



Transportation Permits Policy Memorandum

To: Headquarters Chief, Transportation Permits Branch,
Region Managers, Permits Personnel and
Permit Service Companies, Trucking Industry

Date: July 19, 1999

From: ASIF J. HAQ, Chief
Office of Commercial Vehicle Operations and Permits

Policy: 102-99

Subject: **Lift Axles**



Background

The California Transportation Permits program does not accept mixed axle suspension systems for extralegal weight due to concern over the possibility of a dynamically induced weight imbalance within the axle loading group. Highway legal trucks have used lift axles for over 30 years but the California extralegal weight program does not recognize lift axles.

Existing Documentation

Relevant Transportation Permits Manual (TPM) sections, quoted in part, are:

TPM §302.5.3, Axle Loading Group. The “axle loading group” is all axles within an 18’0” axle bridge regardless of whether they use a common suspension or not.

Single axles are not allowed extralegal weight unless they are used in conjunction with a tandem or tridem axle group using a common suspension system between both groups or they are front steering axles. Single axles used in this configuration would be allowed a proportionate share of the multi-axle group with a +/-10% tolerance, but not to exceed the following: (see table in TPM)

TPM §302.3 Close Coupling. Extralegal weight allowances are reduced when the axle group spacing is less than 18’0” as described in this section and Appendix 6.

TPM §302.4 Suspension Systems. All axles in the same suspension group shall have a common suspension system that naturally divides the weight between all axles equally and equitably, both statically and dynamically under all loading conditions without any influence from an outside source.

Air bag suspension systems are required to have a common air supply to all bags without any valving or quick disconnects to alter the natural flow of air between bags. Left to right leveling valves are allowed.

Suspension systems that incorporate the use of shims and/or air or hydraulic devices that alter the natural weight distribution between axles in a loading group are not acceptable.

TPM §309 Add On Axles. Add on axles are only acceptable if the suspension system for the original axle and the add on axle are the same.

Air bag suspension systems are required to have like mounting hardware and a common air supply to all bags without any valves or quick disconnects to alter the natural flow of air to all bags. Left to right leveling valves are allowed.

EFFECTIVE IMMEDIATELY

New Policy

Lift axles are acceptable for extralegal weight if they meet these two simple tests: 1) The lift axle loading group shall have common suspension and, 2) all axles in the loading group shall meet the +/- 10% equal weight distribution requirement. The lift axle controls shall be located outside the cab and inaccessible to the driver while driving.

Test 1: Common Suspension Requirement

All axles within an axle loading group shall have the same suspension system. Mixed suspension on any axle in an axle loading group makes the vehicle ineligible for extralegal weight.

Test 2: Equal Weight Distribution Requirement

Each axle in an axle loading group shall carry an equal share of the axle loading group weight within plus or minus ten percent of (+/-10%) of the average weight per axle in the loading group.

Note: A lifting device that raises an axle for backing is acceptable as long as its function does not interfere with the equal weight distribution requirement.

Special Provisions for Tow Trucks

Extralegal "Green" weight is available for tow trucks equipped with acceptable lift axles.

Extralegal "Purple" weight is available for tow trucks with acceptable lift axles when equipped with reliable on-board scales indicating the gross weight on the axle loading group.



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