

## Federal Lighting Equipment Location Requirements

*Direct from National Highway Traffic Safety Administration    [www.nhtsa.gov](http://www.nhtsa.gov)*

**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 an device from meeting its prescribed requirements unless an auxiliary device meeting all prescribed requirements is installed.

***\*Photometrically certified at installation angle***

### Basic Equipment Required On All Trailers Under 80'' Wide

Description				Mandatory Requirements			
Area	Equipment	SAE Lens Coding	Functional Purpose	Quantity	Color	Location	Height from the ground (in.)
1	Tail Lamps	(T)	Indicates vehicle presence & width	Minimum 2	Red	On rear- symmetrical-as far apart as practicable	15''-72''
1	Stop Lamps	(S)	Indicates braking	Minimum 2	Red	On rear- symmetrical-as far apart as practicable	15''-72''
1	Rear Turn Signal Lamps	(I)	Indicates direction of turn	Minimum 2	Red or Yellow	On rear- symmetrical-as far apart as practicable	15''-83''
1	Rear Reflex Reflectors	(A)	Indicates vehicle presence & width	Minimum 2	Red	On rear-symmetrical-as far apart as practicable-facing rearward	15''-60''
2	License Plate Lamp(s)	(L)	Illuminates license plate	Minimum 1	White	On rear-above or at the sides of license plate	N/A
3	Rear Side Marker Lamps	(P2, PC* or P3*)	Indicates vehicle presence & width	Minimum 2	Red	Each side at rear – as far back as practicable	15''-60'' max
3	Rear Side Reflex Reflectors	(A)	Indicates vehicle presence & width	Minimum 2	Red	Each side at rear – as far back as practicable-facing sideward	15''-60''
4a	Front Side Marker Lamps	(P2, PC* or P3, PC2*)	Indicates vehicle presence & width	Minimum 2	Yellow	Each side at front – as far back as practicable	15'' minimum
4b	Front Side Reflex Reflectors	(A)	Indicates vehicle presence & width	Minimum 2	Yellow	Each side at front– as far back as practicable-facing sideward	15''-60''

## ADDITIONAL EQUIPMENT FOR TRAILERS EXCEEDING THE FOLLOWING PARAMETERS

Length 30ft or Longer

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

### Basic Equipment Required On All Trailers Over 80'' Wide

Description				Mandatory Requirements			
Area	Equipment	SAE Lens Coding	Functional Purpose	Quantity	Color	Location	Height from the ground (in.)
6	Rear Clearance Lamps	(P2, PC* or P3, PC2*)	Show's vehicles 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 practical-lower only if ID lamps are at the top
7	Rear Identification Lamps	(P2 or P3)	Indicate presence of wide vehicle	Exactly 3	Red	On the rear-center, facing rearward-horizontally spaced 6'' to 12'' apart	As high as practicable
8	Front Clearance Lamps	(P2, PC* or P3, PC2*)	Show vehicle's width	Minimum 2	Yellow	At widest point-symmetrical-as far forward as practicable-facing forward	As high as practicable

**Basic Equipment Required On All Trailers Over 80" Wide and GVWR 10,000 lbs. or Greater**

Description		Mandatory Requirements				
Area	Equipment	DOT Coding	Quantity	Color	Location	Height from the ground (in.)
9	Rear Upper Body Marking	DOT-C, DOT-C2, DOT-C3, or DOT-C4	Exactly 2 pairs of 300mm long strips	White	On the rear upper corners-facing rearward	At the top
10	Bumper Bar Marking	DOT-C, DOT-C2, DOT-C3, or DOT-C4	Continuous	Red / White	On the rear bumper bar's horizontal element-full-width-facing rearward	No Requirement
11	Rear Lower Body Marking	DOT-C, DOT-C2, DOT-C3, or DOT-C4	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	DOT-C, DOT-C2, DOT-C3, or DOT-C4	<i>See Location</i>	Red / White <i>See options below</i>	On rear-symmetrical-as far apart as practicable-facing rearward	As horizontal as practicable and as close as practicable to the range of 375 to 1525 mm from the ground

**OPTIONS:** *Reflex reflectors may not be required if they are replaced, in their required location, with conspicuity treatment. Rear lower body and side conspicuity treatment may also be solid white, solid yellow, or white and yellow*



