# 1. APTA PR-M-RP-001-97 Recommended Practice for Air Connections, Location and Configuration of, for Passenger Cars Equipped with AAR Long Shank Tight Lock or Similar Long Shank Type Couplers

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**Abstract:** This recommended practice defines the position of air connection fittings with respect to tight lock couplers pulling face and shank. It also defines air hose dimensions.

Keywords: air connections, air hoses, brake hoses

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## APTA PR-M-RP-001-97 Recommended Practice for Air Connections, Location and Configuration of, for Passenger Cars Equipped with AAR Long Shank Tight Lock or Similar Long Shank Type Couplers

#### 1. Overview

#### 1.1 Scope

This recommended practice defines the location of air connections adjacent to coupler shank for long shank tightlock couplers used in passenger rail service. This recommended practice was developed from the following documents formerly maintained by the Association of American Railroads (AAR):

AAR S-031, Steam and Air Connections—Passenger Car

AAR S-033, Steam and Air Connections—Passenger Car

The passenger rail industry phased this recommended practice into practice over the six-month period from July 1 to December 31, 1999. The recommended practice took effect January 1, 2000.

#### 1.2 Purpose

To replace the AAR Standard S-003 with a recommended practice to be maintained by the American Public Transportation Association.

#### 2. References

The following documents are referenced in this recommended practice:

AAR Specification M-601-53, M-601-88, Specification for Brake Hose

AAR Standard S-441-88, Standard for Hose Mounting

AAR Standard S-442-87, Standard for Hose Mounting

AAR Standard S-499-87, Standard for Locomotive MR, L Coupling

### 3. Air connection, location & configuration

The air brake and connection should be located as shown in Figures #1 and #2 of this recommended practice.

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Air brake hose must be 1 3/8 inches (3.5 cm) inside diameter and 22 inches (56 cm) long (refer to AAR Standard S-441-88, Hose Spec. M-601-88 Std. or M-601-53 Alt. Standard) or as shown in Figure #3 of this recommended practice.

Main Reservoir hose must be 1 1/8 inches (2.86 cm) inside diameter and 22 inches (56 cm) long (refer to AAR Standard S-442-87, Hose Spec. M-601-88 or Alt. Std. M-601-A) or as shown Figure #3 of this recommended practice.









#### GENERAL NOTES

- All dimensions subject to a tolerance of plus or minus 1/8".
- B. In situations where air brake and/or main reservoir cock are located remotely, the positions shown for the pipe nipple and (air hose attachment point) shall be the governing dimensions
- C. Venting ball cocks shall be used for lines operating at air pressures in excess of 100psi, to vent hose connection. Where a vent is provided, it shall be located such that it is not above the horizontal plane, taking into account the orientation of the ball cock.
- D. Angle cock shall be oriented no more than 30 degrees from vertical.
- E. Main Reservoir Cock shall be oriented no more than 30 degrees from vertical.





**NOTE -** Air Brake - FS-5 Coupling Main Reservoir - LS-4 Coupling. AAR S-499-87