

Safety inspection made easy #1

I have put this in the ISRA news letter a few years back but I still get questions as to what we look for so I am resubmitting it again. It is in three parts to save room in the news letter so you will see the whole list in the next two months.

I know most of you have been rodding at least as long if not longer than me but when I am out doing inspections I still get questions as to what we look for and what are the requirements to pass the NSRA safety inspection. It is because of this that I will try to go through all 23 safety points and give you my take on each item and some of the things that we have seen. This may seem very simple but I am often asked what all is involved in a safety inspection and am trying to make it that way so you understand what we are looking at and can get anything that pertains to your car repaired this year and we can get more cars passed next year. If this is boring to you just skip over it but if you have other opinions, stories or just plain disagree send them in to the ISRA news letter and voice your opinion. We all can learn from others experiences and/or mistakes. I will do several points each month so I don't bore you all at one time.

REQUIRED EQUIPMENT:

1. **HORN:** Electric only.

This is pretty self explanatory, air horns or squeeze bulb type are not considered as legal horns. Hornes must be heard a distance of 200 ft. There are several reasons that we have found that horns don't work. 1. no horn installed at all 2 .corrosion of the wire connections. 3. horn mounted with the bell opening up which will collect water and cause the horn to eventually not work so mount the horn with the bell down if possible.

2. **SPEED INDICATOR:** Speedometer or calibrated tachometer at 65 mph

To the best of my knowledge we have never failed a car that has had a speedometer or tachometer installed. The inspector will take your word that you know that it is accurate or at least know how far it is off so you can adjust your speed accordingly.

3. **REAR VIEW MIRROR:** One inside or outside on driver's side of vehicle.

Again I don't believe that anyone that has a mirror has ever been failed. Although you can never have to many mirrors but they should be of a size and stile that allow you to see what is going on behind you. A dentist mirror attached to the drivers door might be pushing it a little.

4. **GLASS:** Must be safety plate or tempered glass.

You may have noticed the safety inspector going around pointing a pin or other sharp object at your windows. This will tell them if the glass is safety plate. Safety plate will give a double reflection. Plate or plexy glass is not allowed do to the fact that it can shatter if hit with a rock and cause injury to the occupants of the car, also it will in time scratch and obscure the view form inside the car. Even Lexan will eventually scratch.

5. **LIGHTING:** 2 head lights each with Hi-beam; low-beam; 2 tail & brake lights; license plate light.

Lights are one of the most overlooked items of all the safety systems. After the initial build none of us take the time to walk around the car and check out the lights every time we take the vehicle out. We all know that if someone hits one of our rides the first thing they say is I didn't see them so having working lights is just another way to let them know we are out there. Most of the time we find that the lights are in good working order but once in a while we find that there is a bulb out, brake light switch or maybe a grounding problem. One of the biggest things we find with the lights is the license plate light. Some of the aftermarket lighted license plate frames are subject to corrosion at the bulb connection. Even though turn signals are not required we will still check them for you and let you know if they are working properly. If you find your lighting problem is a blown fuse you might want to check further to see what caused the fuse to blow.

6. **WINDSHIELD WIPER:** Electric or vacuum operated.

Wipers are a very controversial area. Most people I talk to say that they use rain-x and it works better than any windshield wiper. I don't think that even the makers of rain-x would recommend using only their product and taking off your wipers. Inspectors will be satisfied if the motor runs and you have the arms on and we do not endorse running without wipers. Most of the time the towers look worse than if you had the arms and blades attached. (Personal opinion)

7. **AUTOMATIC TRANSMISSION LOCKOUT:** Neutral and/or park start only.

This is most likely the #1 reason that causes cars not to pass the safety inspection. If you ask around I'm sure that it wouldn't take long and you will find someone that has had a bad experience by having a nonfunctioning neutral safety switch. Some of us use the stock neutral switch on the column which will work fine. The ones that seem to be the most problem are the ones on the early Gennie and Lokar floor shifters. They can be adjusted but take a little time to get adjusted so that they work properly. This problem has been corrected in newer models. This seems to be due to the narrow groove that the ball switch operates in. With companies like Wire works & Painless out there I see very little reason that this is not working properly on most cars. Another personal opinion is that it should work in both neutral and park. If you have power steering and brakes you know if the engine is not running there performance is drastically reduced and if you are on a 6 lane and the engine dies it might be nice to try to get it started while still rolling.

8. **TIRES:** Minimum 3/32 tread acceptable. Must meet D.O.T. specifications .

Tires & wheels seem to be one of the places people put their money. For those of you that don't know a quick check on tire tread is the distance from the top of Lincoln's head to the edge of a penny is about 3/32 of an inch. We have seen very few bad tires out there. We have run into a few that the tires are cupped or has rubbed the frame, body or other metal parts and had a gouge in the side wall. If you are going to run big tires on the back make sure that they are street legal not for the strip.

9. **STEERING:** No excessive "play" (2" radius max. in steering wheel) or binding; system must be safely mounted.

You will notice that the inspector will ask you to unlock the steering column and then they will grab the steering wheel and rock it back and forth. This is to see how much the wheel has to move before it starts to move the tires. Too loose or too tight will cause serious over steer. In Iowa we also have the owner turn the steering wheel hard right and then left while we watch the front end move. At this time we check out tie rods, play in steering & steering u-joints, ball joints, brake line length and tire clearance.

I hope that this has not been too boring or sound like preaching and has peaked your interest in the following segments and having your car inspected. Being a believer in the program I feel it is worth my time to help explain some of the requirements and answer any questions you may have. Let's all get our cars inspected this year and help out Iowa be #1 in the west central division.

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