

PENNSYLVANIA RAILROAD

LINES EAST OF PITTSBURGH

Locomotive Maintenance Instructions No, L-1-A

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SAFETY APPLIANCES--STEAM LOCOMOTIVES USED IN SWITCHING SERVICE

(SUPERSEDING INSTRUCTIONS NO. L-1, DATED AUGUST 1, 1911, AND SUPPLEMENT NO. 1, DATED JANUARY 19, 1912)

GENERAL.

Note: These instructions have been reprinted on account of original supply being exhausted. No change is made in the original instruction except in the Side Handholds on Cab at Gangway. The issue letters of the tracings have been added or where tracings have been made obsolete the new numbers are given. All locomotives in service, according to record, have been changed to conform hereto and the instructions are continued as a guide in the proper maintenance of these safety appliances.

The Chief Inspector of Safety Appliances has objected to the center support of the Side Handholds on Cab at Gangway not conforming to U. S. Standards in that it forms an obstruction in the vertical clear length equal to approximate height of tank. These handholds have, therefore, been redesigned and the new design must be applied to engines as they go through shop for other repairs. The tracing numbers to be followed are given under the heading "Side Handholds on Cab at Gangway." A weekly report, giving the locomotive numbers on which the new design handholds have been applied, must be made to this office.)

To conform to the orders of the Interstate Commerce Commission dated March 13th, 1911, on the subject of United States Safety Appliance Standards and the Extension of Time within which the safety appliances on locomotives and tenders must comply with the order of the Commission, in which an extension of time of one year from July 1st, 1911, is granted for changing all locomotives and tenders used in switching service and an extension of two years from July 1st, 1911, is granted for changing all locomotives and tenders other than switching, the instructions given below must be observed.

All standard locomotives and tenders, on which the safety appliances do not conform to the minimum requirements of the United States standards, must be changed in accordance with standard tracings within the specified time and the odd classes must be made to conform to the nearest type of standard equipment keeping within the specifications as prescribed by the Commission.

The dimensions and locations of the safety appliances prescribed in the United States Safety Appliance Standards must be carefully checked up on each locomotive and tender to insure that each appliance specified conforms to the requirements of the Order.

Tracings have been completed and issued showing the prescribed United States Safety Appliance Standards for locomotives and tenders used in Switching Service and are enumerated on the

following pages. The drawings covering the locomotives used in road service have been completed and issued, together with printed instructions covering both locomotives and tenders used in road service.

The tracings for the safety appliances on tenders used in switching service also show the safety appliances for tenders used in road service.

All new and existing standard tenders for both shifting and road service are to be provided with 14" end ladder clearance to permit using one standard coupler for all tenders having friction draft gear and another standard for all tenders having Graham draft gear, which will also make road tenders available for switching service, with a minimum change in safety appliances. Where tenders equipped with Graham draft gear require extensive repairs to sills or underframe they should be equipped with friction draft gear, unless otherwise ordered by the Supt. Motive Power.

SWITCHING SERVICE—LOCOMOTIVES

Footboards—The footboards on the front end of switching locomotives, which do not conform to United States Safety Appliance Standards are to be changed and maintained in accordance with the tracings given below:

Classes A1, A2, A2a, B3, B5.

General Arrangement and Wooden Details, 38357-C.

Forged Details, 38400-D.

Classes A3, A3a, A4, B4, B4a, B8.

General Arrangement and Wooden Details, 38363-D.

Forged Details, 38400-D.

Class B6.

General Arrangement and Wooden Details, 38427-C.

Forged Details, 38400-D.

Classes B6a, B29, B6sa.

General Arrangement and Wooden Details, 38239-D.

Forged Details, 38400-D.

Classes B7, B7a.

General Arrangement and Wooden Details, 38382-C.

Forged Details, 38400-D.

Classes H3, H3a, H3b, H3e.

General Arrangement and Wooden Details, 38635-C.

Forged Details, 38400-D.

Class H5.

General Arrangement and Wooden Details, 38778-C.

Forged Details, 38400-D.

Classes H6, H6a, H6b, H6sb.

General Arrangement and Wooden Details, 38608-C.

Forged Details, 38400-D.

Class A3a—Rear End.

General Arrangement, 38456-B.

Wooden Details, 14648-D.

Forged Details, 38455-A.

General Arrangement, 40121-A for Steam Locomotives used in electric zone to clear third rail system.

Sill Steps on Locomotive at Gangway—Present standard sill steps on locomotives at gangway which

Sill Steps on Locomotive at Gangway—Present standard sill steps on locomotives

are in accordance with present standard tracings for the respective classes conform to the Safety Appliance Standards.

Sill Steps, 6863-E and 45126-A.

End Handholds on Pilot Buffer Beam—The end handholds on pilot buffer beams which do not conform to United States Safety Appliance Standards are to be changed and maintained in accordance with the tracings given below:

Classes A1, A2, A2a, B3, B5.

General Arrangement, 38357-C.

Forged Details, 38146-B.

Classes A3, A3a, A4, B4, B4a, B8.

General Arrangement, 38363-D.

Forged Details, 38146-B.

Class B6.

General Arrangement, 38427-C.

Forged Details, 38146-B.

Classes B6a, B29, B6sa.

General Arrangement, 38239-D.

Forged Details, 38146-B.

Classes B7, B7a.

General Arrangement, 38382-C.

Forged Details, 38146-B.

Class A3a—Rear End.

General Arrangement, 38456-B.

Forged Details, 38455-A.

Classes H3, H3a, H3b, H3e.

General Arrangement and Wooden Details, 38635-C.

Wrought Iron Details, 38146-B.

Classes H6, H6a, H6b, H6sb.

General Arrangement and Wooden Details, 38608-C.

Wrought Iron Details, 38146-B.

Class H5.

General Arrangement and Wooden Details, 38778-C.

Forged Details, 38146-B.

Side Handholds on Cab at Gangway—U. S. Safety Appliance Standards require that these handholds be approximate height of tank, minimum diameter $\frac{7}{8}$ ", minimum clearance 2", preferably $2\frac{1}{2}$ ".

It will be necessary to change the present side handholds on cab to conform to the following tracings as the engines go through shop for other repairs.

Classes A1, A2, A2a.

General Arrangement, 10094-C.

Details of Handrail, 10094-C.

Details of Handrail Column, 46186-D.

Classes B4, B4a.

General Arrangement, 18479-D.

Details of Handrail, 50050-A.

Classes A3, A3a.

Arrangement and Detail of Handrail, 14618-B.

Details of Handrail, 14618-B.

Classes A4, B6, B8.
General Arrangement, 23970-E.
Details of Handrail, 50051-A.

Classes B6a, B6sa.
General Arrangement, 37388-F.
Details of Handrail, 50051-A.

Classes B7, H3, H3b.
General Arrangement, 9266-F.
Details of Handrail, 50050-A.

Classes H5, H6, H6a, H6b, H6sb.
General Arrangement, 43454-E.
Details of Handrail, 50051-A.

Uncoupling Levers on Pilot Buffer Beam—The uncoupling levers on pilot buffer beams which do not conform to United States Safety Appliance Standards are to be changed and maintained in accordance with the tracings given below:

Classes A1, A2, A2a, B3, B5.
General Arrangement, 38357-C.
Details: Forged, 37626-B.
Cast Iron, 38081-A and 38082-A.
Chain, 47475-A.
Clevises, 34223-B.

Classes A3, A3a, A4, B4, B4a, B8.
General Arrangement, 38363-D.
Details: Forged, 37626-B.
Cast Iron, 38081-A and 38082-A.
Chain, 47475-A.
Clevises, 34223-B.

Class B6.
General Arrangement, 38427-C.
Details: Forged, 37626-B.
Cast Iron, 38081-A and 38082-A.
Chain, 47475-A.
Clevises, 34223-B.

Classes B6a, B29, B6sa.
General Arrangement, 38239-D.
Details: Forged, 37626-B.
Cast Iron, 38081-A and 38082-A.
Chain, 47475-A.
Clevises, 34223-B.

Classes B7, B7a.
General Arrangement, 38382-C.
Details: Forged, 37626-B.
Cast Iron, 38081-A and 38082-A.
Chain, 47475-A.
Clevises, 34223-B.

Note—The latest tracing numbers and issue letters showing the above details should always be followed. All parties interested will be notified through the regular channel when any changes in tracings are authorized.

Reporting Locomotives and Tenders for Safety Appliance Changes.—A weekly report in letter form must be made to the Office of the Superintendent Motive Power, giving the locomotive number and tender number on which the safety appliances have been changed to conform to U. S. Safety Appliance Standards. These reports to be referred to the Office of the General Superintendent Motive Power.

J. T. WALLIS,
General Superintendent Motive Power.

Class H5.

General Arrangement, 38778-C.

Couplers. Pilot Buffer Beam—All standard classes of locomotives are provided with pivoted head front end couplers which are not to be scrapped until worn out. New couplers ordered must be in accordance with tracing 37805-D and either the Pitt or Sharon type is to be used. It is desirable that the same make of coupler be used and maintained on the front end of locomotive and rear end of tender, after the couplers with which the locomotives are now equipped have been worn out.

Classes A1, A2, A2a, A3, A3a, A4, B3, B4, B4a, B6, B6a, B6sa, B7, B7a, B8, H4, H6, H6a, H6b, H6sb, H8, H8a, H8b, H8s, H8sa, H8sb.

General Arrangement pivoted coupler bracket X-11974 tracing 38426-C to be used in renewals to replace pivoted coupler bracket X-9001, obsolete tracing 20146.

Present coupler brackets meet the requirements of the law and should be worn out in service but new brackets ordered should be per tracing 38426-C.

Adjusting liners, 38398-C.

$2\frac{3}{4}$ " pivot pin, 38397-B.

Classes H3, H3a, H3b, H3c, H3e, B5.

General Arrangement pivoted coupler bracket X-11976, tracing 38425-C to be used in renewals to replace pivoted coupler bracket X-9005, obsolete tracing 20200. Present coupler brackets meet the requirements of the law and should be worn out in service but new brackets ordered should be per tracing 38425-C.

Adjusting liners, 38398-C.

$2\frac{3}{4}$ " pivot pin, 38397-B.

Note—It is necessary to use coupler with $2\frac{13}{16}$ " pivot pin hole with the new brackets; old couplers can be reamed out to suit.

Pilot Buffer Beams and Push Pole Castings—To enable a standard uncoupling lever, end handhold and uniform footboards to be used on pilot beam of shifting locomotives, the wooden pilot buffer beams were made the standard length of 9' 6" and the standard push pole casting X-10037 designed for same.

Classes A1, A2, A2a, B3, B5.

General Arrangement and Wooden Details of Buffer Beam, 38357-C.

Push Pole Casting, 38964-B.

Bevel Washer X-11995, tracing 30552-F.

Classes A3, A3a, A4, B4, B4a, B8.

General Arrangement and Wooden Details of Buffer Beam, 38363-D.

Push Pole Casting, 38964-B.

Bevel Washer X-11995, tracing 30552-F.

Class B6.

General Arrangement of Cast Iron Buffer Beam, 38427-C.

Classes B6a, B29, B6sa.

General Arrangement of Wooden Buffer Beam, 38239-D.

Push Pole Casting, 38964-B.

Bevel Washer X-11995, tracing 30552-F.

Classes B7, B7a.

General Arrangement of Cast Iron Buffer Beam, 38382-C.

Class A3a—Rear End.

General Arrangement and Details of Wooden Buffer Beam, 38456-B and 14648-D.
Present Push Pole Castings X-8316 and X-8317, tracing 17467-A.

Classes H3, H3a, H3b, H3e.

General Arrangement, 38635-C.
Push Pole Casting, 38964-B.
Bevel Washer X-11995, tracing 30552-F.

Classes H6, H6a, H6b, H6sb.

General Arrangement of Cast Iron Buffer Beam, 38608-C.

Class H5.

General Arrangement of Cast Iron Buffer Beam 38778-C.

Lamp and Flag Sockets on Buffer Beams—New combined flag and lamp socket X-11572, tracing 38173-B is to be used and applied as shown on the general arrangements already mentioned in lieu of the present sockets.

Running Boards and Handrails—The present standard arrangements on the following classes of engines are considered as meeting the requirements of the Safety Appliance Standards with the exception of the distance from the front end of the running board or flat top steam chest to the pilot buffer beam. General Arrangements already mentioned show step between Beam and Steam Chest.

Classes A1, A2, A2a, A3, A3a, A4, B3, B4, B4a, B5, B7, B7a, B8.

Detail of step, 14247-B.

The standard arrangements on the following classes of locomotives are considered as meeting the requirements of the Safety Appliance Standards: B6, B6a, B6sa, B29, H3, H3a, H3b, H3e, H5, H6, H6a, H6b, H6sb.

Hand Rails and Steps for Headlight—The present handrails and steps leading to headlights on front end of standard locomotives comply with the requirements of the Safety Appliance Standards.

SWITCHING SERVICE—TENDERS

Footboards—The footboards on rear of tenders are to be changed and maintained in accordance with the tracings given below:

5,500 and 7,000 gallon straight back steel tenders and 5,500 and 6,000 gallon sloping back steel tenders.

General Arrangement and Wooden Details, 38145-C.

Forged Details, 38190-E.

6,000, 4,500, 3,600 gallon straight back wooden tenders.

General Arrangement and Wooden Details, 38609-C.

Forged Details, 38682-B.

3,000, 2,400 gallon straight back wooden tenders.

General Arrangement and Wooden Details, 38673-C.

Forged Details, 38682-B.

4,500, 3,000, 2,700, 2,200 gallon sloping back wooden tenders.

General Arrangement and Wooden Details, 38674-C.

Forged Details, 38682-B.

General Arrangement 40121-A for Tenders of Steam Locomotives used in Electric Zone to clear third rail system.

Sill Steps on Tender at Gangway—Present sill steps on tenders at gangway which are in accordance with present standard tracings as given below conform to the requirements of the Safety Appliance standards. (The tracings given show the step at rear end of tender for road service which is the same step used on tenders at gangway.)

5,500 and 7,000 gallon straight back steel tenders and 5,500 and 6,000 gallon sloping back steel tenders.

General Arrangement, 38145-C.
Details, 45126-A.

6,000, 4,500, 3,600 gallon straight back wooden tenders.
General Arrangement, 38609-C.
Details, 15109-F.

3,000, 2,400 gallon straight back wooden tenders and 3,000, 2,700, 2,200 gallon sloping back wooden tenders.

No tracing showing general arrangement.
Details of steps, 6863-E, 10141-A.

End Handholds on Rear of Tender—End handholds on rear of tenders which do not conform to United States Safety Appliances are to be changed and maintained in accordance with the tracings given below:

5,500 and 7,000 gallon straight back steel tenders and 5,500 and 6,000 gallon sloping back steel tenders.

General Arrangement, 38145-C.
Forged Details, 38146-B.

6,000, 4,500, 3,600, gallon straight back wooden tenders.
General Arrangement, 38609-C.
Forged Details, 38682-B.

3,000, 2,400 gallon straight back wooden tenders.
General Arrangement, 38673-C.
Forged Details, 38146-B.

4,500, 3,000, 2,700, 2,200 gallon sloping back wooden tenders.
General Arrangement, 38674-C.
Forged Details, 38146-B.

Side Handholds on Tenders (at Gangway and Rear of Tender)—United States Safety Appliance Standards require that these handholds be approximate height of tank, minimum diameter $\frac{7}{8}$ ", minimum clearance 2", preferably $2\frac{1}{2}$ ". It will be necessary to change the handholds on any tenders that do not meet the minimum requirements. Where new handholds are applied they must conform to the standard drawings.

5,500 gallon straight back steel tender.
General Arrangement, 25483-A.
Forged Details, 35394-C and 16914-G.

7,000 gallon straight back steel tender.
Short Wheel Base, General Arrangement, 24207-B.
Long Wheel Base, General Arrangement, 30950-A.
Forged Details, 35394-C and 16914-G.

7,000 gallon straight back steel tender.
Short Wheel Base General Arrangement, 24207-B.
Long Wheel Base, General Arrangement, 30950-A.
Forged Details, 35394-C and 16914-G.

5,500 and 6,000 gallon sloping back steel tenders.
General Arrangement, 25616-C.
Forged Details, 16914-G.

6,000 gallon straight back wooden tender.
General Arrangement and Details, 20013-C.

4,500 gallon straight back wooden tender.
Location and Detail, 38817-A.

3,600 gallon straight back wooden tender.
Location and Detail, 38817-A.

3,000 gallon straight back wooden tender.
Location and Detail, 38817-A.

2,400 gallon straight back wooden tender.
Location and Detail, 38817-A.

2,700, 3,000 gallon sloping back wooden tenders.
General Arrangement and Detail, 19000-C.

2,200 gallon sloping back wooden tender.
General Arrangement and Detail, 38740-A.

Uncoupling Leavers Rear End of Tenders—Uncoupling levers on rear end of tenders which do not conform to United States Safety Appliance Standards are to be changed and maintained in accordance with the tracings given below:

5,500 and 7,000 gallon straight steel tenders and 5,500 and 6,000 gallon sloping back steel tenders.

General Arrangement, 38145-C.
Details: Forged, 37626-B.

Cast Iron, 38083-A and 38085-A.
Chain, 47475-A.
Clevises, 34223-B.

Clevis and chain for uncoupling from top of straight back steel tenders,
38168-A and 24051-H.

6,000, 4,500, 3,600 gallon straight back wooden tenders.

General Arrangement, 38609-C.

Details: Forged, 37626-B.
Cast Iron, 38147-A, 38148-A.
Chains, 47475-A, 15308-B.
Clevises, 34223-B, 38168-A.

3,000, 2,400 gallon straight back wooden tenders.

General Arrangement, 38673-C.

Details: Cast Iron, 38083-A, 38085-A.
Forged, 37626-B.
Chains, 47475-A, 15308-B.
Clevises, 34223-B, 38168-A.

4,500, 3,000, 2,700, 2,200 gallon sloping back wooden tenders.

General Arrangement, 38674-C.

Details: Cast Iron, 38083-A, 38085-A.
Forged, 37626-B.
Chains, 47475-A, 15308-B.
Clevises, 34223-B, 38168-A.

Note.—Clevis and chain for uncoupling from top of straight back tenders is not to be applied to tenders belonging to Lines West of Pittsburgh unless otherwise ordered.

On account of the different heights of rear end sills the dimensions given on tracing No. 47475-A for length of chain should be changed to suit conditions allowing not more than 2" slack in chain.

Handrails and Steps for Headlights on Sloping Back Tenders.—Handrails and steps for headlights on sloping back tenders which do not conform to U. S. Safety Appliance Standards are to be applied and maintained in accordance with the tracings given below:

5,500 and 6,000 gallon sloping back steel tenders.

General Arrangement and Details of Steps and Handrails on top of tanks, 27102-D.

Handrail Base X-11596, 38185-A.

Support for Combined Lamp and Flag Socket, 38184-A.

3,000, 2,700 gallon sloping back wooden tenders.

General Arrangement, 19000-C.

Detail of steps, 38747-A.

Handrail Base, 38185-A.

Support for Lamp Socket, 38184-A.

2,200 gallon sloping back wooden tender.

General Arrangement, 38740-A.

Support for Lamp Socket, 38740-A.

Details of Steps, 38747-A.

Handrail Base, 38185-A.

End Ladder Clearance Rear of Tenders.—The present coupler and buffer casting does not provide the required 14" end ladder clearance. The following tracings are to be followed in equipping the tenders specified to conform to the Safety Appliance Standards:

5,500 and 7,000 gallon straight back steel tenders and 5,500 and 6,000 gallon sloping back steel tenders.

General Arrangement, 38145-C and 29266-D.

Details: Buffer Casting, X-11580, 38174-D.

Coupler Carrier, X-10246, 29265-B.

Couplers, 38001-B.

Push Pole Casting, 38119-A obsolete and 18008-C obsolete for repairs according to style of underframe, tracing 38915-C for new work.

Combined Flag and Lamp Socket X-11572, tracing 38173-B.

Buffer Casting, 40120-A for steel tenders with draft gear as shown on tracing No. 14192.

6,000, 4,500, 3,600 gallon straight back wooden tenders.

General Arrangement, Rear End, 38609-C.

General Arrangement, Westinghouse Draft Gear, 38620-A.

Wrought Iron Details, " " " " 15308-B.

Buffer Castings, " " " " 38578-A, 38579-B.

Coupler, " " " " 38001-B.

General Arrangement, Graham Draft Gear, 38643-C.

Buffer Castings, Graham Draft Gear, 38683-B, 38684-D.

Coupler, Graham Draft Gear, 38672-B.

Push Pole Casting, 45215-A.

Combined Lamp and Flag Socket, 38173-B for tenders with straight collar, 26364-B for tenders with sloping collar.

The following tenders when equipped with pivoted coupler and bracket with the redesigned uncoupling lever and end handhold, also with push pole casting and combined lamp and flag socket, as indicated for switching tenders conform to the Safety Appliance requirements for end ladder clearance:

3,000, 2,400 gallon straight back wooden tenders.

General Arrangement, 38673-C.

Coupler Brackets, 21388-C, 38988-A.

Coupler Bracket Supports, 38648-A, 38649-A.

Coupler, 37805-D.

Push Pole Casting, 45215-A.

Combined Lamp and Flag Socket, 38173-B for tenders with straight collar, 26364-B for tenders with sloping collar.

4,500, 3,000, 2,700, 2,200 gallon sloping back wooden tenders.

General Arrangement, 38674-C.

Coupler Brackets, 21388-C.

Coupler, 37805-D.

Push Pole Castings, 8922-C, 38964-B.

Bevel Washer X-11995, tracing 30552-F.

Combined Flag and Lamp Socket, 38173-B.

Tracing 40358-A showing location of train, signal and steam heat pipes to conform to position of coupler as designed to give 14" end ladder clearance.

Couplers Rear End of Tenders.—The couplers on the rear end of steel tenders were changed in design by increasing length of shank 4" and increasing dimension from coupler horn to coupling face from $9\frac{1}{4}$ " to $11\frac{1}{4}$ ". Couplers ordered for changing these tenders must be in accordance with tracing 38001-B, and either the Pitt or Sharon type is to be used. It is desirable that the same make of coupler be used and maintained on the rear end of tenders and front end of locomotives, after the couplers with which the front end of locomotives are now equipped have been worn out. The couplers removed from rear end of tenders can be used for repairs on road tenders until such time that road tenders are changed to provide the 14" end ladder clearance.

The couplers on the rear end of wooden tenders with Graham draft rigging were changed in design by increasing length of shank 6" and increasing dimension from coupler horn to coupling face from $9\frac{1}{4}$ " to $11\frac{1}{4}$ ". Couplers ordered for changing these tenders must be in accordance with tracing 38672-B, and either Pitt or Sharon type is to be used. The couplers removed from these tenders are to be worn out in freight service. When tenders equipped with Graham draft gear require extensive repairs to end sills or underframe, they should be equipped with friction draft gear and coupler in accordance with tracing 38001-B, unless otherwise ordered by the Superintendent Motive Power.

Ladders.—Ladders are to be applied and maintained on straight back tenders more than 48" in height from top of end sill in accordance with the tracings given below:

5,500 and 7,000 gallon straight back steel tenders must be equipped with end ladders, as shown on tracing 38240-C. The cast iron step brackets and post over same, formerly used on rear of tenders, must be removed.

6,000, 4,500, 3,600, 3,000 gallon straight back wooden tenders must be equipped with end ladders, as shown on tracing 38692-B. The cast iron step brackets and post over same, formerly used on rear of tenders, must be removed.

Cast Iron, 38081-A and 38082-A.
Chain, 75-A.
Clevises, 34223-B.

Class A3a—Rear End.
General Arrangement, 38456-B.
Details: Forged, 38455-A.
Cast Iron, 38082-A.
Chain, 47475-A.
Clevises, 34223-B.

Classes H3, H3a, H3b, H3e.
General Arrangement, 38635-C.
Details: Forged, 37626-B.
Cast Iron, 38081-A and 38082-A.
Chain, 47475-A.
Clevises, 34223-B.

Class H5.
General Arrangement, 38778-C.
Details: Forged, 37626-B.
Cast Iron, 38081-A and 38082-A.
Chain, 47475-A.
Clevises, 34223-B.

Classes H6, H6a, H6b, H6sb.
General Arrangement, 38608-C.
Details: Forged, 37626-B.
Cast Iron, 38081-A and 38082-A.
Chain, 47475-A.
Clevises, 34223-B.

On account of the different heights of Coupler Brackets and the variation of the Coupler Heads in the pocket, the dimensions given on tracing 47475-A for length of chain, should be changed to suit the conditions allowing not more than 2" slack in the chain.

End Ladder Clearance at Pilot End—The present standard pivoted head coupler with the redesigned uncoupling lever and end handhold for pilot buffer beam conforms to the Safety Appliance requirements for end ladder clearance at front end. This is shown on the following tracings:

Classes A1, A2, A2a, B3, B5.
General Arrangement, 38357-C.

Classes A3, A3a, A4, B4, B4a, B8.
General Arrangement, 38363-D.

Class B6.
General Arrangement, 38427-C.

Classes B6a, B29, B6sa.
General Arrangement, 38239-D.

Classes B7, B7a.
General Arrangement, 38382-C.

Class A3a—Rear End.
General Arrangement, 38456-B.

Classes H3, H3a, H3b, H3e.
General Arrangement, 38635-C.

Classes H6, H6a, H6b, H6sb.
General Arrangement, 38608-C.