## WHAT COULD POSSIBLY NEED MAINTENANCE by Luke Bernander

#### USER TIPS TO MAINTAIN & OPERATE YOUR COACH from A-Z from Luke

#### **AIR CONDITIONER**

-clean coils on outside, air and / or water

+straighten fins, if hail, or other damage

-clean inside filter: air, vacuum, or hand wash if foam

-lubricate blower motor shaft, if accessible, after shroud is removed

-close accordion door on hot days to cool occupied area

- If second a/c sensor seems inaccurate & sensor is mounted on refer wall, consider foam insulation between wall & sensor

-Micro-Air / Easy Start

+consider Micro Air Easy Start, if using generator, when boon docking

## ALARMS:

smoke / CO (usually battery operated, check / change batteries) propane: = long term power drain

## APPLIANCES

-Dometic® refer 2005 & newer? door divider / hold open -open service door for better cooling

## AWNINGS

-clean & use silicone on any part that moves

-close awning when leaving, to reduce time, only close travel locks when leaving site

+2-5 minutes to open / close awning, if longer, repair is probably required

## BATTERIES

-2 or 4 batteries support 2 to 4 times the battery consumption (i.e furnace blower motor)

-If you have batteries with removable covers, also known as lead acid, check the water level regularly, perhaps monthly.

## BODY

-pens for body scratches 9000w-03

- clear spray 28174w 12 oz

-store extra trailer & tow vehicle keys somewhere

+consider lock box?

-dent removal vs panel replacement

-seal lower rub rail on approximately 2003-2013 trailers

## BRAKES

check break away switch location of breakaway cable: tailgate, not hitch

CURT Echo Brake Controller -plug & play -proportional controller for 1 & 2 axles -communicates with smart control via Bluetooth -less than \$300

many new vehicles WITH tow packages have built in brake controllers

## ELECTRICAL

- -power probe
- -until 2018, store use switch must be in "use" mode to charge battery(s)
- -store / use switch must be in "use" to operate refer while driving, if refer was "pre-cooled" on electric / shore power (per Bob Prussman)
- -push umbilical cord under propane tanks for storage, out of weather (Jay Guerin)
- -keep batteries charged for longevity
- -1 amp per incandescent bulb consumption, LED bulbs about 1/6amp
- -Convenient volt meter, battery indicator & USB charge ports ...ebay (per Elliot Actor)
- -Mailbox / cabinet lock, for battery box, is to secure batteries (per Elliot Actor)
- -battery disconnect, reduces long term drain & stops electric jack operation (per Elliot Actor)
- Batteries: Trouble getting battery caps off? If batteries are between the frame rails, behind the propane tanks, consider turning one battery around. If all terminals are close to each other, the "jumper wires" do NOT have to cross the battery caps. It has been tested & works!

## EQUIPMENT CONSIDERATIONS

12-volt monitor / meter

120-volt monitor / meter

# FLOOR

- -de-laminated plywood repair
- +add denatured alcohol to two-part epoxy, mix to water viscosity, allow to dry out for repairs
- +or Jim Cooper way: 10-15% Zylene added to epoxy (available in qts from h/d or auto paint store?) 20% may be too much...slow dry (per Dan Wray)
- +or 3M / Bondo rotted wood restorer (Home Depot)
- + or Minwax wood hardener, may also have epoxy wood filler (Lowe's)

WRINKLED / BUBBLED vinyl flooring?

consider securing with vinyl floor adhesive via syringe

FURNACES, REFRIGERATORS, & WATER HEATERS

- -if not operating, or operating intermittently; I first check for:
- + obstructions (bee & spider nests)
- +then clean flame sensor

## HITCHES

-check attachment of hitch to tow vehicle .....loose bolts

- -check attachment of ball to weight distribution head....signs of rust may be "tell tale"
- +to tighten ball, turn weight distribution head 1/4 turn, to push down on wrench (per Ray Velasquez)

You tube video: air bags verses weight distribution hitch

evaluation: <a href="https://www.youtube.com/watch?v=XBZu39pQ8Gg">https://www.youtube.com/watch?v=XBZu39pQ8Gg</a>

-feel play between hitch & coupler (Dick Scheuer)

-rifle case for greasy weight distribution bars

# HOOK UP / SET UP TIPS

-use parking brake to keep tow vehicle from rolling, when vehicle is placed in park -overview of weight distribution hitch set up

+have seen many NOT carrying enough weight....front tires lifting / less steering ability -EQUILIZER (brand) has noise suppressant plate available (per Ron Herro)

-put break away cable in trunk lid, or other than safety chain loop

-disconnect safety chains AFTER ball coupler is dis-connected

-lock stabilizer crank into hitch lock, to remember to lift stabilizers before driving away -leave padlock unlocked while towing

-put tow vehicle cord in / under propane tank cover for storage to keep out of the elements

## HOSES & CORDS

-consider figure "8" pattern when storing for less knots & loops -consider "flexible hoses", no coiling required

## INTERIOR

Velcro or magnet to hold swinging bath door open

# PLUMBING

## -POO-POURRI

-Waste water tank sprayer, use it or lose it

+if trailer has black water sprayer, blow out as part of winterizing

-put ice in black water tank, drive to clean OR spinner and / or "Flush King®"

## cold weather camping

- put "salt water" windshield washer solution, or RV anti-freeze in the wash & black water tanks

+ I recently heard about leaving the "termination cap "on", & opening & closing the gate valves, to get anti-freeze resistant liquid on both side of the gate valve, for easier gate valve

operation, when desired. (Jay Guerin)

-cold weather: carry fresh water in containers, stored in sink, shower or tub for transport, to prevent freshwater tank / water line "freeze up"

• if you are "techie winter travel; consider re-circulating hot water from the heater into the freshwater tank, with a solenoid & thermostat

## PROPANE

open valves s-I-o-w-I-y WHEN COACH HAS NOT BEEN USED FOR A WHILE - light stove to evacuate air from propane lines, for other appliances to ignite easier -add "stop" cable to propane covers to reduce / prevent damage from over springing cover, +tip by Ron Herro -leak down test

# REFRIGERATORS

-clean air mixture tube, if flame doesn't ignite, or sounds unusual

-clean igniter (electronic ignition) or thermo-couple (standing pilot)

-newer Dometic® refers have door portions that hold the doors open during storage

## SOLAR

-if factory installed

- + can change controller only (not panels),
- + re-wire the panels in "series" to allow batteries to charge; in the shade & overcast days

## TIRES

bolt on valve stems, if TPS rubber hose over rubber stems, will also work inflate tires to trailer pressure rating, not tires, ie load range D vs E

#### WHEELS

torque wrench

-tightening sequence

-tightening stages

-re-tightening may be more important than I previously thought

+10, 25, & 50 miles, and as needed until no longer need additional tightening (P 4, 74, 75 Dexter operation service manual)

\* are aluminum wheels more prone to create failure?

## WINDOWS

-some black steps may need to be moved upward to allow windows to open easier (Hottman 2016 23FB international Signature)

-use Aero shield 303 for sticking window seals or silicone

-turn rock guard security straps 1/4 turn for easier removal / installation

#### ZIP DEE or other brands

-if it takes more than 1 person, and / or more than 5 minutes to open or close, lubrication and / or repair as needed

+silicone is the recommended lubricant, to minimize attracting dirt

#### BOOKS

Airstream Life: The Newbies Guide to Airstreaming The (nearly) Complete Guide to Airstream Maintenance

Luke Luke's Maintenance & Repair Company ACI / WBCCI #1-1965 970-222-4065