



AEROSPACE RECOMMENDED PRACTICE

ARP4379™

REV. B

Issued 1991-06
Revised 2016-04

Superseding ARP4379A

(R) Aerospace - Accumulator, Hydraulic, Cylindrical, Piston Separated

RATIONALE

ARP4379 has been updated to Revision B for the following reasons:

- Incorporate various technical changes
- Updated the references

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1. SCOPE

This SAE Aerospace Recommended Practice (ARP) is a guide for defining the requirements for aerospace piston hydraulic accumulators, including details pertinent to the design, fabrication, performance and testing of the accumulator. This type of accumulator contains a piston which separates pressurized gas and fluid.

1.1 Field of Application

The accumulator is intended for use in commercial and military aircraft hydraulic systems with rated pressures up to 5000 psi (34 474 kPa) and operating fluid temperatures as follows:

- Phosphate ester based fluid systems: -40 to 225 °F (-40 to 107 °C)
- Hydrocarbon based fluid systems: -65 to 275 °F (-54 to 135 °C)

2. REFERENCES

2.1 Applicable Documents

The following publications form a part of this document to the extent specified herein. The latest issue of SAE publications should apply. The applicable issue of other publications should be the issue in effect on the date of the purchase order. Nothing in this document supersedes applicable laws and regulations unless a specific exemption has been obtained.

2.1.1 SAE Publications

Available from SAE International, 400 Commonwealth Drive, Warrendale, PA 15096-0001, Tel: 877-606-7323 (inside USA and Canada) or +1 724-776-4970 (outside USA), www.sae.org.

ARP1383	Aerospace - Impulse Testing of Hydraulic Components
AS4059	Aerospace Fluid Power - Contamination Classification for Hydraulic Fluids
ARP4150	Procedure for Inspection of Inservice Airborne Accumulators for Corrosion and Damage
ARP4386	Terminology and Definitions for Aerospace Fluid Power, Actuation and Control Technologies
ARP4752	Aerospace - Design and Installation of Commercial Transport Aircraft Hydraulic Systems
AIR4543	Aerospace Hydraulics and Actuation Lessons Learned
AS4941	Aerospace - General Requirements for Commercial Aircraft Hydraulic Components
AS5440	Hydraulic Systems, Military Aircraft, Design and Installation, Requirements For
AS8775	Hydraulic System Components, Aircraft and Missiles, General Specification For

2.1.2 Department of Defense Publications

Available from the DLA Document Services, Building 4/D, 700 Robbins Avenue, Philadelphia, PA 19111-5094, Tel: 215-697-6396, <http://quicksearch.dla.mil>.

A-A-59503	Nitrogen, Technical
MIL-PRF-27401	Propellant Pressurizing Agent, Nitrogen
MIL-STD-129	Marking for Shipment and Storage
MIL-STD-2073-1	Standard Practice for Military Packaging