MARC Horse Trailer Safety Class

Hitch hook up for bumper and goose neck trailers

Are safety chains connected and crossed when possible?

Is the ball size correct? Even if the ball size is correct, is the hitch still loose? Some trailers have a spring loaded adjusting nut on bottom of the hitch on trailer. If it works loose the trailer can pop off the ball.

Is the ball firmly seated in to hitch?

Is the clevis pin in place?

Has the jack been secured properly?

Any signs of rust on hitch both on trailer and vehicle frame?

Tires

Are the tires pumped up to the correct pressure? Do any of the tires look low in pressure. Cold weather in winter usually effects this.

Are there any signs of dry rot? The UV rays of the sun deteriorate the tires. Cracks on the tread and side walls will appear. If present tires need replacement.
Are tires worn? You can check with a penny. Insert coin into tread, if the tread does not come up to Lincoln’s head, the tires need replacement. This is usually 3/32 inches in depth.

Are the tires wearing evenly? If not the trailer wheel bearings may be worn or a bent axle may be present.

Wheel bearings should be packed with grease. This can be done with a buddy bearing cap or service by a mechanic.

Do you have a good spare tire that fits the trailer?

Do you have a lug wrench that fits you trailer wheels lug nuts?

Do you know how to change the tire? Note: See picture of tire changing ramp.

**Electrical system for trailer**

Do all lights on trailer work properly? i.e. tail, brake, side markers and turn signals

Is the electrical plug secure?

Any evidence of frayed or torn wires in harness?

Is the electronic brake control lighting up after you have attached the trailer plug?
Is the backup battery operating properly? If the cable is pulled out of its socket, are the brakes engaged. Check by hearing a click/hum when the backup battery cable is pulled out. Or, try and move trailer with cable pulled out. Wheels should lock up.

Have you adjusted the electronic brake controller for the proper weight load? Usually a dial or slide switch is located on the side of controller. The heavier the load the higher the setting should be. You do not want the trailer tires skidding when you apply the brakes. You should feel the trailer braking slightly in unison with your truck brakes. A NOTE: all electronic brake units have a slide bar that activates the brakes only on the trailer. This is helpful on wet or icy roads. If the trailer should begin to jack knife do not step on truck brakes, use your finger and gently slide this bar over. It will straighten up your unit.

Non-electric trailer brakes The Atwood system

Some trailers have hydraulic brakes. The tongue of the trailer has a master cylinder like a car. The inertia of the trailer actuates the master cylinder when you step on your truck brakes.

Safety check for this type of braking system

Is there any sign of brake fluid leaks around the master cylinder?

Is there any sign of leakage in the brake lines going back to the wheels?
Is there any sign of brake fluid leakage on the inside of the wheels or tires?

Note: On some of these systems you must deactivate the braking system in order to back up. This is usually done with a pin or lever. Usually, if you are on the level and you back up slowly the system will not engage.

The actual brakes on the axle will not be addressed in this course. It is beyond the scope of this class. These items should be checked by a mechanic. Especially if there is a grinding or squeaking noise.

**Trailer condition for safety**

Is the floor of the trailer rotten? Use a knife or screw driver and poke it into the floor beneath the trailer and above. It may be necessary to pull up the matting to gain access. If rotten have the boards replaced. Some trailers have an aluminum floor, check for severe corrosion.

The Tailgate usually has plywood beneath the matting. Over time the plywood will delaminate and become rotten. On the outside of the tailgate is usually a finish panel made of metal or aluminum. If the tailgate wood beneath the matting is rotten you will see dents in this finish panel on the outside of the gate. Sometimes these panels actually get dislodged with spot weld failing and can injure the animal.
Note: When the trailer is not in use, always keep all the doors closed. This keeps out the rain and snow and increases the longevity of the trailer. Always keep the interior of the trailer clean after use. Remove any manure.

**Aluminum over metal frame trailer**

On All metal trailers check for severe rust on cross members of the undercarriage being rusted out. Check frame where axles attach to the frame, making sure attachment is secure.

Aluminum over metal frame trailers have an aluminum box secured to a metal frame. At the factory, the aluminum and metal are insulated from one another to prevent electrolysis. Over time this treatment and or insulative washers deteriorate. The metal frame is compromised and the bed can come off the frame. This takes some time to occur. Check for any severe corrosion at any mounting points beneath trailer.

**Additional safety notes:**

When teaching an animal to load, some people place the trailer in the field or paddock with feed or hay inside. The trailer
hitch should be attached to a vehicle or sunken post to secure the trailer in place. The tires must be chocked to prevent rolling. This will make sure there is no movement when the animal is loading. A bad experience makes the animal insecure.

Keep trailer clutter to a minimum. Place it in the tack room or secure it firmly. There should not be any pitch forks, rakes, buckets or brooms etc. that can become loose and injure an animal in shipping.

It is recommended to have spare halters and shanks in case one gets damaged. The halters should have a breakaway leather head strap. Have a spare strap handy.

Do not ride with your animal in a trailer. Hay nets should be secure, and high enough not to allow the animal to become entangled.