REVISION TRANSMITTAL SHEET

SERVICE BULLETIN 10015804-35-01
REVISION NO. 02 DATED Oct 16/2019

HIGHLIGHTS

This sheet transmits Revision 2 to Service Bulletin 10015804-35-01

SUBJECT:	OXYGEN – CYLINDER – POSSIBLE MISSING COMPONENT ON OXYGEN CYLINDER VALVE ASSEMBLY

NOTE

This revision constitutes a complete revision.

VSB SUMMARY

Revision Changes are indicated by revision bars on the left side of the page. This revision includes changes / additions to the following paragraphs:

Page 1	Added Table for part numbers and added reference for Appendix 1.
Consecutive pages renumbered.	
Page 2	Paragraph 1.C. revised reason to say “Multiple instances”.
	Updated Approval statement.
Page 4	Paragraph 2.B. Updated Industry Support information and tech support email address.
Page 5	NOTE and Paragraph C.1. for attachment information.
Page 12	Updated Appendix 1 and 2 references.

“Appendix 1 Affected Shipments” is updated with additional valve and cylinder information.

REVISION HISTORY

Original Release:	Mar 06/2019
Rev 01	Jul 09/2019
Rev 02	Oct 16/2019

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SERVICE BULLETIN

U.S. EXPORT REGULATIONS

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SUBJECT: OXYGEN – CYLINDER – POSSIBLE MISSING COMPONENT ON OXYGEN CYLINDER VALVE ASSEMBLY

1. Planning Information

A. Effectivity

(1) This SB applies to the following cylinder and valve assemblies installed on aircraft and held in stores as well as spares. The attached “Appendix 1 Affected Shipments” appendix provides a list of potentially affected part numbers, serial numbers, and delivery information.

(2) The tabel below provides part numbers, CMMs and MFG Dates.

PN	Description	CMM	MFG Date
89794077	Cylinder and Valve Assembly	35-21-93	Jan 2018 - Nov 2018
89794015	Cylinder and Valve Assembly	35-21-93	Jan 2018 - Nov 2018
891511-14	Cylinder and Valve Assembly	35-28-91	Jan 2018 - Nov 2018

B. Concurrent Requirements

None

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C. Reason

Multiple instances have been reported and confirmed of a cylinder & valve with oxygen leakage from the valve assembly vent hole.

During the tear down analysis of the valve assemblies it was revealed that guide part number 10015804 was not assembled onto the stem part number 10017384. The absence of the guide creates a situation that increases the probability of significant oxygen leakage through the vent hole. This leakage will result in depletion of the oxygen cylinder and may create an oxygen enriched environment.

NOTE: The valve body vent hole is not in the normal oxygen flow path.

D. Description

This service bulletin provides instructions to inspect the cylinder & valve.

If the cylinder & valve assembly fails the inspection criteria it should be returned to AVOX Systems for disposition.

If the cylinder & valve assembly passes the inspection it should be identified by a blue paint dot on the valve assembly to show the SB has been accomplished. (Refer to Figure 7)

E. Compliance

Mandatory - Service Bulletin must be accomplished

Before any maintenance action on an affected cylinder, or within 60 days, whichever occurs first after the effective date of EASA_AD_2019-0085, inspect the hand valve of each affected part in accordance with the instructions of the applicable AOT and the SB.

F. Approval

The inspection procedures described in this service bulletin are reviewed and technically accepted by Airbus to apply on the Airbus fleet affected.

This SB does not contain any change information that revises the equipment definition covered by Airbus approved modifications.

G. Manpower

Approximately 0.05 man-hour for inspection of each cylinder & valve assembly or body & gage assembly is required.

H. Weight and Balance

Not Changed

I. Electrical Load Data

Not Changed

J. Software Accomplishments Summary

None

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K. References

EASA_AD_2019-0085 issued 18 April 2019

Airbus Alert Operators Transmission:

- AOT A35W014-19 (A300/A310)
- AOT A35L013-19 (A330/A340)
- AOT A35N012-19 (A318 thru A321)

Avox Systems Inc. Component Maintenance Manuals

- CMM 35-21-93 for PN 89794077, and PN 89794015
- CMM 35-28-91 for PN 891511-14

L. Publications Affected

Avox Systems Inc. Component Maintenance Manuals 35-28-91 and 35-21-93 will be revised to incorporate the intent of this service bulletin.

M. Interchangeability

Not Applicable (N/A)

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2. Material Information

A. Material - Price and Availability

None

B. Industry Support Information

Contact customerservice.avox@zodiacaerospace.com to return units that fail inspection and to report the results of units that pass inspection.

Contact tech-support.sao@safrangroup.com for technical inquiries.

Units that fail the inspection process in this service bulletin are to be returned to Zodiac Services repair station.

- If the inspection rejection is confirmed at the repair station, a FOC replacement will be provided.
- If the inspection rejection is not confirmed at the repair station, the unit will be returned to the customer and may be subject to no-fault-found (NFF) fees.

C. List of Components

Oil-based, blue paint permanent marker of local supply.

D. Subcomponents to be Reidentified

Inspected and acceptable cylinder & valve assembly will be identified with a blue paint dot on the valve assembly.

E. Tooling

Standard shop tools may be required.

F. Special Tools

Pin gauge 0.079” or 2mm Ø required to accomplish this inspection.

Pin vise to accommodate 0.079" or 2mm inspection pin. (Optional)

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3. Accomplishment Instructions

NOTE: See Appendix 1 for Affected Serial Numbers.
All affected serial numbers were manufactured between Jan 2018 – Nov 2018.
Inspect only serial numbers found in the “Appendix 1 Affected Shipments” list.

A. General

Inspection of the cylinder & valve assembly may be performed while the unit is in-service or removed from the aircraft.

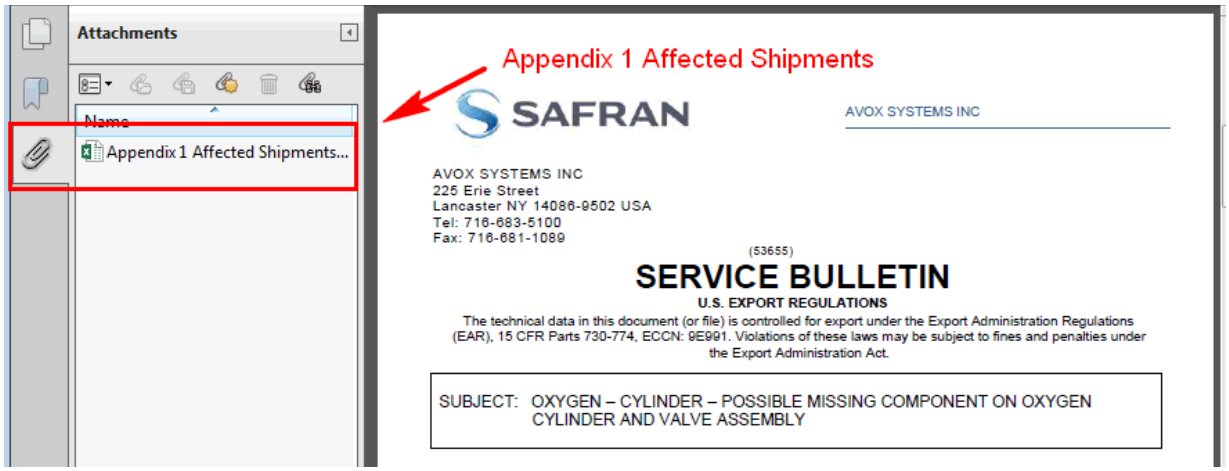
B. Preparation

A Pin gauge 0.079” or 2mm Ø is required to accomplish this inspection.

C. Procedure.

(1) Verify the Serial Number is listed in the Affected Shipments list.

NOTE: See “Appendix 1 Affected Shipments” for a list of serial numbers.



(a) Check if unit is marked with a blue paint dot. If the unit is marked with a blue paint dot, the unit has already been inspected per this SB. (Refer to Figure 7 for blue paint dot location.)

(b) If the unit is not marked with a blue paint dot, or, if a doubt exists that the inspection was performed on the unit, proceed with step (2).

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(2) Gain access to the cylinder & valve assembly.
Figures 1 through 6 show the inspection location on the cylinder & valve assembly



FIGURE 1
OVERVIEW OF CYLINDER AND VALVE ASSEMBLY



FIGURE 2
CLOSE-UP OF VALVE ASSEMBLY

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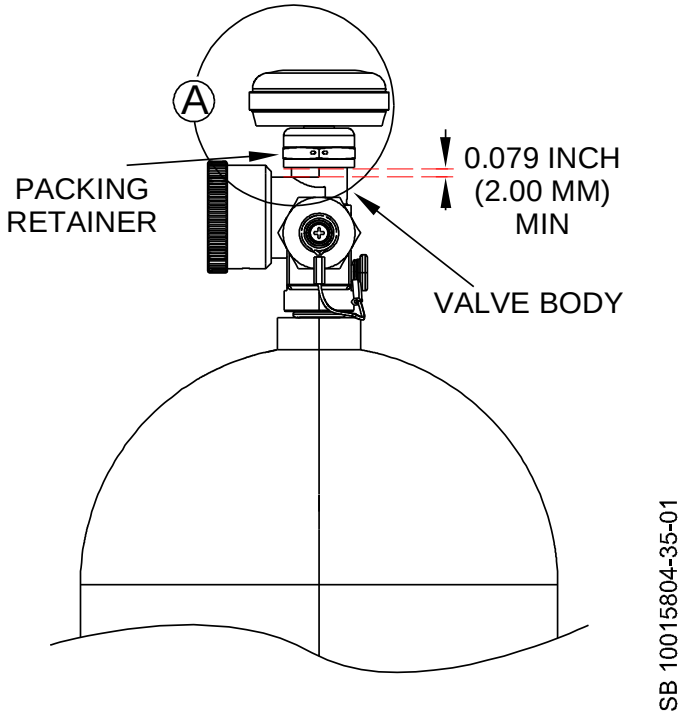


FIGURE 3
CLOSE-UP ILLUSTRATION OF VALVE ASSEMBLY, PIN GAUGE MUST BE INSERTED BETWEEN THE BOTTOM OF THE PACKING RETAINER AND FLAT SURFACE OF THE VALVE BODY ABOVE THE PRESSURE GAUGE

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FIGURE 4
CLOSE-UP OF INSPECTION PROCEDURE LOCATION ON VALVE ASSEMBLY

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(2) Perform the following inspection procedure on the cylinder and valve assembly.

(a) Use a pin gauge, 0.079” or 2mm Ø, to determine if the cylinder and valve assembly meets the criteria for an acceptable unit.

NOTE: The inspection criteria is applicable for all valve assembly configurations

NOTE: It may be necessary to move safety cable to facilitate inspection

(b) Slide the pin gauge between the bottom of the packing retainer and the top of the valve body above where the pressure gauge is mounted.

NOTE: Failure to perform the inspection in exactly the location depicted may result in rejection of conforming product.

(c) Perform visual inspection comparing the “Acceptable” or “Unacceptable” of the pin gauge.

(Refer to Figure 5 for identification of acceptable cylinder and valve assembly)
(Refer to Figure 6 for identification of unacceptable cylinder and valve assembly)

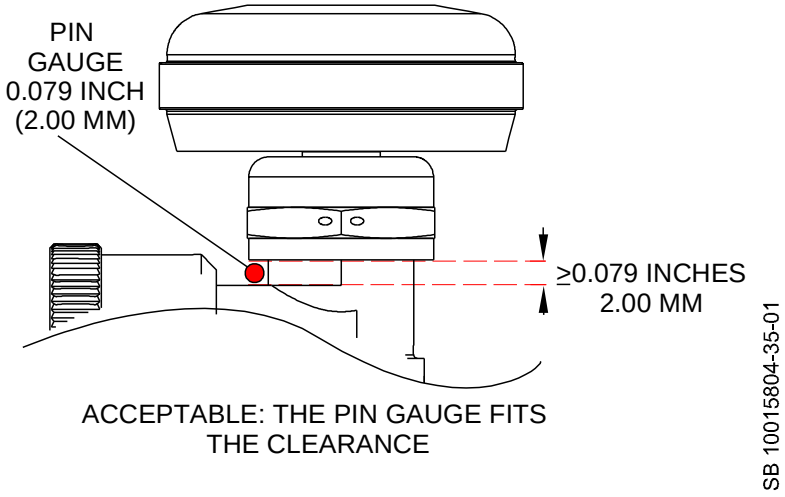


FIGURE 5
ACCEPTABLE ILLUSTRATION TO SHOW CLEARANCE BETWEEN PACKING RETAINER AND VALVE BODY

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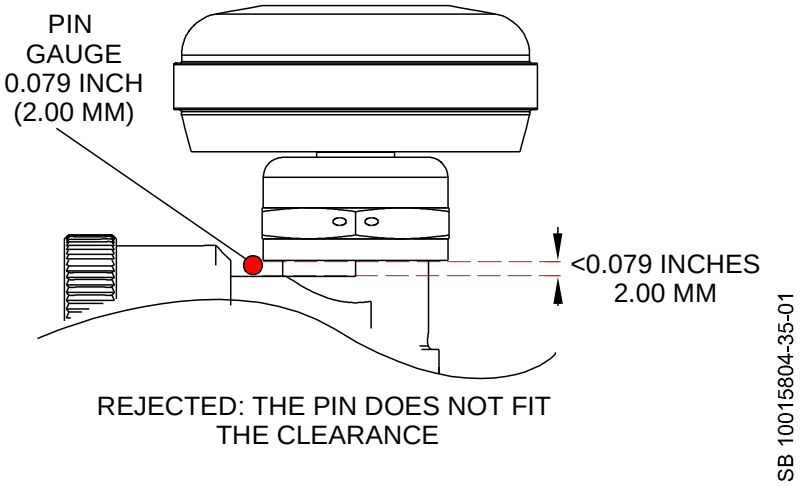


FIGURE 6
REJECTED VALVE ASSEMBLY

(3) If cylinder and valve assembly is identified as “Acceptable”, the cylinder and valve assembly may remain or can be used in service.

D. Re-identification of equipment

(1) Physically identify the acceptable cylinders after inspection by using an oil-based, blue paint permanent marker of local supply, to mark the valve with a blue paint dot as shown in Figure 7.

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FIGURE 7
MARK ACCEPTABLE CVA WITH A BLUE PAINT DOT

(a) Please fill out the report form in Appendix 2 and send a copy to customerservice.avox@zodiacaerospace.com.

CAUTION: IF A CVA IS REJECTED BASED ON INSPECTION, DO NOT OPEN OR CLOSE THE VALVE HANDLE WHILE THE CVA IS CHARGED WITH OXYGEN.

(2) If CVA is installed on an aircraft with the valve in the open position, and it is identified as "Unacceptable" (the gap is too small to accommodate the pin gauge), do the following steps:

(a) Follow aircraft manufacturer's documentation to completely bleed down the CVA through the appropriate aircraft systems.

(b) Close the Valve Assembly.

(c) Remove the CVA from service.

(d) Clearly identify the CVA as non-conforming product / not-for-service.

(e) Package CVA.

NOTE: Alternate reaction plans may be advised at the discretion of the aircraft OEM based on additional system-level safety analysis.

(f) Contact (customerservice.avox@zodiacaerospace.com) for instructions for shipping cylinders.

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CAUTION: **IF A CVA IS REJECTED BASED ON INSPECTION, DO NOT OPEN OR CLOSE THE VALVE HANDLE WHILE THE CVA IS CHARGED WITH OXYGEN.**

(3) If CVA is installed on an aircraft or is in storage with the valve in the closed position and it is identified as “Unacceptable” (the gap is too small to accommodate the pin gauge) do the following steps:

(a) Remove the cylinder and valve assembly from service (if applicable)

(b) Clearly identify the CVA as non-conforming product / not-for-service.

(c) Package cylinder and valve assembly securely in a box that is compliant with HM224B.

(d) Contact (customerservice.avox@zodiacaerospace.com) for instructions for shipping cylinders.

E. Test

No Test is required after the inspection

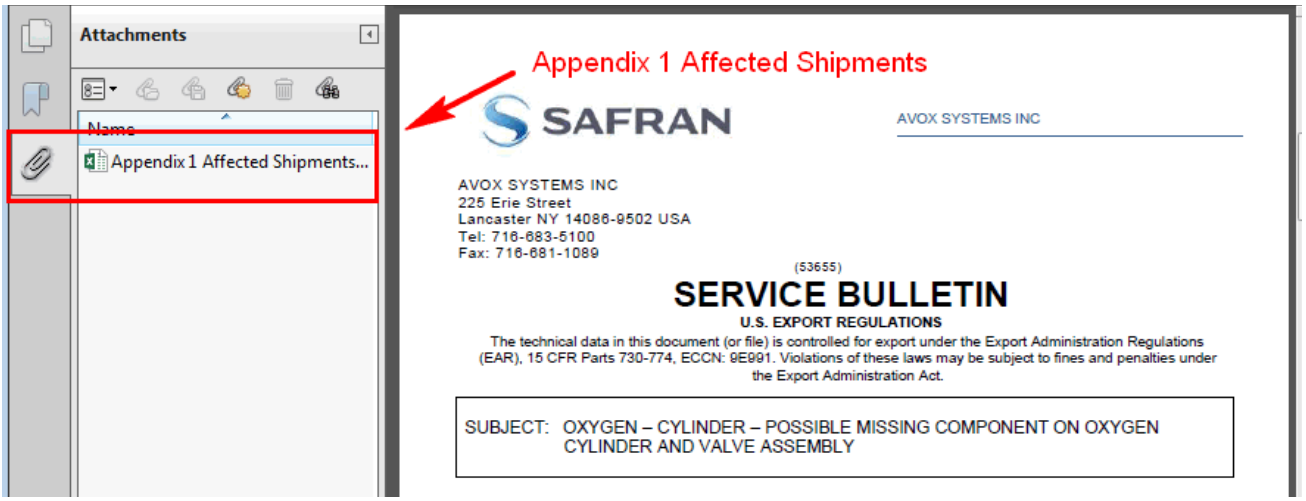
F. Close-up

None.

4. Appendix

A. Appendix 1 - Excel file with the suspect SN list.

“Appendix 1 Affected Shipments.xlsx”



B. Appendix 2 – Inspection Form. (See page 12)

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INSPECTION OF MISSING GUIDE FROM CYLINDER AND VALVE ASSEMBLY FORM

Company Name:	Email: Phone:
Service Bulletin Number: **10015804-35-01**	Date:
Company Address:	

CYLINDER & VALVE ASSY PART NUMBER:	CYLINDER & VALVE ASSY SERIAL NO:	VALVE ASSY SERIAL NUMBER	VALVE ASSY PART NUMBER	MANUFACTURE DATE:	ACCEPTABLE: (YES/NO)

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