synchronized so that the brakes are correctly assigned to the tractor and trailer brakes.

SIGNAL LIGHT

Check the operation of lights (signal lights) outside the trailer before each trip. Make sure the tractor and trailer have synchronized light signals. Damaged signal light cannot send clear signal of driving intention to the following vehicle, thus causing misjudgment of the following vehicle, resulting in traffic safety accidents. Do not break the sealant around the lamp when replacing the cover bulb. Install new lamps with sealants satisfactory to original factory standards.

BATTERY SYSTEM CHARGING

The trailer is equipped with batteries to power lighting, electric retracting gear, skid and other AC electrical equipment. Batteries are charged by the tractor, generator or shore power. Disconnect the battery switch if the trailer is not used for a long time (such as in seasonal storage). Check the battery, Andersen charging system, inverter, solar charging system terminal posts and connection terminals regularly, and correct and maintain them immediately if they are loose. Regularly test the electric performance of Andersen charging circuit, inverter charging (discharging) circuit and solar charging circuit, and maintain and repair the problems found in a timely manner.

FRESH WATER SYSTEM

- (1) If anti-freezing measures have been taken for the fresh water system, drain the antifreeze from the fresh water system.
- (2) Turn on the pump and turn on all faucets until the antifreeze stops flowing.
- (3) Open the water heater bypass valve.
- (4) Flush the fresh water system as described in the "fresh water system" section.
- (5) Operate all faucets and fixtures for the fresh water system. Check all connections and fittings for leaks. Repair when necessary.

GAS SYSTEM

Check the gas path system regularly. Open the gas cylinder valve, check the air valve and T-shaped connector for leaks, check the pipeline for cracks or damages, and check the tightness of the connection between the pipeline and the equipment. Operate each gas appliance. Observe the color of burner flames and ignition flames.

VI. EFFECTS OF LONG-TERM STAY AND UPKEEP & MAINTENANCE

The trailer is designed for recreational purposes and short term use. To use it for an extended period of time, you need to be prepared to deal with problems including condensation, excessive humidity, and possible damage due to moisture, such as mildew. The materials and process chosen to construct the trailer are designed to minimize air leakage and create a weatherproof enclosure. However, to protect your investment and reduce the risk of moisture-related damage and repair expenses, care must be taken to manage moisture inside the trailer.

The relatively small space and airtight structure of modern recreational vehicles means that even the normal activities of a few people can cause the moisture contained in the air inside the trailer to quickly saturate and become visible, especially in cold weather.

Just as moisture collects on the outside of a glass of cold water on a wet day, moisture condenses on the inner surface of the trailer in the event of high relative air humidity in cold weather. This situation may appear more frequently, as the trailer's thermally insulated wall is much thinner than house wall. According to calculations, a family of four can evaporate up to 4.5 litres of water a day by breathing, cooking, bathing and washing. Unless brought outside by ventilation or condensed by a dehumidifier, the water vapor condenses as moisture on the inside of windows and walls, or as frost or ice in cold weather. It may also condense unseen inside walls or ceilings, where it will show up as warping or stained panels.

These conditions indicate a serious condensation problem. In case of signs of excessive moisture and condensation in your trailer, you should take steps to minimize the effects.

Caution: The trailer cannot serve as a permanent house. Long-term or permanent use of this product may cause premature aging of structures, interior finishes, fabrics, carpets and curtains. Damage or deterioration due to prolonged use is not considered normal and constitutes misuse, abuse or negligence under the warranty terms and therefore may reduce your warranty protection.

Signs of excess moisture may be obvious, such as droplets forming on the surface. It is important to identify the causes of excess moisture in a timely manner and take appropriate corrective actions to prevent moisture-related damage.

Monitoring and controlling the relative humidity inside the trailer is one of the most important steps to minimize the risk of moisture-related damage. Ideally, the relative humidity should be 60% or less. Relative humidity can be monitored with a portable hygrometer.

Exhaust fans, air conditioner/or a portable dehumidifier may be used to control moisture in the trailer and keep the relative humidity at 60% or less. In cold climates, relative humidity may need to be 35% or lower to prevent window condensation problems. If the trailer is used in a hot and humid environment most of the time, it may be difficult to keep the relative humidity below 60%. Dehumidifiers can help.

Lower surface temperatures increase the likelihood of condensation and surface mold growth.

Moisture in the air condenses on cool surfaces, such as windows. If you leave the trailer for an extended period of time, we recommend that you do not set the temperature back without taking other steps to control the relative humidity, including using a dehumidifier. Window condensation problems can be identified by water or icing, usually at the bottom of the window. Most of these problems can be solved by controlling the moisture generated inside the trailer. Minor condensation problems are not uncommon, especially for trailers used in cold climates. The key is to maintain reasonable relative humidity in the device.

To minimize window condensation, use exhaust fans that open to the outside, prevent drastic changes to thermostat settings, do not use "vent free" heaters, use curtains wisely. Or open curtains or louvers in the daytime to allow air to circulate and protect window surfaces.

Storage areas are more difficult to adjust because they are isolated from the main body of the trailer. The surfaces of these areas are more prone to condensation and surface mold growth. To minimize this risk, please clean storage areas regularly and allow air space between stored items and exterior walls to facilitate air circulation. For prolonged use in very cold weather, keep cabinet and closet doors partially open to warm and ventilate the interior of the storage room built against the exterior wall. The airflow will heat the exterior wall surfaces, reducing or eliminating condensation and minimizing possible icing.

Non-ventilated combustion equipment, such as the stove, is the source of moisture in the trailer. For every liter of fuel consumed, about a liter of water vapor evaporates into the air. Where possible, use exhaust fans in conjunction with any non-ventilated combustion equipment in the trailer. Water vapor and other combustion by-products should be vented to the outside of the trailer. You need to strictly follow the instructions for use and maintenance, so as to safely operate any combustion equipment, especially non-ventilated equipment.

The trailer's enclosure is the main barrier against weather and moisture. The enclosure requires regular maintenance throughout the life cycle of the trailer. The enclosure includes the trailer's roof, side walls, windows, doors and floors. Special care should be taken to ensure that these components are maintained, and to ensure tight barriers against water intrusion.

The exteriors should be inspected periodically for tears, cracks and sealant conditions. Areas requiring maintenance should be resealed with a high quality sealant similar to that used in the trailer manufacturing process.

Special care should be taken to ensure the normal operation of the slide-out device. Each time the slide-out device is used, it should be checked to ensure proper operation and sealing. Slide-out gaskets should be checked to ensure proper sealing of slide-out operation.

It is important to remember that coverage area of the trailer is significantly smaller than that of a single family house. This fact alone will increase relative humidity because there is less air to help absorb or dissipate moisture. For example, showering and cooking may create a lot of humidity in a small area. In these cases, the operating exhaust fans and open windows can reduce relative humidity, especially for prolonged residence in the trailer.

For prolonged use of the trailer in harsh environments (such as extremely cold or hot humid climates), extra care and maintenance are required to avoid moisture-related problems.

In extremely cold and hot humid climates, more attention needs to be paid to controlling relative humidity inside the trailer. It may also be necessary to keep relative humidity within acceptable limits with a portable dehumidifier.

Care must be taken to ensure that wet air sources are addressed during the time when the trailer is not in use. An enclosed climate-controlled environment is ideal for the storage of a trailer.

If this environment is impossible, the following steps should be taken for moisture control:

- Shut off all water sources.
- Turn off all combustion appliances.
- Empty the water tank.
- Empty the water heater.
- Open all closets, cabinet doors and drawers.
- Close all windows and access doors.
- Open the vents for limited air flows, prevent rain or snow from entering.
- Use dehumidifiers that open to the outside to control the humidity inside the trailer in the event of storage in high humidity climates (relative ambient humidity is above 60% all year long)

Areas exposed to water spills or leaks should be dried as soon as possible within 24–48 hours. Rapid drying minimizes the chance of moisture-related damage and possible mold, which may begin to form colonies within 48 hours.

Drying may be facilitated in the following methods:

- Vacuum to remove excess water.
- Use a dehumidifier.
- Use portable fans to flow air over the surface.
- Take all signs of condensation and overflow seriously and treat them promptly, as moisture is the key to mold growth. Failure to deal with moisture problems in a timely manner may lead to more serious problems that didn't exist in the first place, or make small problems worse.
- Learn to recognize the signs of mold. Do not cover up suspicious discoloration until you are sure it is not mold. Affected surfaces must first be cleaned and dried.
- As part of your cleanup, be sure to understand and eliminate sources of water buildup. Otherwise, this problem will happen again.
- Clean immediately when there is a small amount of mold. Clean small mold areas with stain remover or soap solution or appropriate household cleaners. Cleaned areas should be dried thoroughly. Discard any sponges or rags used to clean mold.

After purchasing a new trailer and using it for a period of time, you may notice some strong odors and feel some chemical sensitivity. It is not a trailer problem. Many different products are used to build your trailer. Some of these materials, such as carpets, linoleum, plywood, insulation, and upholstery, may “discharge” different chemicals. This discharge is particularly evident when the materials are new or exposed to high temperature and/or humidity. Because of a much smaller size of the trailer compared to your house and lower frequency of air exchange inside the trailer, the concentration of these chemicals in the trailer is more pronounced. This situation may disappear over time. However, in extreme cases, you can open doors, windows and vents for air ventilation for several hours.

CHAPTER VII

ENVIRONMENTAL PROTECTION

To better care and protect the earth, please have this product recycled and processed by the local qualified recycling institutions in accordance with relevant national laws and regulations when you no longer need it or its service life ends.

CHAPTER VIII

ACCOMPANYING DOCUMENTATION

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1. Certificate of Quality
2. Operating Instructions of Camper Trailer
3. Instructions of accompanying electric appliances

CHAPTER IX

AFTER-SALES SERVICES

I. WHERE THE TRAILER FAILS TO WORK NORMALLY DUE TO QUALITY PROBLEMS DURING THE WARRANTY PERIOD, THE MANUFACTURER WILL DISPATCH PROFESSIONALS TO THE SITE FOR FREE MAINTENANCE.

II. FAILURES DUE TO THE FOLLOWING REASONS ARE NOT COVERED BY THE WARRANTY:

- (1) Unauthorized disassembly and modification of the product;
- (2) Man-made faults during use of the product;
- (3) Failure to operate as per the Owner's Manual.
- (4) Force majeure;
- (5) Failure to issue the accompanying Certificate of Quality.

III. CONTACT INFORMATION

After-sales service hotline: (833) 822-6737

Website: www.blackseries.net

Address: 19501 E. Walnut Dr South City of Industry, CA 91748 USA

Postal code: 264200

For any problems regarding the product quality and technology during use of the product, please contact us through the above methods, and our professionals will provide you with detailed answers and comprehensive solutions. For any comments or suggestions on our services, please feel free to contact us, and we will make corresponding responses in a timely manner within 3 working days.

For related information and services, please call:

Franchisee's after-sales service hotline: 18678785959

Manufacturer's after-sales service hotline: 15666111950

RECEIPT OF PRODUCT WARRANTY CARD

Dear users:

To protect your rights and ensure complete after-sales service provided for you, please read the after-sales service manual carefully and fill in the receipt of product warranty card.

I. FILLED IN BY THE USER

Name of owner:			Tel.:	
Address:			Date of purchase:	
Product model:			Product No.:	
Product VIN Code:				

II. FILLED IN BY THE DEALER

Name of dealer:			Tel.:	
Address:				

INSTRUCTIONS OF ACCOMPANYING ACCESSORIES:

Radio instructions.

TV instructions.

Refrigerator instructions.

Microwave oven instructions.

Washing machine instructions.

Oven instructions.

Water heater instructions.

Inverter instructions.

Range hood instructions.

Air conditioner instructions.

PV controller instructions.

Electric toilet instructions.

Gas stove instructions.

Operating instructions of air parking heater.

Electric awning instructions.

Smoke detector instructions.

After-sales service manual.

ADDRESS:

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Instagram

[blackseries.us](https://www.instagram.com/blackseries.us)