In the Workshop with Frédéric



Annual Maintenance: Tips

Here are some tips and helpful hints for the use and maintenance of your Alto or your Safari Condo. It is important to make the visual checks annual ly and take action to avoid more serious problems. We are always there to take care of your vehicle. When in doubt, contact our service department.

Frédéric



The Voltmeter Reading

The voltmeter indicates the state of charge of your deep-cycle battery.



Voltage	State of Charge
12.6+	100%
12.5	90%
12.42	80%
12.32	70%
12.20	60%
12.06	50%
11.9	40%
11.75	30%
11.58	20%
11.31	10%
10.5	0%

DC27 12 volt Marine Battery

All Altos and Safari Condo up to 2008

- Battery with annual maintenance
- Life cycle 3 to 5 years

Tips from Frédéric

What your batteries like:

- -Be loaded up as often as possible (extends the useful life of the batteries)
- --Maintenance at 6 months or 12 months maximum (for Alto or vehicle up to 2008)
- -Receive a small boost from using the inverter (you can run the vehicle's engine)



DC27 12 Volt Marine Battery

All Alto and Safari Condo up to 2008

IMPORTANT

Check that your vehicle is really equipped with DC27 12-volt marine batteries with maintenance prior to proceeding with battery maintenance.

If you have a vehicle with marine batteries installed under the floor, it is recommended to have the maintenance carried out by a professional.



Maintenance: DC27 12 volt Battery

Add distilled water in each opening. The water must cover the metal plates. Never use tap water.

Tips from Frédéric

Once maintenance is complete, don't forget to fully seal unit by restoring the seal between the cover and the battery box. This prevents hydrogen fumes inside the vehicle when the batteries are in charge mode. For the sealer, use if possible Adseal, Seal ' N Peel or otherwise, Flextra. Never use silicone.



Maintenace-free 6 Volt AMG Deep-cycle Marine Battery

Safari Condo from 2009

- Maintenance-free battery
- Life cycle 3 to 5 years

Tips from Frédéric

What your batteries like:

- Be loaded up as often as possible (extends the useful life of the batteries)
- Receive a small boost from using the inverter (you can run the vehicle's engine)



Maintenance-<u>free</u> 6 Volt AMG Deep-cycle Marine Battery

Safari Condo from 2009

IMPORTANT

If your vehicle is equipped with maintenance-free 6 Volt AMG batteries, your batteries are sealed and you must never open them. Once they are opened, they must be replaced.



Batteries: Summary

DC27 12 VOLT MARINE BATTERY

ALL ALTO AND SAFARI CONDO UP TO 2008

What your batteries like:

- Be loaded up as often as possible (extends the useful life of the batteries)
- Maintenance at 6 months or 12 months maximum (for vehicle up to 2008)
- Receive a small boost from using the inverter (you can run the vehicle's engine)

What your batteries hate:

- Deep discharge (life shortened)
- Remain discharged too long (days)
- FREEZING (a good charge protects from frost)
- Fully discharged (life seriously shortened)

MAINTENANCE-FREE 6 VOLT AMG MARINE BATTERY SAFARI CONDO FROM 2009

What your batteries like:

- Be loaded up as often as possible
- Must never be opened

(for vehicles from 2009)

Receive a small boost from using the inverter

What your batteries hate:

- Deep discharge (life shortened)
- Remain discharged too long (days)
- FREEZING (a good charge protects from frost)
- Fully discharged (life seriously shortened)

Solar Panels







Check sealing joints annually

If you discover a cracked or missing seal and are comfortable with the process you can DIY. Otherwise, schedule an appointment to have it handled by a professional.

Solar Panels

Solar panels are an extraordinary way to recharge your vehicle marine batteries. They are quiet, clean, respectful of our environment and our resources, and require little or no maintenance. They need only one thing: the Sun. The entire surface of the panel must be exposed to sunlight; no part should be shaded. If you have a roof with crossbar supports, these will cause shade on your panel. As it works in series, don't forget that it will never charge more than the most shaded cell. If a leaf sticks to the surface of the panel, it is exactly as if the entire panel was covered with a huge leaf and preventing the Sun from reaching it. So, for maximum performance, the solar panel must be kept clean, stripped of leaves, snow and receive full sunlight on its surface.

Tips from Frédéric

Forests are pretty but for top performance, go for full sunlight!

Propane Water Heater Maintenance

- Check the sacrificial anode and change as required
- Check aluminium tubing and <u>if required</u> have it replaced by a professional

Clean combustion chamber



Check Sacrificial Anode

You must check the anode in order to see if it approaches 50% wear. This magnesium anode serves as sacrificial anode in order to avoid corrosion of the water heater itself. The harder the water you put in your vehicle's tank, the quicker the anode corrodes. If the anode disappeared completely, your water heater would puncture in only one season. Before you start your inspection, have a new anode on hand in order to compare with the old and assess the degree of corrosion and ultimately to be able to replace it if required.

Check/Replace Anode Every 2 Years



Different Levels of Anode Corrosion



Propane Water Heater Maintenance(cont'd)

Aluminium Tubing:

Another point to check is the aluminum tube that we see at the bottom of the water heater compartment when the protective screen is removed. You need to check if there is any severe corrosion. If that were the case, the tubing should be replaced by a <u>certified propane fitter</u>.

Combustion Chamber:

It is necessary to use compressed air to clean the combustion chamber and sometimes using a steel brush to remove any rust deposits.

Maintenance: Gaz, Diesel or Propane Furnace









Maintenance: Gaz, Diesel or Propane Furnace

When you have not used your gasoline or diesel heating system for a long time, for example during a very hot summer, it is possible that in the fall the furnace will not start. Indeed, after some time, gasoline located in the pipes and the pump evaporates completely and forms a sticky coating that blocks the pump in the closed position. It is therefore imperative to operate your gas or diesel furnace to the maximum position for at least 20 minutes once a month. If your vehicle is equipped with a propane furnace, it is also good to operate it regularly even during the hot season.

The trick to keep a heating system healthy is to operate it regularly.

Propane Fridge / 120 volts Alto Travel Trailer



Annual visual check

Semi-annual Maintenance of combustion chamber by a professional

Propane Fridge / 120 volts Alto Travel Trailer



Clean this area using compressed air

Propane Fridge / 120 volts Alto Travel Trailer



With time, rust particles accumulate in the combustion chamber and on the burner. This area must be cleaned by a professional every two years

Detector Replacement

Every 5 years

- Carbon Monoxyde
- > LPG Propane Detector

Every 10 years

Smoke Detector



Sealing Joint Inspection

Annual Inspection

It is very important to check the sealing joints every year and if necessary, to DIY or have them replaced. You will thus avoid possible water infiltration and any subsequent damage.



Sealing Joints

Over the years with the action of the Sun, joints that provide the seal between the roof and the attached equipment(fan, solar panels, etc.) dry up and can crack. For the Safari Condo canvas roof, it is recommended to check the condition of the gasket that runs along the canvas, and in the case of the electric roof, the one that lies between the wall of the electric roof and the top of the vehicle. If you discover a cracked or missing seal, schedule an appointment in order to have it repaired. If you want to DIY, remove the faulty part of the joint, clean the surface with paint thinner or methyl alcohol and replace the faulty joint using Adseal. Never use silicone because it is will be impossible to remove later. Depending on the color of your vehicle, use the white, black or transparent Adseal. These products are available at Rona, Réno dépôt, or other hardware stores.



Fan

Annual lubrication of the exterior fan switch

The fan switch is exposed to dust and humidity. Without preventive maintenance, it is possible that it sticks, thereby keeping the fan from working.

Use PL-100

Check the seal joints

Essentials

Adseal (White or Clear): Seal joints

PL-100:

Lubrication

Jig-A-Loo:

Lubrication



Available online at safaricondoacc.com

http://safaricondoacc.com/boutique/en/en/rubber-seal-conditioner-p90/





Available online at safaricondoacc.com

http://safaricondoacc.com/boutique/en/holding-deodorant-aqua-gem-p72/?search=aqua&description=1

http://safaricondoacc.com/boutique/en/sanitizer-treatment-p74/?search=saniti&description=1.





