TRAILER AXLE ALIGNMENT—SAE J875 SAE Recommended Practice

Report of Transportation and Maintenance Technical Committee approved October 1963. Reaffirmed without change January 1969.

Purpose—The purpose of trailer axle alignment is to establish a perpendicular relationship between the kingpin centerpoint and the axle centerline at its midpoint.

Procedure—Trailer axle alignment shall be effected with the trailer suspension unit in a relatively free position to relieve stress in rubber bushings or other parts of the suspension system that may be under stress. The trailer axle alignment gage shall be designed so that removal of parts from the trailer is not required and that an accurate, yet simple, alignment can be effected.

The alignment gage shall have platforms on which the trailer wheels are driven that have the facility to center the wheels. These wheel platforms should be constructed so they are free to pivot and move in a fore and aft direction. Such movement will permit any stress in the suspension to be relieved and allows the true centerline of the axle to be established. The platforms shall also be capable of supporting a loaded tailer.

Means should be provided to indicate the relative position of common points on the wheel platforms at each end of an axle. This will represent a reference line that is parallel to the axle in the free position.

The midpoint of the axle must be located and projected to the transverse reference line that is parallel to the axle.

A vertical line should be established from the kingpin by suspending a plumb bob or with a level rod (pogo stick).

To align an axle correctly, the perpendicular bisector of the axle or reference line, in a horizontal plane, must intersect the perpendicular line from the kingpin.

Projection of the perpendicular bisector of the axle to the kingpin vertical may be accomplished with a beam of light or optical sighting.