

 **BOEING**
COMPONENT
MAINTENANCE MANUAL

TO: ALL HOLDERS OF FIRE EXTINGUISHER METERING SYSTEM REGULATOR ASSEMBLY
COMPONENT MAINTENANCE MANUAL 26-23-01

REVISION NO. 2 DATED APR 01/93

HIGHLIGHTS

Pages which have been added or revised are outlined below together with the highlights of the revision. Remove and insert the affected pages as listed and enter Revision No. and date on the Record of Revision Sheet.

CHAPTER/SECTION
AND PAGE NO.

DESCRIPTION OF CHANGE

TITLE PAGE

Added 218N2007-1, -2, Regulator Assemblies per PRR
54162-1.

1

TR & SB RECORD

1

101-102

REPAIR-GEN

601

REPAIR 1-1

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1002

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FIRE EXTINGUISHER METERING SYSTEM REGULATOR ASSEMBLY

PART NUMBERS 453T2652-4
218N2007-1,-2

COMPONENT MAINTENANCE MANUAL
WITH
ILLUSTRATED PARTS LIST

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TITLE PAGE

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REVISION RECORD

- Retain this record in front of manual. On receipt of revision, insert revised pages in the manual, and enter revision number, date inserted and initial.

REVISION NUMBER	REVISION DATE	DATE FILED	BY	REVISION NUMBER	REVISION DATE	DATE FILED	BY



TEMPORARY REVISION AND SERVICE BULLETIN RECORD

BOEING SERVICE BULLETIN	BOEING TEMPORARY REVISION	OTHER DIRECTIVE	DATE OF INCORPORATION INTO MANUAL
		PRR 54162-1	APR 01/93

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TR & SB RECORD

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TR & SB RECORD			ILLUSTRATED PARTS LIST		
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* [1] Special instructions not required. Use standard industry practices.	

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INTRODUCTION

The instructions in this manual provide the information necessary to perform maintenance functions ranging from simple checks and replacement to complete shop-type repair.

This manual is divided into separate sections:

- | | |
|----------------------------------------------------|------------------------------|
| 1. Title Page | 4. List of Effective Pages |
| 2. Record of Revisions | 5. Table of Contents |
| 3. Temporary Revision &
Service Bulletin Record | 6. Introduction |
| | 7. Procedures & IPL Sections |

Refer to the Table of Contents for the page location of applicable sections.

The beginning of the REPAIR section includes a list of the separate repairs, and a list of applicable standard Boeing practices.

An explanation of the use of the Illustrated Parts List is provided in the Introduction to that section.

All weights and measurements used in the manual are in English units, unless otherwise stated. When metric equivalents are given they will be in parentheses following the English units.

Design changes, optional parts, configuration differences and Service Bulletin modifications create alternate part numbers. These are identified in the Illustrated Parts List (IPL) by adding an alphabetical character to the basic item number. The resulting item number is called an alpha-variant. Throughout the manual, IPL basic item number references also apply to alpha-variants unless otherwise indicated.

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FIRE EXTINGUISHER METERING SYSTEM REGULATOR ASSEMBLY

DESCRIPTION AND OPERATION

1. Description and Operation

A. The fire extinguisher metering system regulator assembly is a Tescom regulator to which two unions (one at each port) have been attached. The regulator assembly controls the pressure in the aft cargo compartment fire extinguisher tubing installation.

2. Leading Particulars (approximate)

Height -- 5 inches
Diameter -- 3 inches
Weight -- 2 pounds

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TESTING AND TROUBLE SHOOTING1. Test Equipment and Materials

NOTE: Equivalent substitutes may be used.

- A. Regulated dry nitrogen source.
- B. Pressure gage -- 0-500 psig (certified), with minimum 2 psig increments and a 0.25 percent accuracy.
- C. Pressure gage -- 0-500 psig (certified), with minimum 1 psig increments and a 0.25 percent accuracy.
- D. Axial Visco Jet -- VXLA2500910L, Lee Company, The 2 Pettipaugh Road, Westbrook, Connecticut, 06498

2. Test Procedure

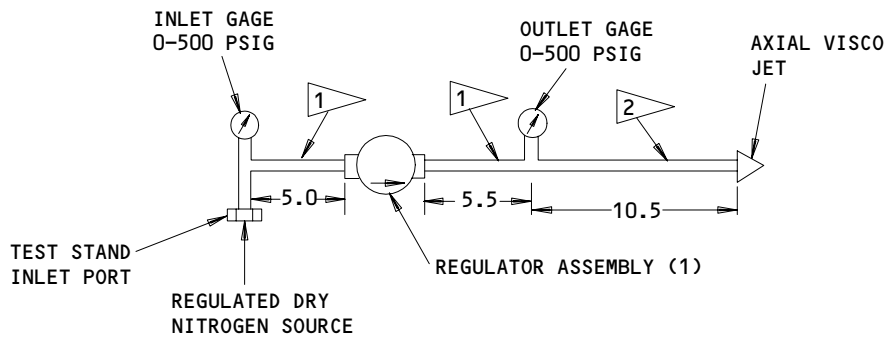
- A. Set up calibration test stand per Fig. 101.

CAUTION: REGULATOR ASSEMBLY IS PRECISELY CALIBRATED. DO NOT MOVE ADJUSTMENT SCREW OR DISTURB INSPECTION SEAL, OR REGULATOR MAY NOT FUNCTION PROPERLY IN FIRE EXTINGUISHER METERING SYSTEM.

- B. Install regulator assembly (1, IPL Fig. 1) in calibration test stand with regulator arrow pointing in direction indicated (Fig. 101).
- C. Connect a regulated dry nitrogen source to the test stand inlet port.
- D. Flow dry nitrogen thru the test stand.
- E. Increase inlet dry nitrogen pressure to 335-385 psig. Verify that the outlet pressure is 100-104 psig.

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- F. Apply leak check solution to threaded joints where unions (5) attach to the regulator. Check for leaks. No visible signs of leakage is allowed.
- G. Decrease inlet dry nitrogen pressure to 175-225 psig. Verify that the outlet pressure is 98-102 psig.
- H. If the regulator outlet pressure cannot be held within the acceptable limits, reject regulator assembly. Return regulator assembly to manufacturer for recalibration.



- 1 1/4 OD x 0.028W AL TUBING
- 2 1/4 OD x 0.028W S.S. TUBING

ITEM NUMBERS REFER TO IPL FIG. 1
 ALL DIMENSIONS ARE IN INCHES

**Regulator Test Stand
 Figure 101**

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DISASSEMBLY

NOTE: See Testing and Troubleshooting to establish the condition of the component or most probable cause of its malfunction. This is to determine the extent of disassembly required without completely tearing down and rebuilding the component.

1. Disassemble regulator assembly (1, IPL Fig. 1) using standard industry practices.

NOTE: Do not disassemble regulator assembly (15). If repair is required, return to manufacturer.

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REPAIR – GENERAL1. Content

- A. Repair, refinish and replacement procedures are included in separate sections as follows:

<u>P/N</u>	<u>NAME</u>	<u>REPAIR</u>
453T2652	REGULATOR	1-1
218N2007	REGULATOR	1-1

2. Standard Practices

- A. Refer to the following standard practices, as applicable, for details of procedures in individual repairs.

20-30-03 General Cleaning Procedures
 20-41-01 Decoding Table for Boeing Finish Codes
 20-50-10 Application of Stencils, Insignia, Silk Screen, Part Numbering, and Identification Markings

3. Materials

NOTE: Equivalent substitutes may be used.

- A. Enamel -- BMS 10-11, type 2, BAC701 black (Ref 20-60-02)
 B. Primer -- BMS 10-11, type 1 (Ref 20-60-02)

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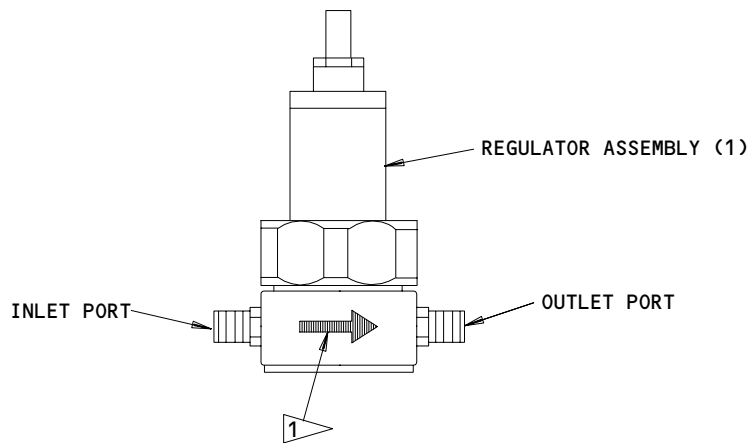
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
REGULATOR ASSEMBLY - REPAIR 1-1


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1. Regulator Repair

NOTE: Repair consists of stripping and restoration of original finish. Refer to Refinish instruction in Fig. 601 and to REPAIR-GEN list of applicable standard practices.

REFINISH

APPLY NO REFINISH, EXCEPT AS NOTED IN 

 MARK ARROW IN DIRECTION SHOWN PER 20-50-10 USING BMS 10-11, TYPE 1 PRIMER AND BMS 10-11, TYPE 2 ENAMEL, BAC701 BLACK. SIZE AND LOCATION TO BE SHOWN

Regulator Assembly Refinish
 Figure 601

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ASSEMBLY

1. Assemble regulator assembly (1, IPL Fig. 1) using standard industry practices.
2. Test regulator assembly per TESTING AND TROUBLE SHOOTING.
3. Prepare and store component using standard industry practices.

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SPECIAL TOOLS, FIXTURES, AND EQUIPMENT

NOTE: Equivalent substitutes may be used.

1. Axial Visco Jet VXLA2500910L, Lee Company, The 2 Pettipaug Road, Westbrook, Connecticut, 06498

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ILLUSTRATED PARTS LIST

1. This section lists and illustrates replaceable or repairable component parts. The Illustrated Parts Catalog contains a complete explanation of the Boeing part numbering system.

2. Indentures show parts relationships as follows:

Assembly

Detail Parts for Assembly

Subassembly

Attaching Parts for Subassembly

Detail Parts for Subassembly

Detail Installation Parts (Included only if installation parts may be returned to shop as part of assembly)

3. One use code letter (A, B, C, etc.) is assigned in the EFF CODE column for each variation of top assembly. All listed parts are used on all top assemblies except when limitations are shown by use code letter opposite individual part entries.

4. Letter suffixes (alpha-variants) are added to item numbers for optional parts, Service Bulletin modification parts, configuration differences (Except left- and right-hand parts), product improvement parts, and parts added between two sequential item numbers. The alpha-variant is not shown on illustrations when appearance and location of all variants of the part is the same.

5. Service Bulletin modifications are shown by the notations PRE SB XXXX and POST SB XXXX.

A. When a new top assembly part number is assigned by Service Bulletin, the notations appear at the top assembly level only. The configuration differences at detail part level are then shown by use code letter.

B. When the top assembly part number is not changed by the Service Bulletin, the notations appear at the detail part level.

6. Parts Interchangeability

Optional
(OPT)

The parts are optional to and interchangeable with other parts having the same item number.

Supersedes, Superseded By
(SUPSDS, SUPSD BY)

The part supersedes and is not interchangeable with the original part.

Replaces, Replaced By
(REPLS, REPLD BY)

The part replaces and is interchangeable with, or is an alternate to, the original part.

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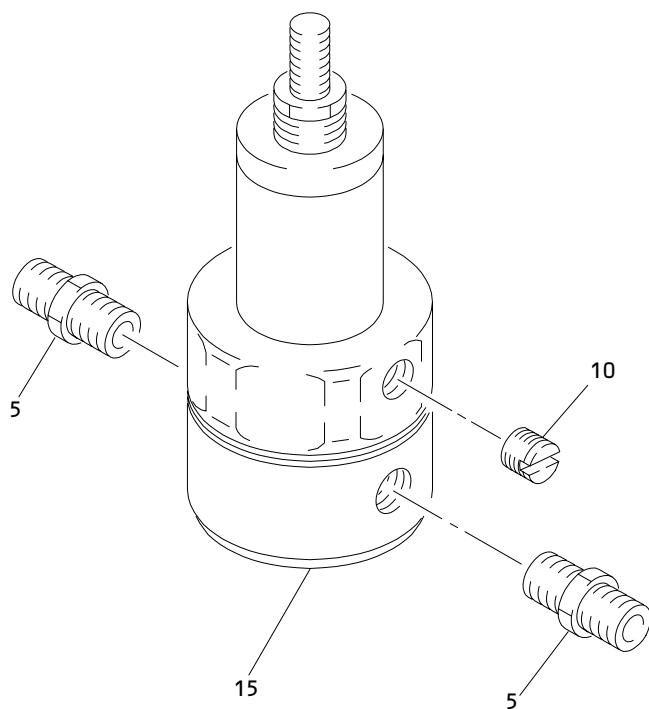
VENDORS

30780 PARKER-HANNIFIN CORP TUBE FITTINGS DIV
3885 GATEWAY BLVD
COLUMBUS, OHIO 43228

33538 TESCO CORP INSTRUMENT DIV
12616 INDUSTRIAL BOULEVARD
ELK RIVER, MINNESOTA 55330

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Fire Extinguisher Metering System Regulator Assembly
Figure 1

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01- -1	453T2652-4		REGULATOR ASSY-FIRE EXT METERING SYS	A	RF
-1A	218N2007-1		REGULATOR ASSY-FIRE EXT METERING SYS	B	RF
-1B	218N2007-2		REGULATOR ASSY-FIRE EXT METERING SYS	C	RF
5	4-4FUSS		.UNION- (V30780)		2
10	453T2652-2		.PLUG- (OPT ITEM 10A)		1
-10A	453T2652-5		.PLUG- (OPT ITEM 10)		1
15	44-2263-241-066		.REGULATOR ASSY- (V33538)		1

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