Subject: Tridems Bonus Purple – Equal Axles Weight Distribution for Hauled Vehicle  
Date: June 7, 2010  
Policy: TPPM 2009-04  
Reference: CTPAC WG4-040407-001, Addendum B

Objective
This policy will allow the equal redistribution of axle weights for hauled vehicles with a qualified bonus tridem axle group and an adjacent non-bonus tridem axle group. Maximum of two bonus tridem groups is allowed per vehicle combination, regardless of the number of axles.

Existing Documentation

Transportation Permit Manual Changes
Add the following new section:
302.5.5 Tridems Bonus Purple Group Weight – Equal axle weight distribution - for Hauled Vehicles

This policy only applies to hauled vehicles (i.e. three (3) or more vehicle combinations with jeeps, dollies, etc...). Hauled vehicles with qualified Bonus PURPLE tridem axles may be allowed to redistribute weight between adjacent tridem groups. Requests for equal weight distribution for tridem groups that are not close coupled shall comply with the following:

- No more than two (2) bonus weight tridem groups per vehicle combination, regardless of the number of axles.
- Minimum spacing between the bonus tridem groups is 25'-0", measured from the center of the last axle to center of the first axle of the next tridem group.
- Measured no less than 8'-0" and no greater than 10'-4" from the center of the first axle to the center of the last axle within the same tridem group.
- Minimum of four (4) tires per axle.
- Minimum axle width of 8'-0", measured from extreme width of the axle or tire on the left side to the extreme width of the axle or tire of the same axle on the right side, not including the load induced tire bulge.
- Not be a crane.
- Only Bonus tridem groups are allowed to split or redistribute weight with an adjacent tridem group.
- Tridem groups must not be close coupled.
- Maximum of two (2) split tridem groups.
- Equal weight distribution is allowed only between Bonus PURPLE group and a non-Bonus PURPLE tridem group.
- Tridem groups are only allowed equal split weight (50/50 distribution) from the combined total weights.
- Weight shall be determined and are limited to equipment capacity.
- Redistributed weights must be shown on the inspection report.
Equal weight distribution policy will only be allowed with a valid inspection report. Customer must request for equal weight distribution of tridem axles at the time of vehicle inspection. For previously inspected equipment, the Department may reinspect the vehicle and issue a revised inspection report. The customer shall contact the Caltrans vehicle inspector to request a revised inspection report.

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Attachment: Examples
Example 1

Equal weight distribution between FRONT groups of Tridems

Given: Purple weight - Tridems @ 4 tires per axle, 8'-0" wide

(Note: Maximum of two bonus tridem groups is allowed per vehicle combination, regardless of the number of axles.)

Overall Tridem axle spacing =
- Tridem Group - Drive: 8'-0"
- Tridem Group - Jeep: 10'-4"

Allowable Tridem weight =
- Un-bonus Purple Weight: 50,400 lbs
- Bonus Purple Weight: 60,000 lbs

Total (Drive + Jeep) = 110,400 lbs
(Reference)
(PURPLE Weight Chart - Plate 25-5)
(TPPM 2009-02 Bonus PURPLE Weight chart)

Divide total weight by two groups = 110,400 lbs / 2 groups

Redistributed weight for each Tridem group = 55,200 lbs max.

Example 2

Equal weight distribution between different groups of Tridems

Given: Purple weight - Tridems @ 4 tires per axle, 8'-0" wide

(Note: Maximum of two bonus tridem groups is allowed per vehicle combination, regardless of the number of axles.)

Overall Tridem axle spacing =
- Tridem Group C: 9'-0"
- Tridem Group A: 10'-2"
- Tridem Group B: 9'-6"

Allowable Tridem Group weight =
- Bonus Purple Weight: 59,168 lbs
- Bonus Purple Weight: 60,000 lbs
- Un-bonus Purple Weight: 51,975 lbs

Total (Groups A + B) = 111,975 lbs
(Reference)
(TPPM 2009-02 Bonus PURPLE Wt chart)
(PURPLE Weight Chart - Plate 25-5)

Divide total weight by two groups = 111,975 lbs / 2 groups

Redistributed weights = 55,988 lbs max.

*Note: Mechanical Distribution Units (MDU) are designed to distribute weight equally. The final allowable weights shall be determined by the vehicle inspector.