

	SURFACE VEHICLE RECOMMENDED PRACTICE	SAE	J702 NOV2008
		Issued 1948-09 Revised 2008-11	
		Superseding J702 AUG2003	
Brake and Electrical Connection Locations—Truck-Tractor and Truck-Trailer			

RATIONALE

As part of the periodic review this document has been modified to conform to the new J Document Format. The references section was updated to reflect the title change of SAE J560, the new address for FMCSA and to identify ANSI as the source for ISO documents.

1. SCOPE

This SAE Recommended Practice establishes the recommended locations for the air brake and electrical connections for the back of a truck-tractor and the front of a truck-trailer.

2. REFERENCES

2.1 Applicable Publications

The following publications form a part of the specification to the extent specified herein. Unless otherwise indicated, the latest issue of SAE publications shall apply.

2.1.1 SAE Publications

Available from SAE International, 400 Commonwealth Drive, Warrendale, PA 15096-0001, Tel: 877-606-7323 (inside USA and Canada) or 724-776-4970 (outside USA), www.sae.org.

SAE J318 Automotive Air Brake Line Couplers (Gladhands)

SAE J560 Primary and Auxiliary Seven Conductor Electrical Connector for Truck-Trailer Jumper Cable

SAE J849 Connection and Accessory Locations for Towing Multiple Trailers

2.1.2 Federal Motor Carrier Safety Administration Publication

Available from FMCSA, 1200 New Jersey Avenue SE, Washington, DC 20590, Tel: 1-800-832-5660, http://www.access.gpo.gov/nara/cfr/waisidx_07/49cfr399_07.html.

FMCSR Part 399.201, Subpart L Step, Handhold, and Deck Requirements on Commercial Motor Vehicles

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2.2 Related Publications

The following publications are provided for information purposes only and are not a required part of this document.

2.2.1 International Organization for Standardization (ISO) Publication

Available from ANSI, 25 West 43rd Street, New York, NY 10036-8002, Tel: 212-642-4900, www.ansi.org.

ISO 4009 Commercial vehicles—Location of electrical and pneumatic connections between towing vehicles and trailers

2.2.2 Technology and Maintenance Council – American Trucking Association Recommended Practice

Available from the Technology and Maintenance Council, American Trucking Associations, 950 North Glebe Road, Suite 210, Arlington, VA 22203-4181, Tel: (703) 838-1763, www.truckline.com.

RP 703B Electrical and Gladhand Connector Placement

3. TRUCK-TRACTOR BRAKE AND ELECTRICAL CONNECTIONS

3.1 Truck-Tractor Fittings

Fittings for stowing the cable and hose shall be located on the back of the cab within the area shown in Figure 1. For ergonomic reasons, connections should be located as low and as far roadside as possible.

3.2 Truck-Tractor Electrical Connections

These should be mounted between the air connectors. The electrical connector should meet the provisions contained in SAE J560. Any auxiliary electrical connections (i.e., SAE J560 Aux) should be placed just in-board from the SAE J560 connector.

3.3 Truck-Tractor Brake Connections

The brake connector should meet the provisions contained in SAE J318.

3.4 Jumper Hose and Cable Length

Care should be exercised in calculating hose and electrical jumper cable lengths to make certain that there will be sufficient length to accommodate the back of cab to nose of trailer locations shown at all degrees of trailer articulation.

3.5 High Profile Cabover Engine Truck-Tractor Brake and Electrical Connection Access

If these connections are located such that they are not accessible (as defined in FMCSR Part 399, Subpart L), then access steps, handholds, and/or deck plates should be provided in accordance with FMCSR Part 399, Subpart L, "Step, Handhold, and Deck Requirements on Commercial Motor Vehicles.

4. TRUCK-TRAILER BRAKE AND ELECTRICAL CONNECTIONS

4.1 Brake Connections

Trailer-mounted air hose couplings should be mounted on the front within the area shown in Figure 2. For ergonomic reasons, connections should be mounted as low and as far roadside as possible.

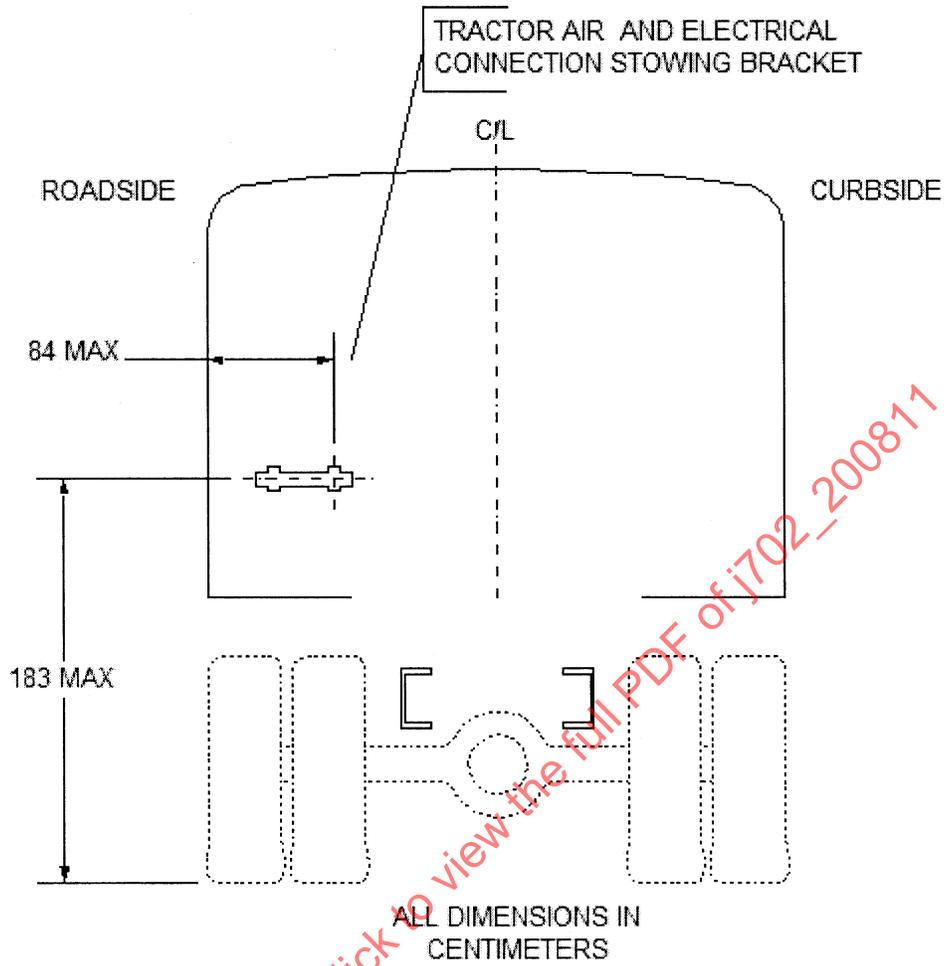


FIGURE 1 - BACK OF CAB - RECOMMENDED LOCATIONS

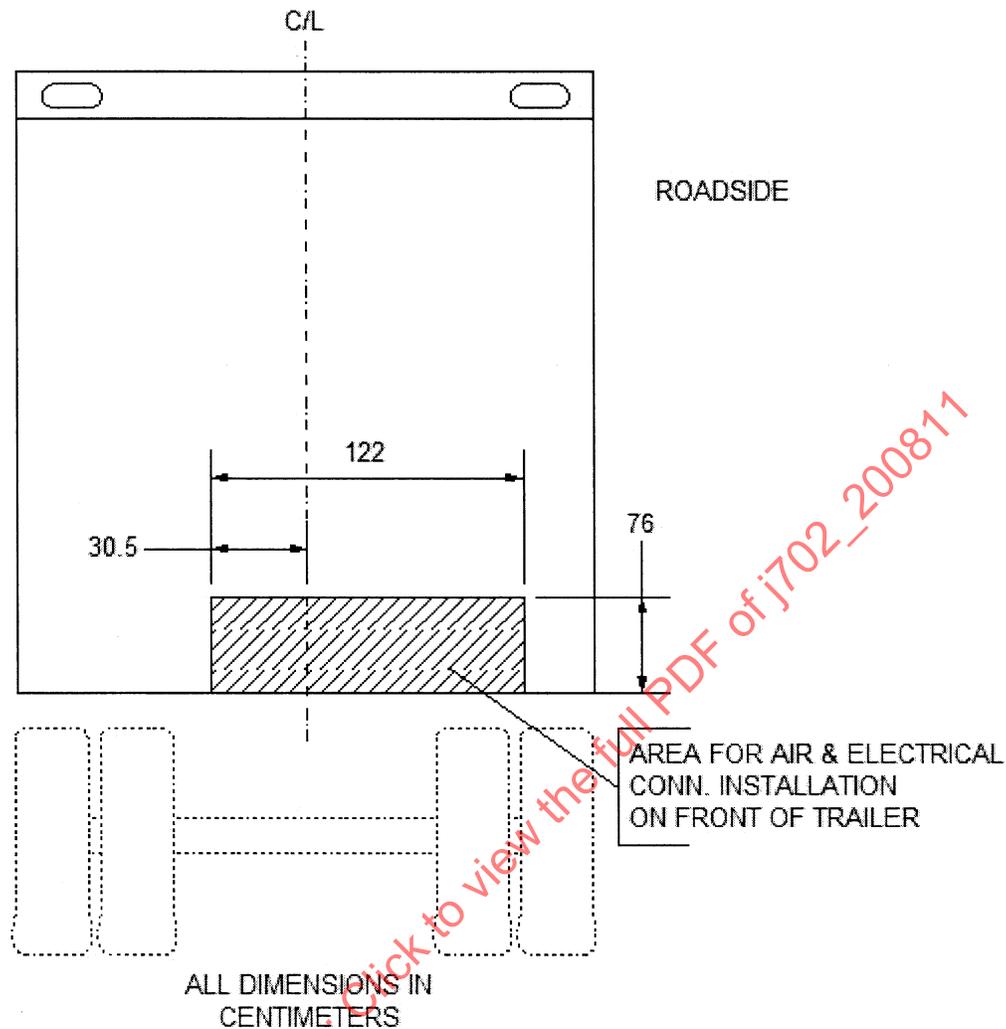


FIGURE 2 - FRONT OF TRAILER - RECOMMENDED LOCATION

4.2 Electrical Connection

The trailer-mounted electrical connector receptacle should be mounted between the air connectors. The electrical connector should meet the provisions contained in SAE J560. Any auxiliary electrical connectors (i.e., SAE J560 Aux) should be mounted just in-board from the SAE J560 connector.

4.3 Brake and Electrical Connections at the Rear of a Truck-Trailer

Brake and Electrical Connections at the Rear of a Truck-Trailer – When truck-trailers are being equipped as “lead” trailers to pull a full trailer, refer to accessory locations contained in SAE J849.

5. RELATIVE LOCATION OF AIR LINES

5.1 Control (Service) Line

Curbside in relation to other line.