

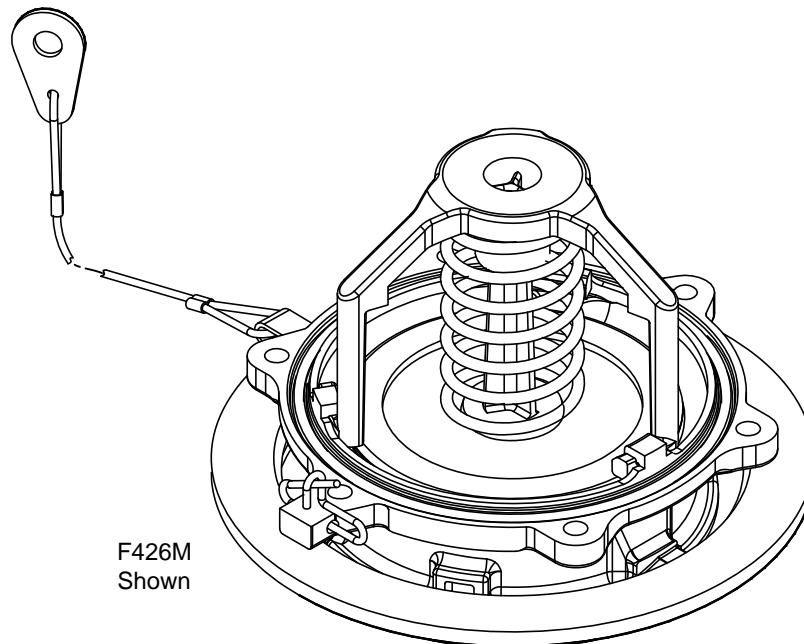
Maintenance Manual

QUICK-DISCONNECT ADAPTER

F426

MMF426

Revision 2.0
25 November 2013



F426M
Shown

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IMPORTANT SAFETY INSTRUCTIONS

SAVE THESE INSTRUCTIONS!

This manual contains important instructions that should be followed during installation and maintenance of the Quick-Disconnect Adapter. The following are general safety precautions that are not related to specific procedures and therefore do not appear elsewhere in this publication. These are recommended precautions that personnel must understand and apply during maintenance.

The adapter is a mechanical device and can be dangerous if not correctly operated or maintained.

Safety Alert Symbols

Safety alert symbols are used in this manual to identify potential or immediate personal injury hazards. The safety alert symbol words are explained below:



- indicates an imminently hazardous situation which, if not avoided, will result in injury or serious injury.



- indicates a potentially hazardous situation which, if not avoided, could result in injury or serious injury.



- indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.



- used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, may result in property damage.

WEAR PROTECTIVE CLOTHING

- Wear protective clothing (gloves, apron, etc.) approved for the materials and tools being used.

USE APPROVED SAFETY EQUIPMENT

- Use only approved equipment and make sure firefighting equipment is readily available.

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GIVE CLEANERS SPECIAL CARE

- When cleaners are being used read and follow the material safety data sheet (MSDS) instructions for correct handling.

Equipment Safety Information

The following safety information briefly discusses hazards peculiar to the equipment, which are likely to be encountered during maintenance activity.

GENERAL OPERATING LOCATION PRECAUTIONS

- Use only authorized replacement parts or hardware.
- Obey Lock-Out/Tag-Out procedures when working on the Adapter.

OPERATION AND MAINTENANCE OF FUEL SYSTEMS

- Protect all fuel lines from damage or puncture. Do not operate the Adapter if a fuel leak is detected.
- Do not use flammable solvents for cleaning parts.
- Check for tools, rags, or loose parts left in the area before resuming operation.
- Do not attempt to remove the Adapter from the system without first isolating it from the line pressure and venting all of the trapped internal pressure.

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INTRODUCTION

1. General

The information and procedures contained in this manual have been prepared to assist qualified repair personnel in off-aircraft maintenance of the Quick-Disconnect Adapter (adapter). The instructions provide information necessary to accomplish maintenance functions. The adapter is manufactured by Meggitt (North Hollywood), Inc., 12838 Saticoy Street, North Hollywood, California 91605.

2. Scope

The instructions contained in this manual do not claim to cover all details or variations in equipment. They do not provide for every problem that could occur during installation, operation, or maintenance. If further information is required, contact Meggitt (North Hollywood), Inc., Product Support Department.

3. Standard Shop Practices

Use approved procedures and safety precautions to prevent damage to the equipment and injury to personnel.

4. Weights and Measurements

Weights and measurements in this manual are expressed in both English (U.S. customary) and Metric (SI) units.

5. Revision Service

This manual will be revised, as necessary, to reflect current information.

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DESCRIPTION AND OPERATION

1. Description

The Quick-Disconnect Adapter (adapter) is a three-lug bayonet adapter assembly with a plastic dust cap conforming to MS24484-2. If the adapter fails to operate in accordance with the procedures listed refer to [Table 2](#) Fault Isolation table to select an appropriate action.

2. Operation

The poppet in the adapter may be actuated after coupling it to a single point nozzle. To actuate the poppet, rotate the operating handle on the nozzle to the open position.

3. Leading Particulars

For the leading particulars refer to [Table 1](#).

Table 1. Leading Particulars

Service Fluid	Automotive and Aviation Fuels
Operating Pressure (maximum).....	60 psi (413.7 kPa)
Temperature	
Fluid.....	-65 to 135°F (-54 to 57°C)
Ambient.....	-65 to 160°F (-54 to 71°C)

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FAULT ISOLATION

1. General

This section contains fault isolation procedures for the adapter. Operate the adapter in accordance with the Operation section, if the adapter fails to operate correctly refer to [Table 2](#) and select the applicable action. [Table 2](#) identifies the Fault, Probable Cause and Corrective Action.

Table 2. Fault Isolation

FAULT	PROBABLE CAUSE	CORRECTIVE ACTION
Leakage past poppet when closed	Damaged or worn seal (bonded) on poppet assembly (IPL Figure 1 , 5)	Replace the poppet assembly (5)
	Damage or worn poppet assembly (5)	Replace the poppet assembly (5)

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SPECIAL TOOLS

1. General

Refer to [Table 3](#) for the special tools recommended for maintenance of the adapter. Equivalent tools may be substituted for the items listed.

Table 3. Recommended Special Tools

PART NUMBER	DESCRIPTION	APPLICATION
GTP-8963	Gage	Used to check excessive wear on the adapter lugs.

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DISASSEMBLY

1. **Disassembling the Adapter** (See [IPL Figure 1](#))
 - A. Remove the screws that secure the adapter to flange (6).
 - B. Remove packing (7) from flange (6).
 - C. Disconnect hook (8) and remove dust cover (9) from flange (6).
 - D. Push and rotate the guide (3) to remove it from flange (6).
 - E. Remove compression spring (4) and poppet assembly (5) from flange (6).

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CLEANING

1. Cleaning Materials

Refer to [Table 4](#) for recommended cleaning materials. Equivalent items may be used.

Table 4. Recommended Cleaning Materials

DESCRIPTION	SPECIFICATION	SOURCE
Alcohol, Isopropyl	ASTM D770	Commercially available
Bags, Plastic	-	Commercially available
Brush, Bristle, Stiff, Non-metallic	-	Commercially available
Pick, Teflon®	-	Commercially available
Solvent, Dry Cleaning	P-D-680, Type 2	Commercially available
Tissues, Lint-free	-	Commercially available

2. Cleaning Procedures



DRY CLEANING SOLVENT AND ISOPROPYL ALCOHOL ARE HARZARDOUS MATERIALS. BEFORE USE, READ AND OBEY THE MATERIAL SAFETY DATA SHEET (MSDS) INSTRUCTIONS FOR CORRECT HANDLING. FAILURE TO OBEY THIS WARNING MAY RESULT IN PERSONAL INJURY, LONG TERM HEALTH HAZARDS OR DEATH.

- A. Clean all of the metal parts by washing them thoroughly in dry cleaning solvent. Remove any stubborn deposits by scrubbing them with a non-metallic stiff bristle brush. Use a Teflon® pick to remove obstructions from the ports, grooves and flow passages.
- B. Clean all of the non-metallic parts by wiping them with clean lint-free tissues slightly moistened with isopropyl alcohol.

NOTE: All parts must be free of corrosion, dirt, grease, oil or any other foreign matter.

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WEAR EYE PROTECTION WHEN USING COMPRESSED AIR. DO NOT DIRECT AIRSTREAM AT PERSONNEL OR LIGHT METAL PARTS.

- C. Dry the parts with clean lint-free tissues or clean, dry, compressed air.
- D. Package all of the clean parts in plastic bags.

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CHECK/INSPECTION

1. General

Under strong light and magnification, look at all parts in accordance with the general criteria specified in [Table 5](#).

Repair minor damage in accordance with local directives. If damage is major or beyond simple repair, replace the part rather than attempt extensive repairs.

2. Component Checks (Refer to [Table 5](#))

Table 5. Component Checks

DESCRIPTION	INSPECTION CRITERIA
General	<p>Look at the parts for; nicks, cracks, cuts, burrs, corrosion, breaks, scoring, dents, thread damage, serration damage, or other damage.</p> <p>Make sure the ports, passages, recesses, and grooves are clean and are not blocked.</p> <p>Make sure all sealing and seating surfaces are free from damage or corrosion.</p> <p>If any cracks are suspected, do a magnetic particle inspection (for ferrous metal parts) in accordance with MIL-I-6868 or a penetrant examination (non-ferrous metal parts) in accordance with MIL-I-6866.</p>

NOTE: Burrs, nicks, and scratches are defined as material raised above normal surface, which if not removed would prevent complete and proper mating of parts and sealing surfaces. Where nicks or scratches allow bare metal to show through a protective finish, note defect and assign part for repair. Dents or damage must not impair finish or functional operation of any part.

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ASSEMBLY

1. Assembly Materials

Refer to [Table 6](#) for recommended assembly materials. Suitable equivalent materials may be substituted for the items listed.

Table 6. Recommended Assembly Materials

DESCRIPTION	SPECIFICATION	SOURCE
Petroleum jelly	-	Commercially available

2. Assembly Procedure (See [IPL Figure 1](#))

- A. Before assembly, lightly lubricate all of the packings and seals with petroleum jelly.
- B. Put poppet assembly (5) and compression spring (4) in guide (3).
- C. Push and rotate guide (3), along with compression spring (4) and poppet assembly (5) into flange (6).
- D. Connect hook (8) to dust cover (9) and install on the flange (6).
- E. Put new packing (7) on the flange (6).
- F. Install the screws to secure the adapter to the flange (6).

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ILLUSTRATED PARTS LIST

1. General

This section lists, describes, and illustrates all detail parts required for maintenance support of the Quick-Disconnect Adapter.

2. Scope of Information

The parts list is arranged in the general order of disassembly. The listing is indented to show the relationship between each part and its next higher assembly. Item numbers used in the parts list are keyed to the corresponding numbers of the accompanying illustration.

A. MODIFICATION CODE

The modification code indicates the parts usage with respect to the end item. When the MOD column is blank, the part usage is applicable to all versions unless otherwise specified in the DESCRIPTION column.

B. How to Identify a Part

When the part number is known: Refer to the parts list for the item number, description, modification codes, and quantity. Refer to the illustration to make sure the physical appearance and location of the part.

When the part number is not known: Look at the illustrations to identify the part by physical appearance and location. Refer to the accompanying parts list to get the part number, nomenclature, modification codes, quantity, etc.

C. Abbreviations

ASSY	Assembly
FIG.	Figure
IPL	Illustrated Parts List
MOD	Modification

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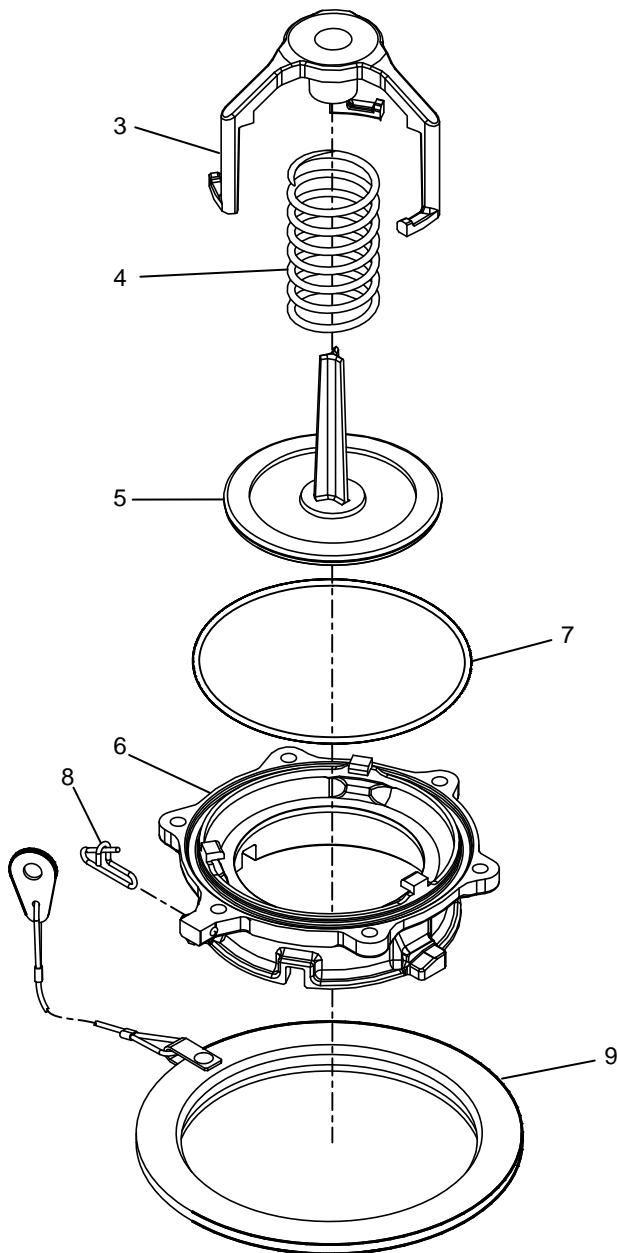
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IPL Figure 1. F426 Quick Disconnect Adapter

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FIG. ITEM	PART NUMBER	DESCRIPTION							MOD CODES	UNITS PER ASSY
		1	2	3	4	5	6	7		
ADAPTER, QUICK DISCONNECT F426										
1	- 1									REF
	- 2	F426								1
	3	2671131								1
	4	2681136								1
	5	2721404								1
	6	2671129							BSC,M	1
		961014-101							A	1
	7	2661058A153							M	1
	8	1429-512631							M	1
	9	2682050							M	1
Overhaul Parts Kit – Not available for this adapter.										

- Not Illustrated

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