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Instructions for Continued Airworthiness
MBA Maintenance Manual Supplement for AeroTough GF Piston
Replacing
Hydrodyne Accumulator Piston Part#980075-1 &
York Accumulator Piston Part#08-90024-3

Introduction

MBA has designed a new material, AeroTough GF which is used to manufacture new pistons to replace the OEM Hydrodyne and/or York Accumulator piston. The piston from OEM part numbers 980075-1(Hydrodyne) and 08-90024-3(York) will be replaced with part number MBA10073 and MBA10134, respectively. Every AeroTough GF piston will ship with the seals installed and will come with a set of instructions for installation (II0007) and a MBA Maintenance Manual Supplement (MMS0007). MMS0007 is to be used after installation of product.

Aerostar Maintenance Manual

No change is required in the Aerostar Maintenance Manual. The AeroTough GF piston is designed to be used in accordance with the same installation procedure as the original part in the Aerostar MM Chapter 29-17-00.

Aircraft Information

Designed for installation in:

- a) Hydrodyne Accumulator p/n 980075-1 and
- b) York Accumulator p/n 08-90024-3

Utilized on: Aerostar PA-60-600, PA-60-601, PA-60-601P, PA-60-602P, PA-60-700P

Piston part number MBA10073 or MBA10134 will be operated when the flaps need to be lowered or raised as well as for gear retracting/extension and nose wheel steering. Aviation grade lubrication and oils suggested by the OEM must be used with MBAs AeroTough GF piston. Reference the Aerostar MM Chapter 12.

Maintenance Instructions

Troubleshooting

Contact MBA if you have any abnormal occurrences related to the operation of the accumulator following the MBA10073 or MBA10134 installation.

Removing/Replacing Part

Remove/replace OEM part by following the Aerostar MM under Chapter 29-17-00. If the MBA part is being removed/replaced, follow the same procedures as the Aerostar MM Chapter 29-17-00.

Post-Installation Checks

When MBAs piston has been installed, proceed to conduct the necessary checks stated by the Aerostar MM Chapter 12-13-02 (Accumulator Servicing) and Chapter 29-17-00 (Adjustment/Test for Piston Type).

Airworthiness Limitations

Mandatory Replacement Time: MBA AeroTough GF pistons with seals will be replaced on condition when deemed necessary to continue proper serviceability of the accumulator.

Inspection Interval: The function of the accumulator with the replacement parts will be verified annually as a minimum.

For Canadian Registered Aircraft: The Airworthiness Limitations section is approved by the Minister and specifies maintenance required under any applicable airworthiness or operating rule, unless an alternative program has been approved by the Minister.

For U.S. Registered Aircraft: The Airworthiness Limitations section is FAA approved and specifies maintenance required under §§ 43.16 and 91.403 of the Federal Aviation Regulations unless an alternative program has been FAA approved.

**Instructions for Continued Airworthiness
MBA Maintenance Manual Supplement for Seals
Replacing
Hydrodyne Accumulator Piston O-Ring Seal &
York Accumulator Piston O-Ring Seal**

Introduction

The original design of the accumulator piston has been changed to incorporate new MBA seals which have lips on the pressure side of the application to allow better sealing and performance. The seal lips flex when pressurized. The MBA seals also incorporate a proprietary advanced material allowing for minimal friction. MBA seals, MBA10076 (Hydrodyne) and MBA10147 (York), will be installed on the AeroTough GF piston before it is sent to the customer. Each assembly will contain a set of instructions for installation and a MBA Maintenance Manual Supplement. This document, MMS0007, is to be used after installation of the product.

Aerostar Maintenance Manual

The seals are designed to utilize the same installation procedure as the original part as mentioned in the Aerostar MM Chapter 29-17-00.

Aircraft Information

MBA seals are only designed to be installed on the MBA designed pistons. Their design is not compatible with the OEM piston.

Maintenance Instructions

Inspection Program

Visually check the MBA seal lips for any cracking or splitting using a 10x magnifier.

Troubleshooting

Problem	Solution
There is hydraulic fluid leaking past the MBA seal to the nitrogen side of the accumulator.	a) Visually check the seal lips for cracking or splitting using a 10x magnifier. If damage is found contact MBA for a replacement seal. b) Visually inspect the accumulator cylinder bore for damage. Contact MBA for assistance with correcting damage to the bore.



Removing/Replacing Part

Remove OEM part by following the Aerostar MM under Chapter 29. If needed, MBA will replace the seals on the MBA accumulator.

Post-Installation Checks

Visually inspect the seal after installation to ensure no damage occurred during the installation process. MBA recommends using a minimum 10x power magnifying lens and a light during the post-installation inspection. Ensure that the lips are facing the pressure side of the application, and the seal lips are NOT facing each other. Follow the instructions in the Aerostar MM Chapter 29-17-00 to verify correct installation and operation.

Airworthiness Limitations

Mandatory Replacement Time: MBA seals will be replaced on condition when deemed necessary to continue proper serviceability of the accumulator.

Inspection Interval: The function of the accumulator with the replacement parts will be verified annually as a minimum.

For Canadian Registered Aircraft: The Airworthiness Limitations section is approved by the Minister and specifies maintenance required under any applicable airworthiness or operating rule, unless an alternative program has been approved by the Minister.

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REVISION HISTORY TABLE

Revision	Revision Date	Signature
Original	May 5, 2017	