

NAVISTAR, INC.		
Material, Parts, and Process Specifications (MPAPS)		NUMBER: MPAPS P-9556
		Former Designation: TMS -9556
TITLE: Quality Requirements For Air Brake Reservoirs		CURRENT REV No.: 1512
		DATE: Dec. 2015
WRITTEN/EDITED BY: W. Cook	APPROVED BY: R. Goluch	SUPERSEDES: Rev. New October 2007
PRINTED COPIES OF THIS DOCUMENT MUST BE VERIFIED FOR CURRENT REVISION		
<i>This specification may involve hazardous materials, equipment, and procedures. This specification does not purport to address all of the safety issues associated with its use. The user is responsible to consult appropriate safety and health practices and to determine the applicability of regulatory limits prior to use.</i>		
Change Notice: <i>Changed rated working pressure notation from 150 psig(1034 kPa) to "Governor Cutout Pressure; adopted MPAPS format; added qualification section; editorial changes</i>		

1.0 APPLICATION

Air brake reservoirs covered by this specification are tanks used for the purpose of storing compressed air in connection with air brake systems. This specification covers engineering quality requirements for purchased air brake reservoirs/tanks supplied to Navistar, Inc. for use on Navistar products with air brake systems, and to such components as may be provided for field service applications.

2.0 SCOPE

This specification covers the material and performance and quality requirements of metallic air tanks, including quality control and source approval, supplier's compliance reports, painting, appearance criteria, and shipping and identification requirements.

2.1 Restricted Chemical Substances

Effective January 1, 2007, all product supplied to the requirements of this specification must comply with the requirements of the MPAPS B-50 specification.

3.0 REFERENCE DOCUMENTS

Unless otherwise specified, the latest issue of all referenced standards shall apply. The following Specifications, Standards, and Regulations are referenced in this specification.

Quality System Standard ISO 9001 or TS-16949	Navistar MPAPS C-10
NAVISTAR Manufacturing Std. MS-D-13	Navistar MPAPS G-9009
NAVISTAR Engineering Design Std A-16	Navistar TMS 4513
NAVISTAR MPAPS B-50	Navistar MPAPS A-6 Part I
FMVSS -121	Navistar CSE-SP-0012
Aluminum Association AA45	SAE J10
CFR Title 29, Part 1910	AWS A2.4
ASTM B-117	

4.0 GENERAL REQUIREMENTS

All air reservoirs supplied under this specification shall conform to the requirements of FMVSS-121, SAE J10, and CSE-SP-0012.

This document is restricted and may not be sent outside Navistar, Inc. or reproduced without permission from Corporate Technical Standards. Suppliers are required to assume all patent liability. ©2015 by Navistar, Inc.

DECEMBER 2015



Documents

Page 1 of 6

Document Sharing Hub

NUMBER: MPAPS P-9556	TITLE: Quality Requirements For Air Brake Reservoirs	REVISION: 1512
---------------------------------------	--	---------------------------------

4.1 Material

The supplied parts will meet the material requirements of this specification depending on the type of base material specified on the tank drawing or purchase order.

4.1.1 Steel Tanks

4.1.1.1 Material Specification: Steel, Grade 1 or 2, per MPAPS A-6, Part I (or other grade as agreed upon between supplier and purchaser)

4.1.1.2 Material Finish

4.1.1.2.1 Exterior Surface: Paint per MPAPS G-9009, Class IIA (unless otherwise specified on drawing or purchase order); color to be specified on drawing or purchase order.

4.1.1.2.2 Interior Surface: Suitable coating must be applied in order to meet minimum corrosion requirements specified in SAE J10.

4.1.2 Aluminum Tanks

4.1.2.1 Material Specification: 5052-H34 or 5052-H32 aluminum per MPAPS C-10

4.1.2.2 Material Finish

4.1.2.2.1 Non-Polished/Painted aluminum: mill finish Class AA-M10 per Aluminum Association document 45; paint per MPAPS G-9009, Class IIA (unless otherwise specified or ordered). Paint color to be specified on drawing or purchase order.

4.1.2.2.2 Polished aluminum: will have a buffed finish Class AA-M22 per AA Document 45. The polished/buffed surface will be coated with a protective coating per TMS-4513 or other protective wrap prior to shipping. (If a specific type of protective coating is desired, it will be defined on the drawing or purchase order.)

4.1.3 Material Thickness

Tank material thickness will be selected by the supplier based on what is needed to meet the burst pressure and minimum volume requirements.

4.2 Welding

All welds on air tanks must be in conformance to applicable American Welding Society (AWS) standards. Required weld locations and parameters (weld length, size, etc.) may be specified on the engineering drawings with standard welding symbols per AWS A2.4. However, if such parameters are not specified, welding procedures and parameters will be selected by the supplier so as to meet applicable requirements of FMVSS 121, SAE J10, and CSE-SP-0012.

4.3. Performance Requirements

4.3.1 Proof Tests

Prior to a production run or lot (defined as a single part number manufactured for a one-year period or for 200 pieces, whichever occurs sooner), the first reservoir shall be subjected to proof testing per FMVSS-121, Section 5.1.2.2. The rated working pressure for purposes of this specification shall be defined as the Governor Cutout Pressure.

4.3.2 Leakage Tests

Each air tank supplied to this specification shall be subjected to twice the rated working pressure when tested per SAE J10; leakage shall not exceed 20 std cm³/m.

4.3.3 Painted Tanks

For tanks required to be painted, all outside surfaces (including weld area) will be clean and free from rust, oxidation, excessive weld spatter, flux, scale, oils, and other debris prior to painting. Exterior

This document is restricted and may not be sent outside Navistar, Inc. or reproduced without permission from Corporate Technical Standards. Suppliers are required to assume all patent liability. ©2015 by Navistar, Inc.

DECEMBER 2015



Documents

Page 2 of 6
Document Sharing Hub