RAP R82: Service and Adjustment Procedure Dashpot 09/06/11

Shafer Dashpot Service and Adjustment





The purpose of this procedure is to guide and verify the disassembly, repair and assembly of a Shafer Dashpot.

This procedure is to be used in conjunction with the following drawings

Shafer Dashpot Assembly	58630

Preparation

WARNING: Before beginning work on a Shafer Actuator Valve Operating System or any actuator using pressurized gas:

- 1. Turn power oil off.
- 2. Bleed down the power storage tank if applicable.
- 3. Move control handles back and forth to relieve pressure from poppet block.
- 4. Turn pilot gas off (if applicable).

REMOVAL AND DISASSEMBLY

- 1. Shut off the return line valve.
- 2. Remove tubing from the shuttle valve on top of Dashpot.
- 3. Remove the four mounting bolts from the left side of the Dashpot and remove the Dashpot, also remove the two o-rings that are between the Dashpot and the Poppet Block. (See Figure
 - 1).



Figure 1: View of Poppet Block with Dashpot

- 4. Place the Dashpot (item 1) in a vice.
- 5. Remove end caps (items 4 & 5) and o-rings (items 9 & 12), see Figure 2.
- 6. With a blunt object push piston stem (item 3) and piston (item 2) out of the Dashpot.
- 7. Remove wear rings (item 8), o-ring (item 6) and back-up ring (item 7) from the piston.
- 8. Remove o-ring (item 10) and back-up ring (item 11) from the piston stem.



Figure 2: Cut-Away View of Dashpot

CLEAN AND INSPECT

- 1. Remove all o-rings and wear bands.
- 2. Thoroughly clean and inspect all components.

ASSEMBLY AND TEST

- Using o-ring grease install o-ring (item 10) and backup ring (item 11) on piston stem (item 3).
- 2. Grease piston stem and insert into Dashpot body (item 1) as seen in Figure 2.
- 3. Using o-ring grease install o-ring (item 6) and back-up ring (item 7) on piston (item 2).
- 4. Install wear rings (item 8) on piston (item 2).

- 5. Grease piston and insert into Dashpot body (item 1) as seen in Figure 2.
- 6. Using o-ring grease install o-rings (items 9 & 12) on end caps (items 4 & 5).
- 7. Install end caps (items 4 & 5) on Dashpot (item 1) and tighten.
- 8. Using o-ring grease install o-rings on the two 1/8" ports on the side of the Dashpot.
- 9. Install Dashpot using the four mounting bolts.
- 10. Reinstall the tubing to the shuttle valve.
- 11. Open the return line.
- 12. Turn pilot gas on (if applicable).
- 13. Open power oil valve.
- 14. Stroke the actuator to purge the Dashpot and look for leaks.

Dashpot Parts List



BILL OF MATERIAL				
ITEM	QUAN.	DESCRIPTION	DWG.	
1	1	BODY 6061-T6 ALUM		
2	1	PISTON 6061-T6 ALUM		
3	1	PISTON STEM 6061-T6 ALUM		
4	1	END CAP		
5	1	END CAP		
6	1	O-RING PRP-568-121- 70 DURO		
7	1	BACK-UP RING #2103-121	TEFLON	
8	2	PISTON WEAR RING GLASS FILLED	TEFLON	
9	1	O-RING PRP-568-126	70 DURO	
10	1	O-RING PRP-568-113	70 DURO	
11	1	BACK-UP RING #2103-113	TEFLON	
12	1	O-RING PRP-568-118	70 DURO	

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If any further information is required, please feel free to contact:

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Please visit our website for up to date product data. www.shafervalve.com

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