



Service Information System

Shutdown SIS

Previous Screen

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Rear Axle Alignment Specifications {7000}

SMCS - 7000

On Highway Truck:

CT660 (S/N: TGA1-UP; TGD1-UP; TJD1-UP; TEJ1-UP; TRK1-UP; TKL1-UP; TEM1-UP; TEP1-UP; TGR1-UP; TGS1-UP; TJS1-UP; TGT1-UP; TGW1-UP; TSW1-UP; TEY1-UP; TSY1-UP; TEZ1-UP; TGZ1-UP)

The following tables display rear axle alignment specifications and target values.

Use the target values when readjusting the rear axle alignment.

Note: Before measuring rear axle alignment, the rear suspension (if equipped) ride height must be within specification.

Table 1

Rear Axle Thrust					
Target	Specification		Target		Unit
	Min	Max	Min	Max	
	-0.18	+0.18	-0.05	+0.05	Degrees
	-6.4	+6.4	-2.13	+2.13	Millimeters
	-3.1	+3.1	-0.9	+0.9	mm/M
	-0.25	+0.25	-0.084	+0.084	Inches

	-0.75 inch	+0.75 inch	-0.2 inch	+0.2 inch	Laser to target at 240 inches
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Table 2

Rear Axle Tram/Scrub/Parellism					
Tram/Scrub/Parellism	Specification		Target		Unit
	Min	Max	Min	Max	
	-0.08	+0.08	-0.08	0	Degrees
	-3.2	+3.2	-3.2	0	Millimeters
	-1.4	+1.4	-1.4	0	mm/M
	-0.125	+0.125	-0.125	0	Inches

ALLOWANCE OFF TARGET CENTERLINE

1 1/8" 28.5 mm					
1" 25.4 mm					
7/8" 21 mm					
3/4" 19 mm					
5/8" 15.9 mm					
1/2" 12.7 mm					
3/8" 9.5 mm					
1/4" 6.4 mm					
1/8" 3.2 mm					
	40" 102 cm	80" 203 cm	120" 305 cm	160" 406 cm	200" 508 cm

DISTANCE FROM LASER GUN

Illustration 1

Laser Gun-to-Target Distance at 0.18 degree thrust angle

Example: 19 mm (0.75 inch) off the center line of the target with the gun-to-laser distance of 610 cm (240 inch), is within thrust specification.

Thrust Angle

The thrust angle is formed by the centerline of the vehicle frame and the direction the axle points, viewed from the rear of the vehicle. Positive thrust angle is the axle pointing to the right of the centerline of the vehicle frame rails. Negative thrust is the axle pointing to the left of the centerline of the vehicle frame rails.

Note: On "Jasam" alignment equipment, the positive and negative thrust angle is reversed. On "Josam" equipment, Positive thrust is axle pointing towards the left of the centerline of the vehicle frame.

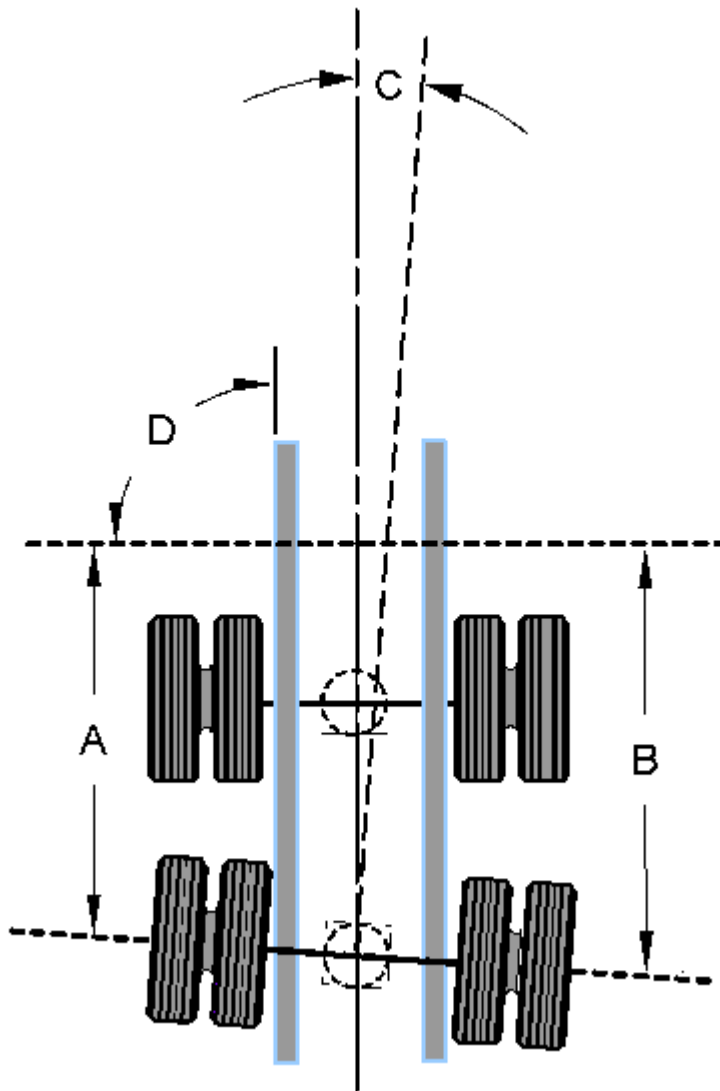


Illustration 2

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Rear Axle Thrust (Positive thrust shown)

(D) 90 degree angle

Illustration 2 shows an example of Positive Thrust.

(A) - (B) = Rear axle thrust measured in millimeters (inches).

(C) = Rear axle thrust from centerline of frame rails in degrees, or millimeters/Meter (mm/M).

Tram

Tram is the difference in the tandem axle spacing from one side of the vehicle to the other. Tram could also be called the angle formed by the thrust angles of the tandem axles. Tram is also called scrub or parallelism. Negative tram is when the tandem axles are closer together on the left side than the right side, viewed from the rear of the vehicle. Tram is the most important factor in rear vehicle alignment.

Note: On "Jasam" alignment equipment, the positive and negative tram angle is reversed. On "Josam" equipment, Positive tram is when the axles are closer together on the left side of the vehicle.

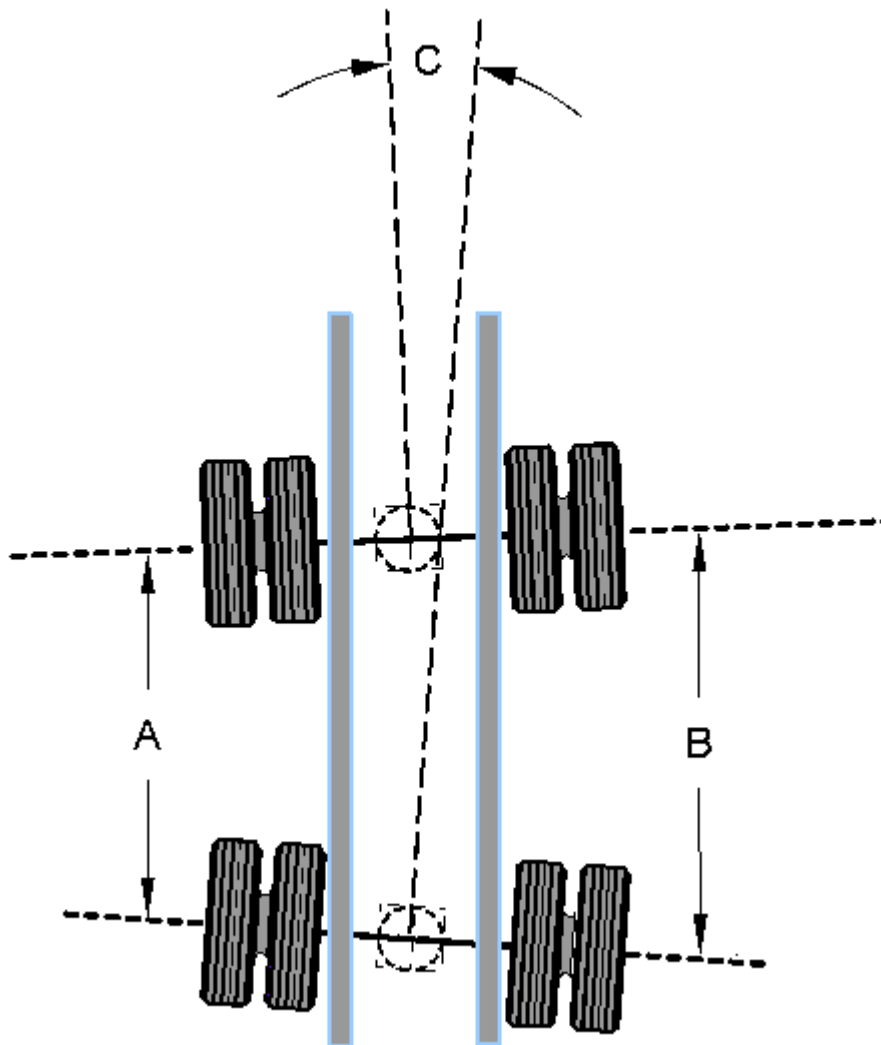


Illustration 3

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Tram measurement (Negative tram shown)

Illustration 3 shows an example of Negative Tram.

(A) - (B) = Tram measurement in millimeters (inches).

(C) = Tram in degrees, or millimeters/Meter (mm/M).

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