

## § 230.106

### TRUCKS, FRAMES AND EQUALIZING SYSTEM

#### § 230.106 Steam locomotive frame.

(a) *Maintenance and inspection.* Frames, decks, plates, tailpieces, pedestals, and braces shall be maintained in a safe and suitable condition for service, and shall be cleaned and thoroughly inspected as often as necessary to maintain in a safe and suitable condition for service with cleaning intervals, in any case, not to exceed every 1472 service days.

(b) *Broken frames.* Broken frames properly patched or secured by clamps or other suitable means which restores the rigidity of the frame are permitted.

#### § 230.107 Tender frame and body.

(a) *Maintenance.* Tender frames shall be maintained in a safe and suitable condition for service.

(b) *Height difference.* The difference in height between the deck on the tender and the cab floor or deck on the steam locomotive shall not exceed 1½ inches.

(c) *Gangway minimum width.* The minimum width of the gangway between steam locomotive and tender, while standing on tangent track, shall be 16 inches.

(d) *Tender frame condemning defects.* A tender frame with any of the following defects shall be removed from service immediately and repaired:

(1) Portions of the tender frame or body (except wheels) that have less than a 2½ inches clearance from the top of rail;

(2) Tender center sill that is broken, cracked more than 6 inches, or permanently bent or buckled more than 2½ inches in any six foot length;

(3) Tender coupler carrier that is broken or missing;

(4) Tender center plate, any portion of which is missing or broken or that is not properly secured; or

(5) Tender that has a broken side sill, crossbearer, or body bolster.

#### § 230.108 Steam locomotive leading and trailing trucks.

(a) *Maintenance.* Trucks shall be maintained in safe and suitable condition for service. Center plates shall fit properly, and the male center plate shall extend into the female center

## 49 CFR Ch. II (10-1-02 Edition)

plate not less than ¾ inch. All centering devices shall be properly maintained and shall not permit lost motion in excess of ½ inch.

(b) *Safety chain required.* A suitable safety chain shall be provided at each front corner of all four wheel engine trucks.

(c) *Clearance required.* All parts of trucks shall have sufficient clearance to prevent them from interfering with any other part of the steam locomotive.

#### § 230.109 Tender trucks.

(a) *Tender truck frames.* A tender truck frame shall not be broken, or have a crack in a stress area that affects its structural integrity. Tender truck center plates shall be securely fastened, maintained in a safe and suitable condition for service, and provided with a center pin properly secured. The male center plate must extend into the female center plate at least ¾ inch. Shims may be used between truck center plates.

(b) *Tender truck bolsters.* Truck bolsters shall be maintained approximately level.

(c) *Condemning defects for springs or spring rigging.* Springs or spring rigging with any of the following defects shall be taken out of service immediately and renewed or properly repaired:

(1) An elliptical spring with its top (long) leaf or any other five leaves in the entire spring pack broken;

(2) A broken coil spring or saddle;

(3) A coil spring that is fully compressed;

(4) A broken or cracked equalizer, hanger, bolt, gib or pin;

(5) A broken coil spring saddle; and

(6) A semi-elliptical spring with a top (long) leaf broken or two leaves in the top half broken, or any three leaves in the entire spring broken.

(d) *Tender securing arrangement.* Where equipped, tender devices and/or securing arrangements intended to prevent the truck and tender body from separating in case of derailment shall be maintained in a safe and suitable condition for service.

(e) *Side bearings and truck centering devices.* Where equipped, side bearings and truck centering devices shall be