

**Steering Frame Lock
for Articulated Loaders
and Tractors –
SAE J276 JUN81**

SAE Standard
Completely Revised June 1981

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STEERING FRAME LOCK FOR ARTICULATED LOADERS AND TRACTORS—SAE J276 JUN81

SAE Standard

Report of the Construction and Industrial Machinery Technical Committee, approved November 1971, completely revised by Subcommittee 9 June 1981. Rationale statement available.

1. **Objective**—This SAE Standard provides a means to prevent accidental machine articulation during either shipment or maintenance.

2. **Scope**—Structural requirements, selected mounting requirements, and test procedures are established for articulated frame wheel loaders and articulated frame wheel tractors as defined in SAE J1057a (June, 1975).

3. **Definition—Frame Lock**—One or more links, bars, or structures including attaching points and parts designed to provide the function detailed in Section 1.

4. General Requirements

4.1 **Design**—The frame lock shall be designed to withstand static loads of two times the force imposed upon the attached frame lock by the steering system when set at the upper limits of the machine manufacturer's specification.

4.2 **Mounting Positions**—The frame lock shall secure the machine in a straight-ahead position, and also in articulated position(s) if necessary to

perform maintenance functions. When used to secure the machine in a straight-ahead position, the frame lock shall be mounted on the side normally used for access to the operator's seat.

4.3 **Attachments to Machine**—The frame lock and its required parts shall be attached to the machine in such a fashion that they will not become separated from the machine during use or storage.

4.4 **Color**—The frame lock parts shall be painted red on all machines except where the machine color is red, then the frame lock shall be painted yellow. Attaching parts may be excluded from this requirement.

4.5 **Testing**—Each different design of frame lock, including attaching points and parts, shall be tested with a force applied equivalent to two times the force that will be induced by the machine steering system. A physical test is required to verify the design criteria of paragraph 4.1 in all locked positions. The frame lock shall withstand the above test without permanent structural deformation.

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