TITLE 6A. EDUCATION
CHAPTER 27 STUDENT TRANSPORTATION
SUBCHAPTER 7.

N .J . A . C. 6A : 2 7-7 .13 (2017)

§ 6A:27-7.13 School bus sensor system

(a) The following words and terms shall have the following meanings when used in this section, unless the context clearly indicates otherwise:

"School bus" means as set forth in N.J.S.A. 39:1-1

"Sensor system" means a system utilizing technology such as, but not limited to, radar video, sound, or infrared technology that shall be capable of detecting the presence of a person(s) or object(s) as measured by the placement of a 12-inch high by 12-inch diameter cylinder within a minimum area defined as follows:

1. For vehicles with a GVWR of 10,000 pounds or less, five feet laterally to each side and extending 10 feet frontward from the center of the vehicle's front bumper, and five feet laterally to each side and extending 20 feet rearward from the center of the vehicles rear bumper; or

2. For vehicles with a GVWR over 10,000 pounds, 10 feet laterally to each side and extending 10 feet frontward from the center of the vehicle's front bumper, and 10 feet laterally to each side and extending 10 feet rearward from the center of the vehicle's rear bumper.

(b) Every school bus, as defined in this section manufactured after April 16, 2018, shall be equipped with a sensor system as defined in this section.

1. This subsection shall not be construed to prohibit the equipping of a school bus with a sensor system to determine the presence of a person(s) or object(s) in the side areas of the school bus, in addition to the front and rear of the bus.

(c) The sensor system shall include an audible and visual alert signal placed in the driver's compartment to alert the driver when a person(s) or object(s) is detected within the sensor's designated area or a video monitor placed in the driver's compartment relaying the image of the sensor's designated area.

1. The audible alert signal for the sensor shall be a sound that is distinctive from all other audible alert signals on the bus.

2. The alert signal shall identify for the driver the location near the vehicle in which the person(s) or object(s) is detected, or when a video monitor is used,

(d) The rear sensor system shall activate only and always with the engagement of reverse gear and shall deactivate when the reverse gear is disengaged.

(e) The front sensor system shall activate in any gear other than reverse gear every time

any passenger entrance door opens. The front sensor system shall deactivate:

1. With the engagement of reverse gear; and

2. When in any gear other than reverse, after all passenger doors are closed and:

j . The vehicle has reached a speed of 10 miles per hour; or

ii. Ten seconds have elapsed after closure of the passenger door(s).

HISTORY:

New Rule, R.2017 d187, effective October 16, 2017.

See: 48 N.J.R. 2091(a), 49 N.J.R 3429(b).

Administrative correction

See: 49 N.J~R. 3505(a).

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School Bus Sensor System

Inspection **procedure for Sensor** / Video System

"Sensor system" means a system utilizing technology such as, but not limited to, radar, video, sound, or infrared technology that shall be capable of detecting the presence of a person(s) or object(s) as measured by the placement of a 12 inch high by 12 inch diameter cylinder within a minimum area defined as follows:

TO ESTABLISH TESTING AREA FOR VEHICLES GVWR 10,000 LBS OR LESS

The overall width and length of the testing zone shall be consistent with the points measured From the center of the front and rear bumpers. *See Fig1*

1. **To establish the FRONT rectangular testing zone areas,**

a) Measure 5 feet laterally (left and right) in each direction from the center of the vehicle.

b) Measure 10 feet forward from the center of the vehicle's front bumper to establish the length of the test zone area.

2. **To establish the REAR rectangular testing zone areas,**

a)Measure 5 feet laterally (left and right) in each direction from the center of the vehicle.

b) Measure **20 feet** rearward from the center of the vehicle's rear bumper to establish the length of the rear test zone area.

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TO ESTABLISH TESTING AREA FOR VEHICLES GVWR OVER 10,000 LBS

The overall width and length of the testing zone shall be consistent with the points measured from the center of the front and rear bumpers. *See Fig.* 2

1. **To establish the FRONT rectangular testing zone areas,**

a) Measure 10 feet laterally (left and right) in each direction from the center of the vehicle.

b) Measure 10 feet forward from the center of the vehicle' s front bumper to establish the length of the test zone area.

2. **To establish the REAR rectangular testing zone areas,**

a) Measure 10 feet laterally (left and right) in each direction from the center of the vehicle.

b) Measure **10** feet rearward from the center of the vehicle's rear bumper to establish the length of the rear test zone area.

BEGIN INSPECTION

1. Ensure the inspection area around the vehicle is free of obstacles that the system might detect. Ensure drive wheels are chocked, parking brake is set.
2. Proceed to driver's compartment where the sensor / video system monitor screen is located. The sensor system shall include an audible and visual alert signal to alert the driver when a person(s) or object(s) is detected within the sensor designed area. The video monitor system in the driver's area compartment shall relay an image of the sensor designated area.
3. Start vehicle's engine, open any passenger entrance door to activate system.

BEGIN FRONT MONITORING SYSTEM CHECK

1. Ensure all front and rear sensors / video are active on the system monitor screen. (Rear sensors / video will only function with gear selector in reverse)
2. Place a 12" by 12" diameter **cylinder five feet laterally to the left measuring from the center of the bumper to position (A)** as **illustrated in Fig(s).** The system shall detect the cylinder. The sensor system shall activate an audible alarm and a visual alert signal. The audible alert signal for the sensor shall be a sound that is distinctive from all other audible alert signals on the vehicle. The video system shall display a visual image on the monitor.
3. Move the 12" by 12" diameter **cylinder to position (B) as illustrated** in **attached diagram. Check System.**
4. Move the 12" by 12" diameter **cylinder to position (C) as illustrated in attached diagram. Check System.**
5. Move the 12" by 12" diameter **cylinder to position (D) as illustrated in attached diagram. Check System.**
6. Move the 12" by 12" diameter **cylinder to position (E) as illustrated** in **attached diagram. Check System.**

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Begin Rear monitoring system check

1. Move the 12" by 12" diameter **cylinder to position (F)** as in **illustrated attached diagram. Place the vehicle gear selector into reverse gear activate system. Check System.**
2. Move the 12" by 12" diameter **cylinder to position (G)** as in **illustrated attached diagram. Place the vehicle gear selector into reverse gear activate system. Check System.**
3. Move the 12" by 12" diameter **cylinder to position (H)** as in **illustrated attached diagram. Place the vehicle gear selector into reverse gear activate system. Check System.**
4. Move the 12" by 12" diameter **cylinder to position (I)** as in **illustrated attached diagram. Place the vehicle gear selector into reverse gear activate system. Check System.**
5. Move the 12" by 12" diameter **cylinder to position (J)** as in **illustrated attached diagram. Place the vehicle gear selector into reverse gear activate system. Check System.**

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VEHICLE WITH GWVR LESS 10,000 LBS OR LESS

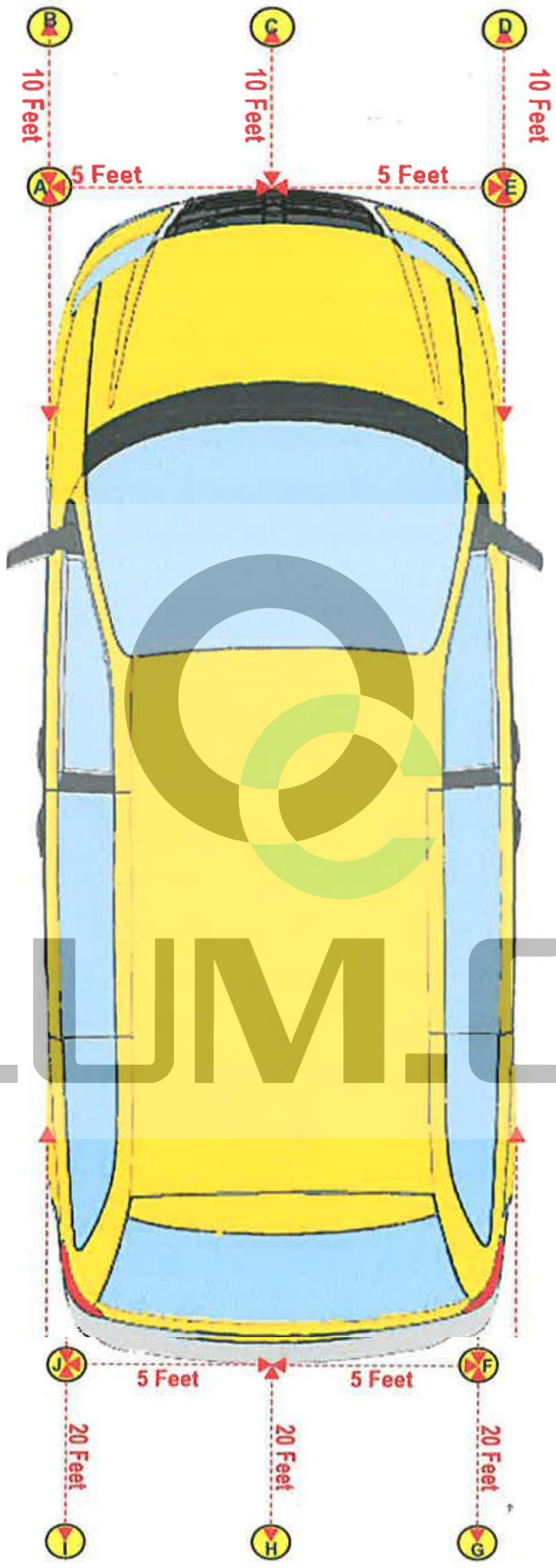

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FIGURE 1.

VEHICLE GVW OVER 10,000 LBS

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FIGURE 2.