

The following was provided by Kate FitzPatrick and Glen Kotulek as part of their presentation at the ADU “Getting Ready for a Show” Workshop in 2009.

	Before the Show Season	1 –2 Weeks out	Day or two before	
Truck	<p>Check age of tires (6 years max rec). Check spare. Check tires for dry rot, cracks, bulges, damage, uneven wear, faulty air valves, etc.</p> <p>All inspections up to date.</p>	<p>Check oil, fluids (transmission, windshield washer, brake, radiator, etc). Check fuses and bulbs. Check tires for dry rot, cracks, bulges, damage, uneven wear, faulty air valves, etc.</p>	<p>Fill up – gas and fluids. Check tire pressure, look for lumps, cracks, etc. Double check fluids (washer fluid, radiator, oil, trans). Wash windshield.</p>	<p>Packing list A</p>
Trailer	<p>Check floors, seal or replace if needed Check tires: Age of tires (6 years max). Condition of tires (only tires specifically designed and rated for trailers – never use auto tires on a horse trailer). Spares (have two). Inspect wheels and hubs or brake drums and linings for wear and/or scoring. Check the water in all your batteries regardless if they are maintenance free or not. Check brake magnets with ohmmeter (3.2ohms) and replace if worn. Lubricate all brake moving parts. Remove rust from braking surface and armature surface of drums. Inspect suspension for wear. Check tightness of hanger bolt, shackle bolt and U-bolt nuts per recommended torque values. Inspect and/or grease seals for wear or nicks. Replace if necessary. Top jack gearbox needs to be greased, regardless of how it is turned, manually, elec.</p>	<p>Check wiring and lights, brakes, and fix if needed. Inspect and grease mechanical moving parts, such as the hitch and suspension parts, dividers, hinges and latches. Installing dielectric grease on the pins will increase the conductivity and make the physical connection easier. Look for wasp nests, mice etc. Look under the trailer for anything rusting, broken, or unusual. Check the water in all your batteries regardless if they are maintenance free or not. Check your CO and smoke detectors, replace after five (5) years and replace the batteries every year. Check the dial on your fire extinguisher (s) to see if there is a proper charge within.</p> <p>LQ: check propane, water tanks, windows, screens, door latches, roof vent, Heater/AC, lights, etc Dump and/or fill tanks and check covers, drain hoses, check water system for leaks. Check the anode in your water heater for wear, and replace if necessary.</p>	<p>Check tire pressure – set at max rec on sidewall, and look for lumps, rot, etc. Hook up and test drive. Check brakes, including emergency brake battery. Check wheel lug nuts (every trip!). Do, or doublecheck anything on the first two columns that you forgot, put off, or didn’t fix.</p> <p>“FINGER LIST” for hooking up trailer -Tailgate (up/down/up for my trailer) - electrical (plugged in and working) - safety chain 1 - safety chain 2 - emergency brake (on or off as needed) - latch / unlatch coupler</p>	<p>Packing List B Handouts: Bearing Buddy US Rider Sealing Floor Insulating the ceiling, caulking the roof, and other hints</p>

	Insulate ceiling if desired. Recaulk roof if needed.			
	Before the Show Season	1 –2 Weeks out	Day or two before	
Tack	Be sure bits are legal Ensure saddle fit Fix or replace anything that needs it Read rules	Measure whip Clean show pads	Clean and condition tack	Packing List C
Horse Care	Be sure shoeing schedule jives with competition dates Immunizations updated Check that supplements are legal	Check shoes Buy shavings, feed, etc for show	Check shoes Divvy up feed and supplements for show	Packing List D Packing List E
Show Gear	Try on breeches and other show clothes – mend or replace if needed	Start wearing show boots when schooling	Polish boots, wash breeches and shirts, etc	Packing List F
Personal Gear		Check batteries in watch, alarm clock, etc	Charge cell phone	Packing List G
Other	Learn to braid Know your tests Do not ride for, pay, or otherwise engage the judge for 30 days prior to show.	Hire braider Print maps &/or load GPS (to show and from show grounds to hotel, restaurants) Copy show entry forms Have readers, videoers, grooms, etc lined up Know when you are allowed to arrive Blow up copies of tests and mark for reader	Double check with braider Pack Know how to get to the show Double check ride times, and verify readers, etc.	Packing List H

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Sealing the floor of an aluminum or steel trailer:

Step One: Buy the materials and make the time: One to two gallons of "Duplicolor" or "Herculiner type material", one gallon of acid, a roller cover, and one cheap paint brush, costs about \$100. Actual work time is two or three hours, the rest is waiting for things to dry. A truck bed with one heavy coating requires approx 1 1/4 gallons of product. A four horse trailer floor could be easily coated with two gallons (three coats).

Step Two: Move the trailer to an outside area. Remove the mats and clean them. Sweep the floor and pressure wash if possible. While you are rinsing out the floor, you can see where the water puddles. Drill a 1/4" hole at the lowest point for drainage if desired.

Step Three: Acid etch the floor to chemically stop the corrosion before you can apply any coating over the bare aluminum. Muriatic Acid is mild and effectively stops active corrosion. YOU MUST USE A CHEMICAL RESPIRATOR TO APPLY THIS ACID. They cost about \$40 and incorporate a charcoal filter. A dust mask is worthless with the resulting fumes. Wear old shoes, long pants, gloves and safety glasses. Open all the trailer windows, and close the pass thru door to your LQ. One (or several) box fans aimed appropriately are also good option.

NOTE: If the corroded areas penetrate the thickness of the metal, you have active corrosion. You have to determine the extent of the damage by poking, prodding, doing whatever you can to open up the holes until you reach good metal. These areas have to be mechanically cleaned out with drills or a rat tail file until the area shows only bright metal. Two part epoxies can be used as fillers (JB Weld or equivalent) can fill smaller holes, larger repairs should be made using welding apparatus. If the smaller holes are first reamed with a countersink, it will give more strength to the repair. If the holes are small and tapered, you can use a two part epoxy like "JB Weld" (liquid metal) If the holes are larger, (dime sized) you will have to have them repaired by welding in patches or panels as required. This should be done by an accomplished welder that knows about, and has worked with, aluminum. Once the repairs are finished and the floor is etched, coat with the liner material and you will probably never have this problem again.

Do not apply this acid inside any closed structure, barn or garage. DON'T SPRAY the acid. Pour some acid from the container on about a third or quarter of the floor area and quickly spread it around with a short bristle brush, such as roof coating brush, or a broom. You will immediately see fumes rise from the floor; **leave the trailer quickly.** The acid will start showing bubbles after a minute or two, and you can go back in and spread the acid evenly over the part of the trailer being treated. After about 10 - 15 minutes you will see an even foam of bubbles, with the most reaction being where the floor was the most corroded and dirty. Re-enter the trailer and agitate the wetted area with the broom and leave it for another 5 minutes. Rinse the floor with water and inspect the area, spot reapplying as necessary until the floor is an even color, and there are no black or brown spots in the corroded areas. The atomization will aggravate the fume problem. Do another third and the last the same way, working towards the door as you go. When you're done FLOOD the floor several times with water, and treat the wet area with baking soda to neutralize the acid. Let it dry.

On aluminum, by acid washing the area, you are providing a clean, ready surface to be coated. It is now etched and corrosion free. On steel, the Duplicolor manufacturer recommends that all the areas are sanded, abraded and cleaned before any application. Read all of the manufacturer's instructions for the proper procedures.

Step Four: Apply the Duplicolor or Herculiner. The Duplicolor manufacturer recommends two coats of coverage. On a three horse trailer with a rear tack, one gallon will give you a two coat coverage. Two gallons will give three coats, and the rest can be used for other projects. Once the trailer is dry, it can be rolled or painted (supposedly sprayed also). Go up the walls of the trailer a couple of inches, especially on the butt side. Put the clean mats back in.

Remove mats, check the liner, and rinse annually.

Insulating the ceiling of the horse trailer

Use a rigid foam insulation with a foil back rather than the traditional pink or blue stuff. Cut it to fit very snugly between the beams and apply with a fast tacking polyurethane construction adhesive. Then use 4" foil tape, like that used for heating and cooling applications, and tape over the joints as well. This doubly secures the insulation and leaves a really nice finish and is brighter than the blue and pink.

Recaulking the roof of the horse trailer

Remove as much of the old caulking as possible. Clean the area (includes Ospho for steel trailers) and install new urethane caulking, not silicone. You will need a putty knife, utility knife, caulking gun and caulking. Urethane sealants include 3M 5200, or Sikaflex 295UV, and can be found at big box stores and most marinas.

Misc. Trailer Maintenance Hints:

Brakes will last years depending again on your usage and terrain. If you have heavy loads, steep hills or harsh driving techniques, they should be checked annually. If they are good then, and there is a good amount of material left on the shoes, let the next inspection go to two years.

Wheel bearings are critical. If you do not have annual brake inspections, whether by mandate or the amount of yearly usage, once the bearings are repacked, it's not out of the ordinary for them to be serviceable in excess of 20k miles. That would be reduced if they were constantly immersed in water and muddy conditions. This figure could be almost doubled by the usage of synthetic grease and Bearing Buddies. (BB's allow grease to be easily squirted into a grease fitting on them, which keeps bearings well greased and occludes any water entry) If you already HAVE bearing buddies, GREASE THEM! They are the caps at the very center of each wheel and will have a grease fitting "nipple" for attaching a grease gun. Pump it up till spring loaded cover moves some. Bearing buddies come in different sizes. To fit them to your trailer, pull the grease cap off the wheel with pliers and possibly a prying tool, and then place it against the Bearing Buddy gauge to see what size fits your trailer. Buy them locally or order online, now that you know which size to buy.

Tires: Six years is a maximum recommended usage. Weather cracking, rough terrain, constant high speed driving, driving while under inflated can reduce their life spans, or driving while overloaded. Their life spans vary greatly and they have to be constantly monitored. Tire pressures should be checked each time your trailer is used. Tire pressures should be set at the maximum recommended factory inflation pressure marked on the sidewall. Check and maintain the spare as well.

Whenever a wheel is removed from the brake drum, a lubricant can be applied to the wheel studs before the nuts are reinstalled. This can be a little dab of the wheel bearing grease or a few drops of oil. This will help keep the studs from rusting to the nuts, and a wet torque value is always more accurate than a dry, rusty attempt.

On many of the jack heads is a square removable cap held on with two screws. When this is removed, you will be looking at the top of the gearbox that transitions the horizontal cranking motion to a vertical screw that elongates and shortens the lower leg. This should be lubricated with automotive chassis grease. Apply some to the gears, run the jack a bit and reapply some more grease before closing it up. On the two speed jacks, you will find a few grease fittings on the side gearbox. Two or three pumps of grease on each nipple will do the job. These should be serviced once a year. If you have an adjustable lower leg, lubricate the spring pin with the spray oil.

Your hitches need to be kept free of rust and the mechanisms should be lubricated so that the locks work properly. Again, a quick spray of oil applied once a month will keep things working properly. Check the spring loaded locking pin on the goose couplers and slide locking plate for proper operation.

All your windows and door hinges should be regularly lubricated. This is as much weather dependent as it is wear and tear. Use synthetic automotive ATF automatic transmission fluid. Hinges need to be oiled with a thin penetrating oil that is weather resistant. There is enough residual in the bottle after pouring it into your vehicle to oil almost everything on the trailer. When your vet completes all the inoculations, ask him for the used syringes. Pour the remaining oil from a bottle into the syringe and it's perfect for oiling hinges. This maybe accomplished a couple of times a year, less if the trailer is shed kept. The latches should be serviced as well. A spray WD 40 or LPS will work well on the overhead stall vents. While you have the spray can in your hand, spray some oil into the key holes of your various locks. Afterwards, insert the key and turn the lock to spread the lubricant.

Sliding windows are lubricated with silicone spray in the tracks. Silicon grease applied sparingly to the weather seals on drop downs and entrance doors will keep the seals supple and prevent them from sticking.

Dielectric grease applied sparingly to the trailer's electrical plug pins, will help prevent corrosion, increase conductivity and ease the application of the mechanical connection.

These are many of the outside lubricating parts of the trailer. How often they will need to be serviced will depend on its usage, miles per year, and environment.

NOTE: if you leave your trailer hooked up to your truck you may need to unplug the trailer's cord from the truck. If anything is left on in the trailer once it has drained your trailer's batteries your truck is next. This is normal, it does not mean anything is wrong with the trailer or truck. That is what it is suppose to do. If you don't want this to happen you need to have the 12v (auxiliary) unhooked from the trailer or truck end of the plug. The 12v hook up on the truck helps keep your batteries on the trailer charged as long as the truck is running, and it gives you 12v in the trailer for horse area light etc. it also will run your interior lights and such if your on board batteries are dead, depending on the set up of the trailer's system. This is how most systems are designed.

HINT FOR HITCHING UP A GOOSENECK: Simply stretch a bunge cord across the bed of your truck - attach the hooks under the bedrail. Center the cord over the ball. Mark the center of the cord with a ribbon to be in alignment with the neck. You will be able to see the cord and when it begins to stretch, the collar will be right where it belongs!