



JAM - Junior Agricultural Mechanics San Antonio Stock Show & Rodeo

JAM Trailer Rules and Codes

Presented by:

Lon R. Shell

JAM Superintendent

Presented at the 2009 VATA Summer Professional Meeting in Lubbock



2010 JAM Junior Agricultural Mechanics San Antonio Livestock Show

- TxDOT regulations as they apply to the 2010 JAM
- There have been very few changes in the Texas Statutes regarding trailers this past year.
- I will attempt to review the regulations we enforce at JAM. Those that are TxDOT and those that are unique to JAM.
- In the most part these will reflect what Dr. Harrell is doing at Houston. Billy Harrell, Superintendent of the Houston Agricultural Mechanics Project Show and I want to have as much consistency as possible.



Texas Transportation Codes that apply to trailers

- A lot of the materials I will be presenting were taken from presentations made to our JAM Judges developed by the following:
- **Ryan Heger** – Ag Mech Committee member.
- **Charles Turner** - Retired DOT Compliance Manager with Zachry Construction Corporation



Seven Steps in Trailer Design

When preparing to build a trailer to meet all rules and codes to show at JAM it is recommended that the student begin to study the following materials found on <http://jamshow.org> WEB site.

1. San Antonio Livestock Show Premium List - Special Rules found under JAM. Premium List is normally posted in December.
2. Charles Turner document – Trailer Statutes – found in *Additional Links* on WEB page.
3. Texas Transportation Codes – Link on WEB



Seven Steps in Trailer Design

4. Trailers: Federal Lighting Equipment Location Requirements – Link on WEB
5. Trailer Check Sheet – Link on WEB – Judges use this as a check sheet when judging trailers.
6. Other Documentation found on the WEB page including a) Documentation Check Sheet, b) Naming Describing Projects, and c) Showmanship Scorecard.
7. Power Point Presentations found on WEB – This presentation *JAM Trailer Codes and Rules*, and *Project Documentation*.



www.jamshow.org

Links

2009 Passwords –
VATA presentation

2009 Awards

Donors and Judging Schedule

Check Sheets - includes
Trailer Check Sheet

2007 Survey

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Helpful Links

- [San Antonio Stock Show & Rodeo](#)
- [Texas Transportation Codes](#)
- [Trailers: Federal Lighting Equipment Location Requirements](#)
- [ASABE American Society of Agricultural and Biological Engineers](#)
- [IMS/Houston Livestock Show & Rodeo \(HLSR\) AgMechanics Project Show Results](#)
- [Additional Links](#)

San Antonio Junior Agriculture Mechanics (JAM) Project Show	Other Educational Materials
2008 San Antonio JAM - Passwords - 2007 Teachers Conference - Arlington (HTM) 2008 JAM Awards Presentations (HTM) <ul style="list-style-type: none"> Presentation One - Division 1 through 3 Winners (HTM) Presentation Two - Division 4 and 5 Winners (HTM) Presentation Three - Documentation, Showmanship, Scholarship, Show and Sweepstakes Winners or (HTM) Presentation Four - Picture Gallery or (HTM) 2008 JAM Donors List 2008 Judging Schedule JAM Check Sheets - Revised - used by Judges (PDF) <ul style="list-style-type: none"> Tractor Mechanical Check Sheet (Rev 11/07) Tractor Evaluation Check Sheet (Rev 11/07) Trailer Check Sheet (Rev 11/07) Documentation Check Sheet (Rev 11/07) Showmanship Scorecard Naming/Describing Projects (NEW) Three Point Hitch Dimensions (NEW) 2003 JAM Survey Results 2007 JAM Survey Results (PDF)	CDE Materials (HTM) <ul style="list-style-type: none"> 2002 CDE 2003 CDE 2004 CDE Educational Materials (HTM) <ul style="list-style-type: none"> Differential and Profile Leveling 3353 Summer Project TxState GPS Monument (PID A16952) Research Wyandotte OK Schools Alumni



Judges Check Sheet

- WEB site has Check Sheets used by JAM Judges.
- These include the *Trailer Check Sheet* and the *Documentation Check Sheet*.
- Exhibitor is encouraged to print out these check sheets and use them to evaluate their projects prior to bringing them to show.
- *Trailer Check Sheet* is very detailed and includes all trailer requirements – see following slides.

Trailer Check Sheet

All Check Sheets are found on JAM

Page 1 of Trailer Check Sheet – Two Parts:

1. Inspection Summary

2. Measurements

Check Sheet Revised

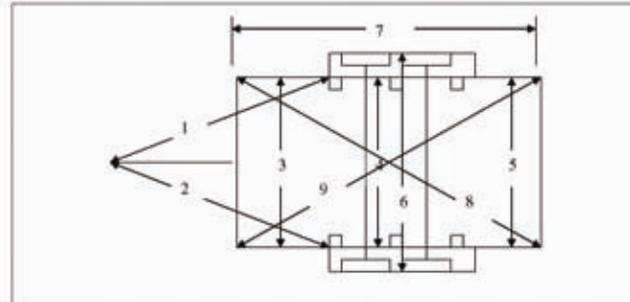
SAN ANTONIO JAM TRAILER INSPECTION SHEET

Class _____ Entry ID _____ Inspector _____

INSPECTION SUMMARY: (Lighting requirements are detailed on back)

Description	YES/OK	NO
1. Overall trailer width (line 6) is 102 inches or less		
2. Lines 1 and 2 are within ¼ inch of being equal		
3. Lines 3-4-5 are within ¼ inch of being equal		
4. Differences in Diagonals, lines 8 & 9 are less than ½ inch		
5. License plate with light and bracket		
6. Lights and reflectors meet specifications (Fed Table)		
7. Equipment a) Safety chains b) Break-a-way c) Trailer jack.		
8. Fender clearance above tires is adequate (minimum 4 inch)		
9. Lights & brakes work (Checked at Gemblar)		
10. Tie downs – D rings and stake holders are recommended.		
11. Other (identify)		

1. **Measurements** (To nearest ¼ inch) All Trailers - Tongue or Gooseneck Trailers. You should write the measurements on the lines so they can be checked against plans in documentation.



• **Lines 1 & 2** are measured from front spring hanger to ball socket and determines center of hitch.

Difference in lines 1 & 2 to nearest ¼ inch _____

• **Lines 3-4-5** (Determines trueness of bed width.)

Difference in lines 3-4-5 to nearest ¼ inch _____

• **Line 6** should be measured from widest part of trailer (metal to metal). **Very important** – (See Premium Book) Widest width of trailer in inches _____ Trailers will be measured for width at Gemblar and not allowed to East gate if over wide (**more than 102 inches**) except with permit.

TRAILER INSPECTION SHEET rev 10.doc



Trailer Check Sheet Light Requirements

Page 2

Light Equipment requirements come from Federal Lighting Table

Check Sheet is in same order as Table.

Link to Check Sheet & Table found on JAM

- **Line 7** identifies length of trailer and comes into play when trailer is 30 ft or longer. Length may also determine trailer class.

Length in feet _____ (does not include tongue)

- **Lines 8 & 9** are the diagonals. Equal length indicate square ness. Differences _____.

2. **Trailer Safety - Lights and Reflectors** - Check lighting according to *Federal Lighting Requirements Table*. Indicate if it meets requirements for each Area by checking ✓ if OK or NO if does not meet. In some cases Reflector may be built into light lens.

Sub Table - Basic Equipment Required on all Trailers

- **Area 1:** Tail Lamps _____ Stop Lamps _____ Rear Turn Lamps _____ Rear Reflectors _____

- **Area 2:** License Plate Lamp _____

- **Area 3:** Rear Side Marker Lamps (Red) _____ Rear Side Reflector (Red) _____

- **Area 4a:** Front Side Marker Lamps (Yellow) _____ **4b:** Front Side Reflectors (Yellow) _____
Both of these are located on each side as far forward as practical - facing sideward.

Sub Table - 30 feet or longer Trailers (Leave blank for trailers shorter than 30 feet.)

- **Area 5a:** Intermediate Side Marker Lamps (Yellow) _____ **5b** Intermediate Side Reflectors (Yellow) _____
Both of these are found on each side near center facing sideward.

Sub Table - 80 inches or Wider (Leave blank for narrower trailers)

- **Area 6:** Rear Clearance Lamps (Red) _____ *At widest point near rear facing rearward. Usually found on rear of fenders.*

- **Area 7:** Rear Identification Lamps (Cluster of 3 Red) _____ *Located on rear center at top of stock or cargo trailer. May be found at bottom of utility or flat bed trailers.*

- **Area 8:** Front Clearance Lamps (Yellow) _____ *At widest point in front facing forward. Usually found on front of fenders.*

Sub Table 4 - 80 inches or Wider and 10,000 lb GVWR or More (Leave blank for lighter trailers)

- **Area 9:** Rear Upper Body Marking (White strips on top corners) _____ *Not found on flat bed or low boys.*

- **Area 10:** Bumper Bar Marking (Red/White Reflective tape) _____ *Full width of bumper facing rearward.*

- **Area 11:** Rear Lower Body Marking (Red/White Reflective tape) _____ *On the rear - full width - facing rearward.*

- **Area 12:** Side Marking (Red/White Reflective tape) _____ *Each side - facing sideward - evenly spaced over 50% of length - includes necks of gooseneck trailers.*

Check with Charles Turner - DOT Compliance Officer, if you have any questions or need clarification. Do not disclose measurements with exhibitors (exhibitors helping judges measure should have zero end of tape. Notify Charles of any trailer that is over wide and without permit. Do not share information with anyone except DOT officer, judges and judges helpers.



Item 8 in Check Sheet Summary Fender Clearance 4-inch Rule

- If trailer is a single axle and has very little axle movement, the fender clearance distance can be less than 4 inches, however how far the tire extends under the edge of fender still must be considered.
 - ◆ Example: if running the trailer up on a curb or rock causes axle to rotate up and allows tire to contact fender, this creates a unacceptable clearance condition.
- Tandem axles should have more movement than single axles, therefore they need 4 inches of clearance.
- The kinds of spring - leaf or torsion dictates the axle movement.



Additional Items in Check Sheet Summary

Please review Premium List and WEB site for rules and codes as they apply to trailers. Agricultural Exemptions do not apply to trailers.

- Maximum Trailer Widths
- Trailer License – may have Farm License Plates
- Brakes – see Charles Turner document under links on jamshow
- Safety Chains – Illustrated in this presentation
- Lighting – covered thoroughly in this presentation
- Jacks
- Break – a ways
- Wiring Harness – grounding and conductor color codes
- Tie Downs – D rings, Stake holders
- Tires – see Charles Turner document



**2009 San Antonio Stock Show and Rodeo
Junior Agricultural Mechanics – JAM
Trailer Check Sheet And Lighting Inspection**

Presented by:

Ryan Heger

Most of this presentation was given to the 2009 JAM judges by Ryan Heger and Charles Turner. It has been modified to include new revisions.

Lighting Requirements

Areas 1- 4b

Basic Equipment

Lon Shell Dot Com - Windows Internet Explorer

http://lonshell.com/

TRAILERS: FEDERAL LIGHTING EQUIPMENT LOCATION REQUIREMENTS

IMPORTANT NOTE: Every lamp, reflex reflector, and conspicuity treatment (device) must be permanently attached in the location specified below and must comply with all applicable requirements prescribed for it by FMVSS/CMVSS 108. The face of any device on the front/rear and sides should be, respectively perpendicular and parallel to vehicle centerline, unless it is photometrically certified at installation angle. No part of the vehicle shall prevent any device from meeting its prescribed requirements unless an auxiliary device meeting all prescribed requirements is installed.

In Canada: Manufacturers and importers of vehicles must have the proper certification test records demonstrating compliance of lighting components with all prescribed requirements.

BASIC EQUIPMENT REQUIRED ON ALL TRAILERS

Area	Equipment	DESCRIPTION (SAE Lens Coding)	Functional Purpose	MANDATORY REQUIREMENTS			
				Quantity	Color	Location	Height mm (in.) from the ground
1	Tail Lamps	(T)	Indicate vehicle's presence and width	Minimum 2	Red	On the rear - symmetrical - as far apart as practicable	380-1830 (15-72)
	Stop Lamps	(S)	Indicate braking	Minimum 2	Red	On the rear - symmetrical - as far apart as practicable	380-1830 (15-72)
	Rear Turn Signal Lamps	(I)	Indicate direction of turn	Minimum 2	Red or Yellow	On the rear - symmetrical - as far apart as practicable	380-2110 (15-83)
	Rear Reflex Reflectors	(A)	Indicate vehicle's presence and width	Minimum 2	Red	On the rear - symmetrical - as far apart as practicable - facing rearward	380-1530 (15-60)
2	License Plate Lamp (s)	(L)	Illuminates license plate	Minimum 1	White	On the rear - above or at the sides of license plate	No requirement
3	Rear Side Marker Lamps	(P2, PC* or P3, PC2*) <i>* photometrically certified at installation angle</i>	Front and rear side marker lamps / side reflex reflectors indicate vehicle's presence and length	Minimum 2	Red	Each side at rear - as far back as practicable	380-1530 (15-60) no max. for veh. under 2.032m(80") wide
	Rear Side Reflex Reflectors	(A)		Minimum 2	Red	Each side at rear - as far back as practicable facing sideward	380-1530 (15-60)
4a	Front Side Marker Lamps	(P2, PC* or P3, PC2*) <i>* photometrically certified at installation angle</i>		Minimum 2	Yellow	Each side at front - as far forward as practicable	380 (15) minimum
4b	Front Side Reflex Reflectors	(A)		Minimum 2	Yellow	Each side at front - as far forward as practicable facing sideward	380-1530 (15-60)

ADDITIONAL EQUIPMENT FOR TRAILERS EXCEEDING THE FOLLOWING PARAMETERS

LENGTH 9.1 m (30 ft.) OR LONGER

All JAM trailer lighting requirements are taken from the Federal Lighting Table

Lighting Requirements

Table Con't Additional Equip

- Trailers over 30 ft
- Trailers 80 inch or wider
- Trailers 80 inches and wider and weigh 10,000 lbs or more

Lon Shell Dot Com - Windows Internet Explorer

http://lonshell.com/

File Edit View Favorites Tools Help

Lon Shell Dot Com

ADDITIONAL EQUIPMENT FOR TRAILERS EXCEEDING THE FOLLOWING PARAMETERS

LENGTH 9.1 m (30 ft.) OR LONGER

Area	Equipment	DESCRIPTION (SAE Lens Coding)	Functional Purpose	MANDATORY REQUIREMENTS			
				Quantity	Color	Location	Height mm (in.) from the ground
5a	Intermediate Side Marker Lamps	(P2 or P3)	Indicate presence of a long vehicle	Minimum 2	Yellow	Each side near center - facing sideward	380 (15) minimum
5b	Intermediate Side Reflex Reflectors	(A)	Indicate presence of a long vehicle	Minimum 2	Yellow	Each side near center - facing sideward	380-1530 (15-60)

WIDTH 2.032 m (80 in.) OR WIDER

Area	Equipment	DESCRIPTION (SAE Lens Coding)	Functional Purpose	Quantity	Color	MANDATORY REQUIREMENTS	
						Location	Height
6	Rear Clearance Lamps	(P2, PC* or P3, PC2*) * photometrically certified at installation angle	Show vehicle's width - MAY NOT be combined with tail lamps	Minimum 2	Red	At widest point - symmetrical - on the rear or near the rear - facing rearward	As high as practicable - may be lower only if ID lamps are at the top
7	Rear Identification Lamps	(P2 or P3)	Indicate presence of a wide vehicle	Exactly 3	Red	On the rear - center, facing rearward - horizontally spaced 150 mm (6 in.) to 300 mm (12 in.) apart	<i>in Canada</i> : at the top - maybe lower if door header narrower than 25 mm <i>in USA</i> : as high as practicable
8	Front Clearance Lamps	(P2, PC* or P3, PC2*) * photometrically certified at installation angle	Show vehicle's width	Minimum 2	Yellow	At widest point - symmetrical - as far forward as practicable - facing forward	As high as practicable

WIDTH 2.032 m (80 in.) OR WIDER AND GVWR 4536 kg (10,000 lb.) OR MORE

DESCRIPTION				MANDATORY REQUIREMENTS				OPTIONS
Area	Conspicuity Treatment	DOT Coding	Quantity	Color	Location	Height		
9	Rear Upper Body Marking		Exactly 2 pairs of 300mm long strips	White	On the rear upper corners - facing rearward	At the top	Reflex reflectors may not be required if they are replaced, in their required location, with conspicuity treatment <i>Optional in Canada</i> Rear lower body and side conspicuity treatment may also be solid white, solid yellow, or white and yellow.	
10	Bumper Bar Marking	DOT-C, DOT-C2, DOT-C3, or DOT-C4	Continuous	Red/White <i>see options</i>	On the rear bumper bar's horizontal element - full width - facing rearward	No requirement		
11	Rear Lower Body Marking		Continuous	Red/White <i>see options</i>	On the rear - full width of the vehicle - facing rearward	As horizontal as practicable and as close as practicable to the range of 375 to 1525 mm from the ground		
12	Side Marking		<i>see location</i>	Red/White <i>see options</i>	Each side - facing sideward - continuous, or evenly spaced over minimum of 50% of length, starts and ends as close to the front and rear of vehicle as practicable	As horizontal as practicable and as close as practicable to the range of 375 to 1525 mm from the ground		

Done

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Following Slides illustrate lighting locations

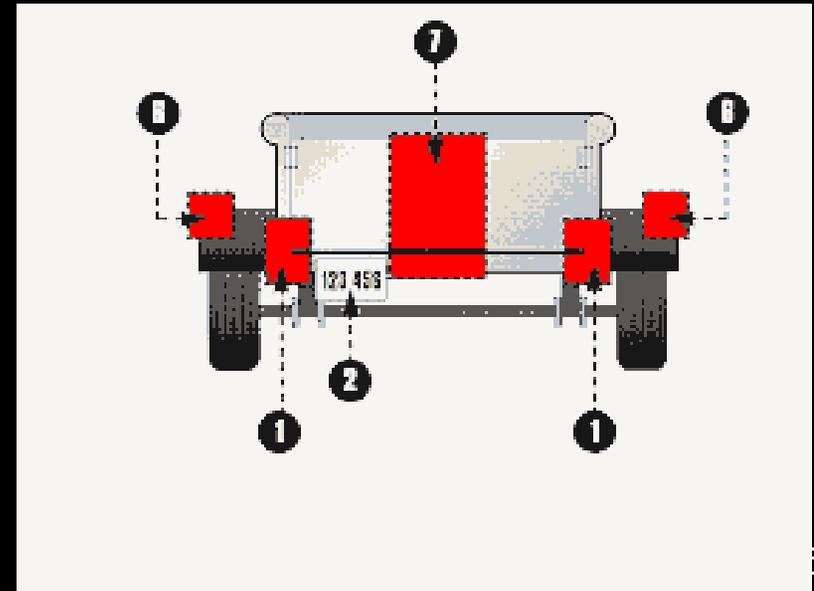
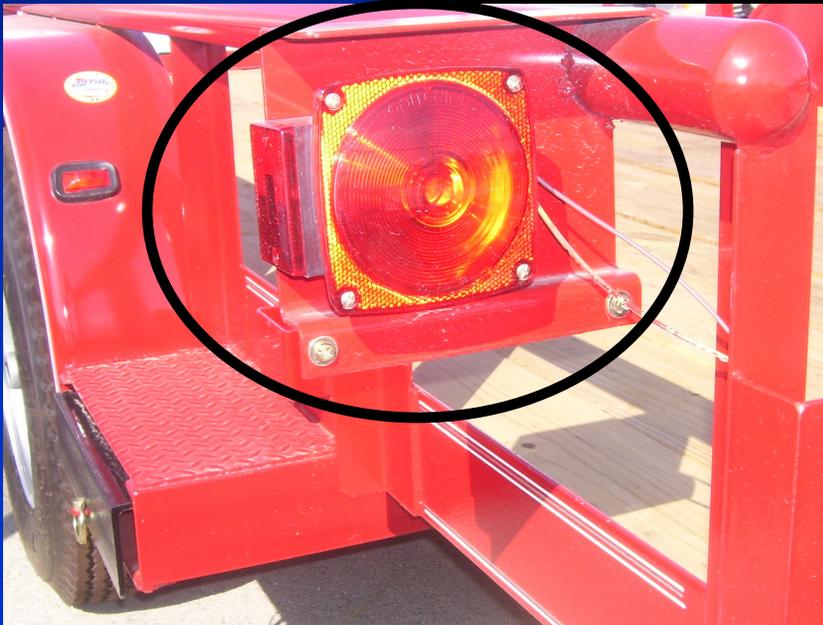


Basic Trailer Requirements FOR ALL TRAILERS

Area 1 & 2 – Tail, Stop, Turn Lamps & License

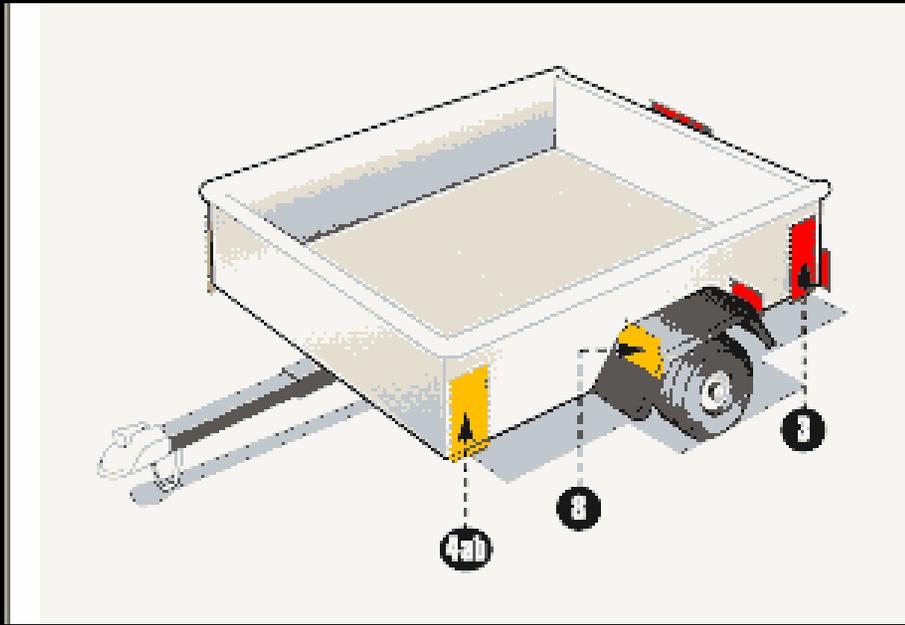
BASIC EQUIPMENT REQUIRED ON ALL TRAILERS

DESCRIPTION				MANDATORY REQUIREMENTS			
Area	Equipment	(SAE Lens Coding)	Functional Purpose	Quantity	Color	Location	Height mm (in.) from the ground
1	Tail Lamps	(T)	Indicate vehicle's presence and width	Minimum 2	Red	On the rear - symmetrical - as far apart as practicable	380-1830 (15-72)
	Stop Lamps	(S)	Indicate braking	Minimum 2	Red	On the rear - symmetrical - as far apart as practicable	380-1830 (15-72)
	Rear Turn Signal Lamps	(D)	Indicate direction of turn	Minimum 2	Red or Yellow	On the rear - symmetrical - as far apart as practicable	380-2110 (15-83)
	Rear Reflex Reflectors	(A)	Indicate vehicle's presence and width	Minimum 2	Red	On the rear - symmetrical - as far apart as practicable- facing rearward	380-1530 (15-60)
2	License Plate Lamp (s)	(L)	Illuminates license plate	Minimum 1	White	On the rear - above or at the sides of license plate	No requirement



Basic Trailer Requirements FOR ALL TRAILERS Area 3 – Rear Side Lamps & Reflectors

3	Rear Side Marker Lamps	(P2, PC* or P3, PC2*) <i>*photometrically certified at installation angle</i>		Minimum 2	Red	Each side at rear - as far back as practicable	380-1530 (15-60) no max. for veh. under 2.032m(80") wide
	Rear Side Reflex Reflectors	(A)	Front and rear side marker lamps / side reflex reflectors indicate vehicle's presence and length	Minimum 2	Red	Each side at rear - as far back as practicable facing sideward	380-1530 (15-60)

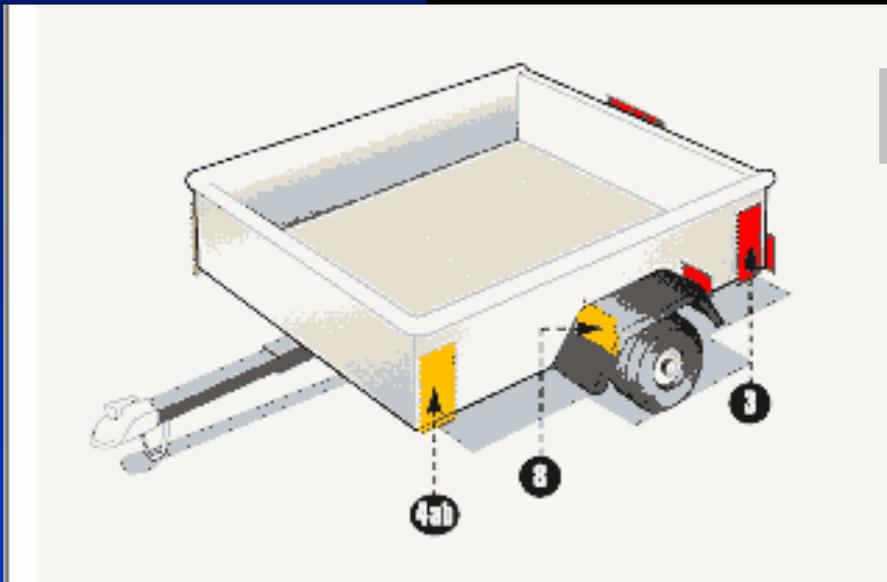




Basic Trailer Requirements FOR ALL TRAILERS

Area 4a & 4b – Front Side Lamps & Reflectors

4a	Front Side Marker Lamps	(P2, PC* or P3, PC2*) *photometrically certified at installation angle	indicate vehicle's presence and length	Minimum 2	Yellow	Each side at front - as far forward as practicable	380 (15) minimum
4b	Front Side Reflex Reflectors	(A)		Minimum 2	Yellow	Each side at front - as far forward as practicable facing sideward	380-1530 (15-60)



Light lens may also serve as reflector

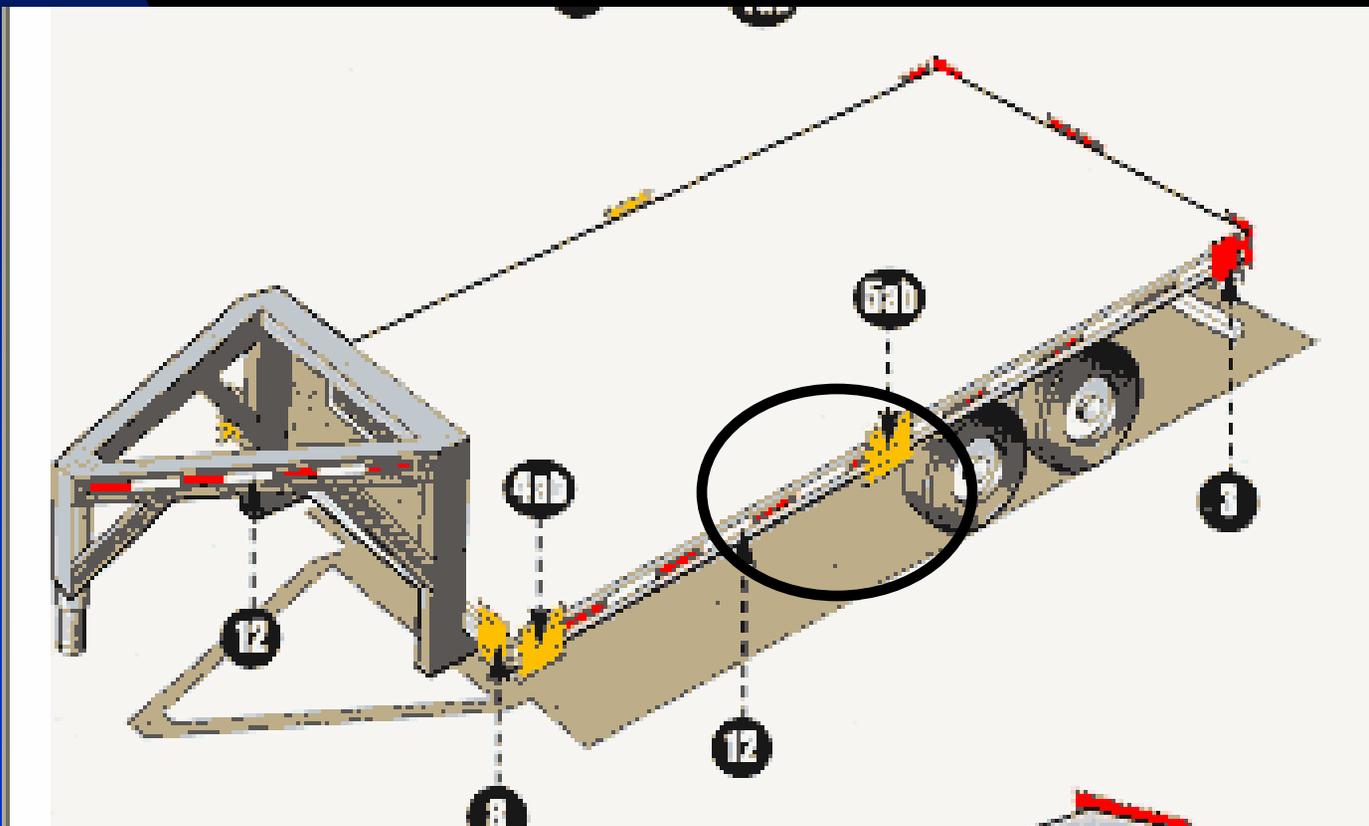


Trailers over 30 ft in Length

Area 5a– Intermediate Side Lamps & 5b Reflectors

LENGTH 9.1 m (30 ft.) OR LONGER

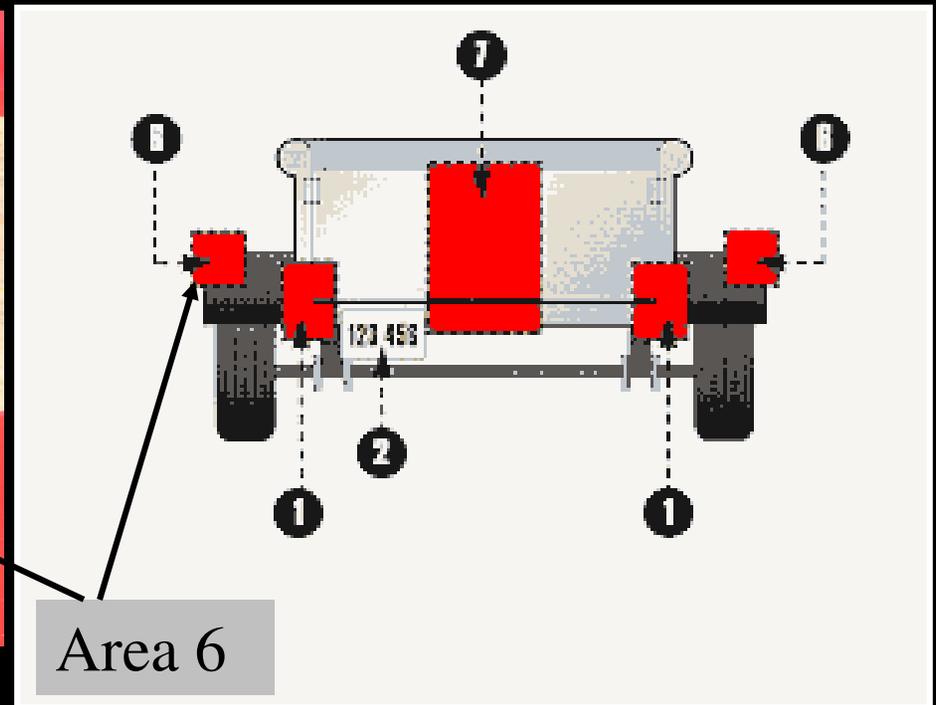
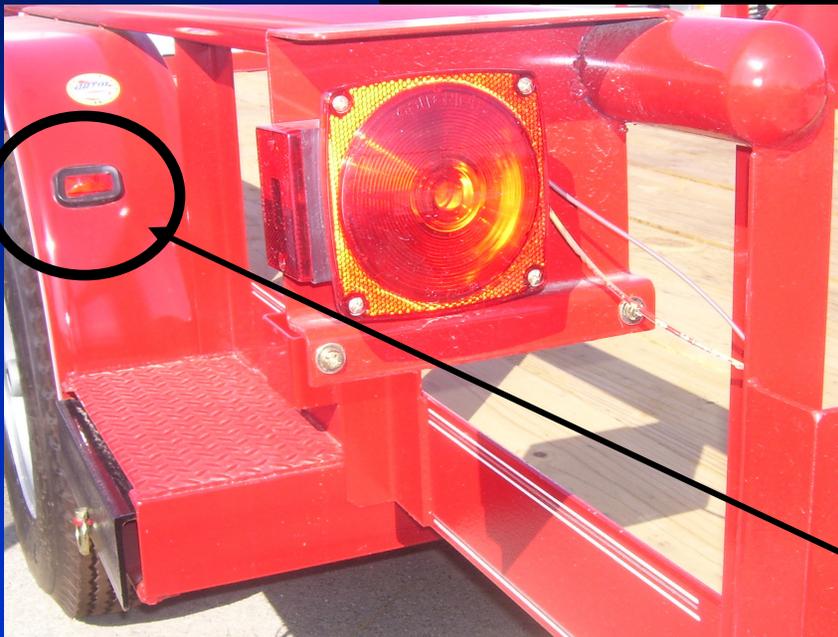
DESCRIPTION				MANDATORY REQUIREMENTS			
Area	Equipment	(SAE Lens Coding)	Functional Purpose	Quantity	Color	Location	Height mm (in.) from the ground
5a	Intermediate Side Marker Lamps	(P2 or P3)	Indicate presence of a long vehicle	Minimum 2	Yellow	Each side near center - facing sideward	380 (15) minimum
5b	Intermediate Side Reflex Reflectors	(A)	Indicate presence of a long vehicle	Minimum 2	Yellow	Each side near center - facing sideward	380-1530 (15-60)



Trailers over 80" wide Area 6 – Rear Clearance Lamps

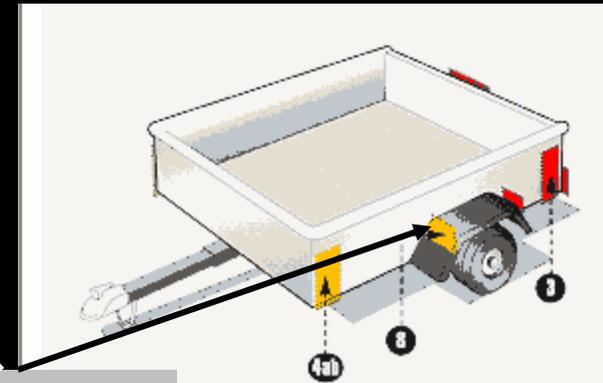
WIDTH 2.032 m (80 in.) OR WIDER

DESCRIPTION				MANDATORY REQUIREMENTS			
Area	Equipment	(SAE Lens Coding)	Functional Purpose	Quantity	Color	Location	Height
6	Rear Clearance Lamps	(P2, PC* or P3, PC2*) <i>*photometrically certified at installation angle</i>	Show vehicle's width - MAY NOT be combined with tail lamps	Minimum 2	Red	At widest point - symmetrical - on the rear or near the rear - facing rearward	As high as practicable - may be lower only if ID lamps are at the top



Trailers over 80" wide Area 8 - Front Clearance Lamps

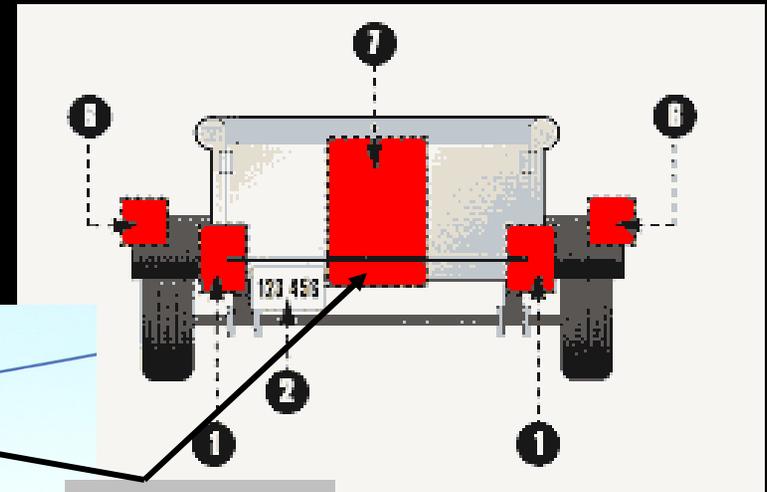
8	Front Clearance Lamps	(P2, PC* or P3, PC2*) *photometrically certified at installation angle	Show vehicle's width	Minimum 2	Yellow	At widest point - symmetrical - as far forward as practicable - facing forward	As high as practicable
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Area 8

Trailers over 80" wide Area 7 – Rear Identification Lamps

7	Rear Identification Lamps	(P2 or P3)	Indicate presence of a wide vehicle	Exactly 3	Red	On the rear - center, facing rearward - horizontally spaced 150 mm (6 in.) to 300 mm (12 in.) apart	<i>in Canada</i> : at the top - maybe lower if door header narrower than 25 mm <i>in USA</i> : as high as practicable
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Area 7

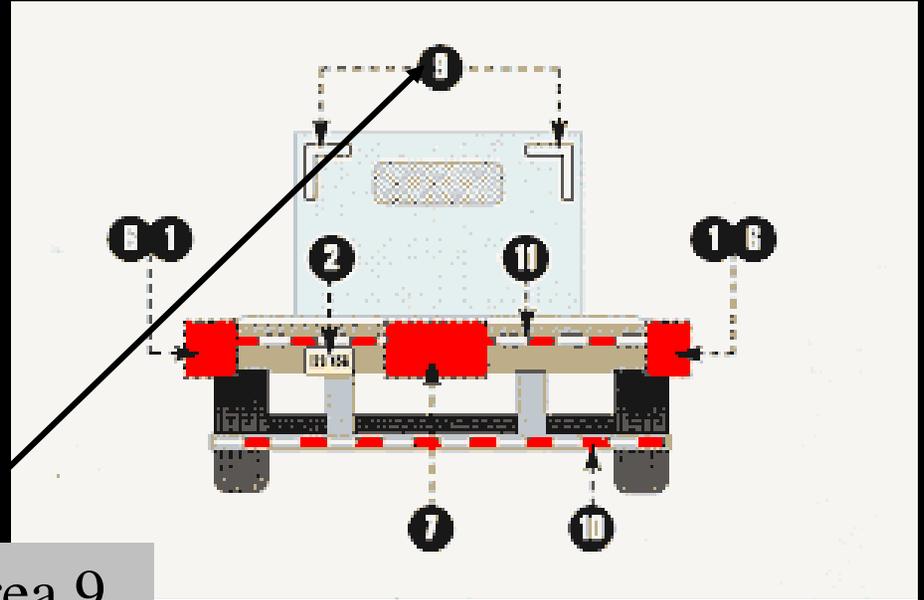


Trailers over 80 inches wide and GVWR 10,000 lbs or more

Area 9 – Rear Upper Body Marking

WIDTH 2.032 m (80 in.) OR WIDER AND GVWR 4536 kg (10,000 lb.) OR MORE

DESCRIPTION					MANDATORY REQUIREMENTS	
Area	Conspicuity Treatment	DOT Coding	Quantity	Color	Location	Height
9	Rear Upper Body Marking		Exactly 2 pairs of 300mm long strips	White	On the rear upper corners - facing rearward	At the top



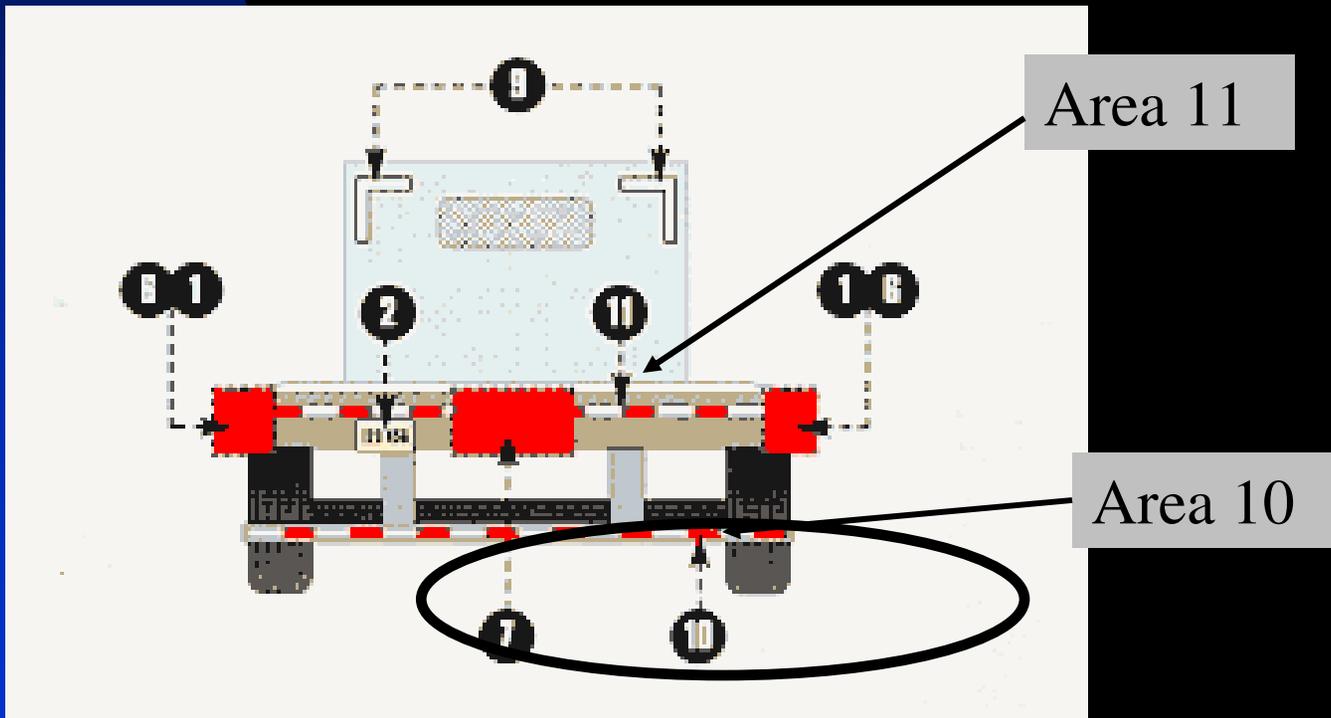
Area 9



Trailers over 80 inches wide and GVWR 10,000 lbs or more

Area 10 – Bumper Bar Marking

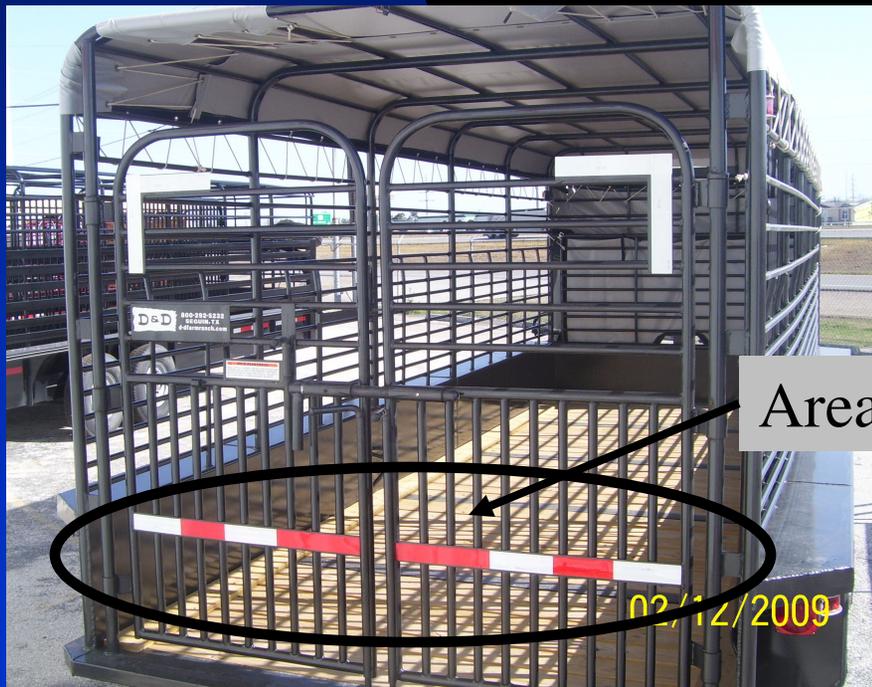
10	Bumper Bar Marking	DOT-C, DOT-C2	Continuous	Red/White	On the rear bumper bar's horizontal element - full width - facing rearward	No requirement
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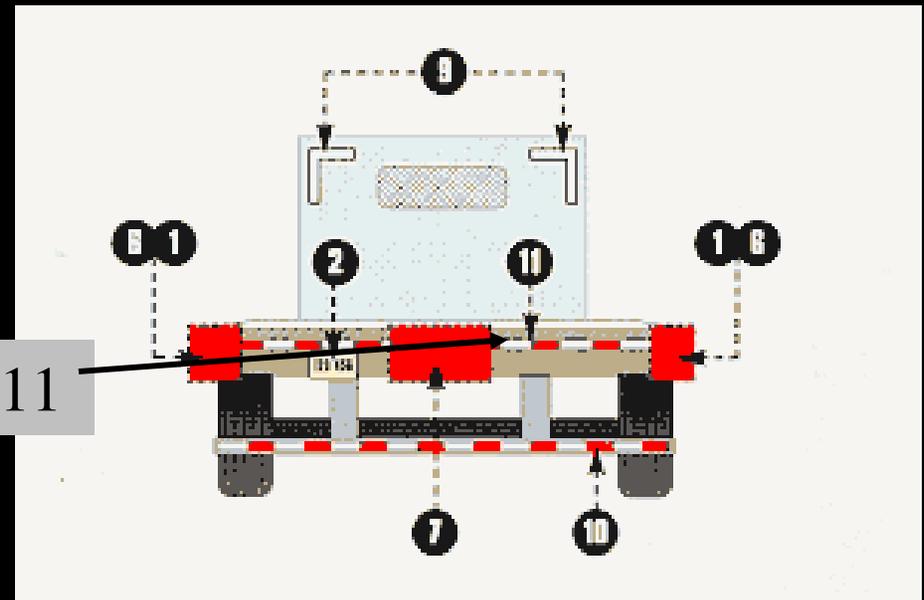


Trailers over 80 inches wide and GVWR 10,000 lbs or more Area 11 – Rear Lower Body

11	Rear Lower Body Marking	C2, DOT-C3, or DOT-C4	Continuous	Red/White see options	On the rear - full width of the vehicle - facing rearward	As horizontal as practicable and as close as practicable to the range of 375 to 1525 mm from the ground
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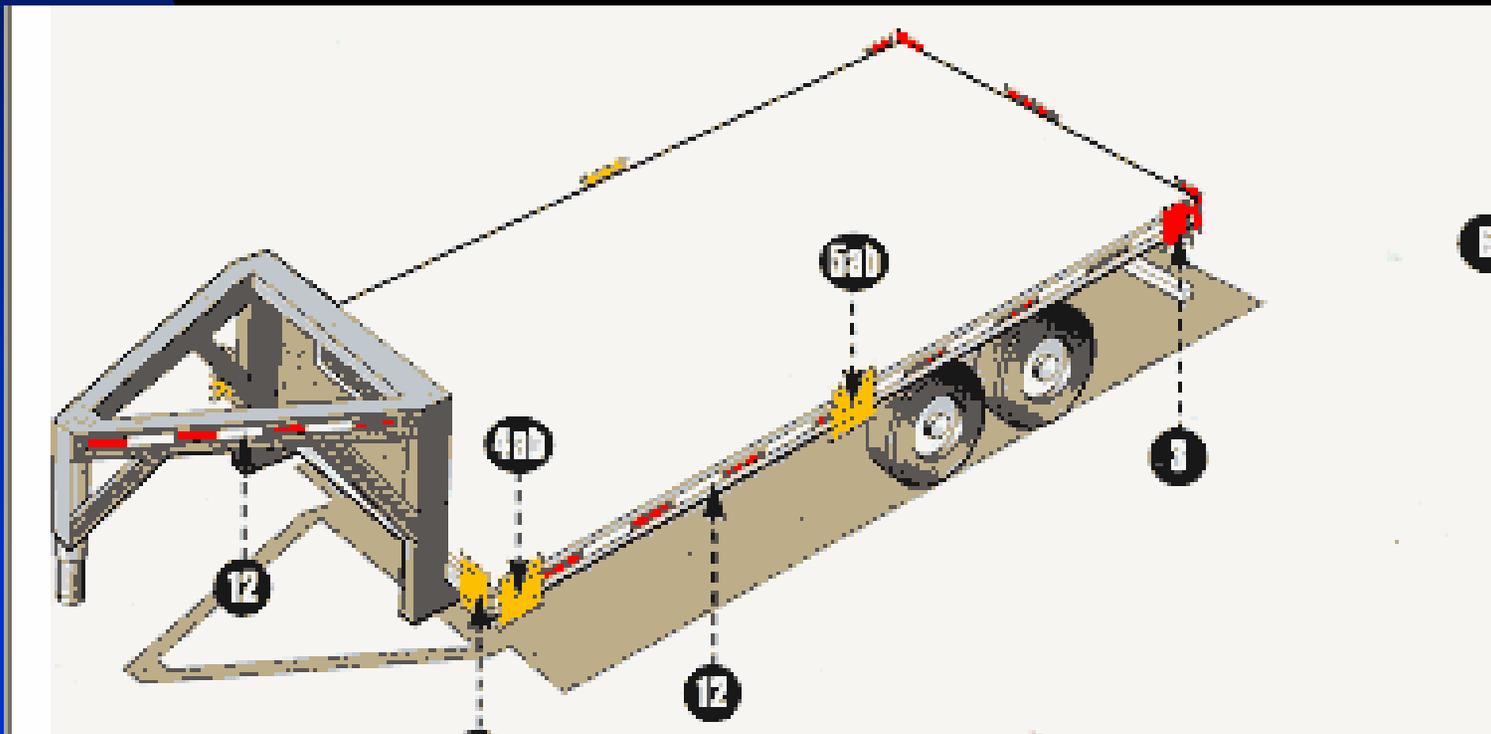


Area 11



Trailers over 80 inches wide and GVWR 10,000 lbs or more Area 12 - Side Marking

12	Side Marking	DOT-64	see location	Red/White see options	Each side - facing sideward - continuous, or evenly spaced over minimum of 50% of length, starts and ends as close to the front and rear of vehicle as practicable	As horizontal as practicable and as close as practicable to the range of 375 to 1525 mm from the ground
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Transportation Statutes – Rule 17 Reflective Tape

Trailers with a “WIDTH 2.032 m (80 in.) OR WIDER AND GVWR 4536 kg (10,000 lb.) OR MORE”

- Conspicuity Treatment
 - ◆ Side Marking “Each side - facing sideward - continuous, or evenly spaced over minimum of 50% of length, starts and ends as close to the front and rear of vehicle as practicable. “
- See Table for Options and other requirements



Rule 18 – Wiring Harness

- Trailer wiring harness (lights and brakes) will be tested.
- Wiring harness and terminal must include a ground wire – cannot use ball hitch to complete the grounding circuit.
- Colors of conductors used in the wiring harness should follow Texas trailer manufacturers specifications. *



Additional Transportation Statutes Special Rule 18 – Trailer Width

- Trailer Width
- Maximum Width is 102 inches.
- Width is measured from metal to metal including for example – dust caps, fenders, wheel (rims), license plate hangers etc.
- (Transportation Code CFR 658 15-16.)



Texas Statute

- Sec. 621.201. MAXIMUM WIDTH. (a) The total width of a vehicle operated on a public highway other than a vehicle to which Subsection (b) applies, including a load on the vehicle but excluding any safety device determined by the United States Department of Transportation or the Texas Department of Public Safety to be necessary for the safe and efficient operation of motor vehicles of that type, may not be greater than 102 inches.



Federal Code

- e-CFR Data is current as of July 24, 2009
- **Title 23: Highways**
PART 658—TRUCK SIZE AND WEIGHT, ROUTE DESIGNATIONS—LENGTH, WIDTH AND WEIGHT LIMITATIONS
- [Browse Previous](#) | [Browse Next](#)
- **§ 658.15 Width.**
- (a) No State shall impose a width limitation of more or less than 102 inches, or its approximate metric equivalent, 2.6 meters (102.36 inches) on a vehicle operating on the National Network, except for the State of Hawaii, which is allowed to keep the State's 108-inch width maximum by virtue of section 416(a) of the STAA.
- (b) The provisions of paragraph (a) of this section do not apply to special mobile equipment as defined in §658.5.
- (c) Notwithstanding the provisions of this section or any other provision of law, a State may grant special use permits to motor vehicles, including manufactured housing, that exceed 102 inches in width.
- [49 FR 23315, June 5, 1984, as amended at 59 FR 30419, June 13, 1994; 67 FR 15110, Mar. 29, 2002; 72 FR 7748, Feb. 20, 2007]



Trailer (Tongue) Jacks

Special Rule 18.

“All trailers must be equipped with lift jacks –”



Tie Downs

Special Rule 18.

It is recommended that all trailers except stock trailers to be equipped with tie downs – D rings – stake holders. Tie downs should be attached to the frame.



Additional Transportation Statutes Special Rule 18 – Tires

- Tires must have at least a $2/32^{\text{nd}}$ tread depth at a major tread groove.
- They must meet and match load capacity of the trailer or be greater than.



Additional Transportation Statutes Special Rule 18 – Brakes

- See Charles Turner Document.
- Any GWR (gross weight rating) trailer of 4500 pounds must have brakes.
- If brakes are on one axles only - they should be on the rear axle.
- Trailers with a GVWR of 15,000 lbs and over are required to have brakes on all wheels except tri-axles and only two axles are required to have brakes.



Additional Transportation Statutes Special Rule 18 – Break – Away System

Any trailer requiring brakes must have a break-a way braking system



Additional Transportation Statutes Special Rule 18 – Safety Chains

All trailers, gooseneck and tongue must have two safety chains of sufficient strength to carry a loaded trailer.

They must be attached in a manner to be sufficient for the load.



SAFETY CHAINS

Safety Chains – Installations
Do's and Don'ts

Attach to frame similar to this



Another acceptable method



Acceptable



Safety Chain Don't: Chain link welded to the trailer.



LICENSE PLATES



License Plate Installations
Do's and Don'ts

License Plate Do's



Lighted and Easily Seen

Partially blocked – not acceptable





Acceptable Locations But

The following are acceptable locations, but they need to be lighted.

On Fender



On the rear bumper



On the rear tailgate.



Mounted on the right side.



License Plate Don't: Put on with baling wire and no lighting.



JAN 27 2009



Keep in Mind... Reminder to Judges

- Use your check sheets as a guide but they should not be taken as always 100% correct. We are all human and make mistakes so please judge or measure anything that is questionable.
- Always recheck the trailer width.
- Be sure to tell the exhibitor of problem and write on their critique so they will not continue to make these same errors.



The End