

## ACM-400 (S-SERIES) AIR SHIFT INSTALLATION

## **DETENT REMOVAL**

- 1. Remove Detent Cap, item #1; Lockwasher, item #2; Spring, item #3; and Ball, item #4.
- 2. Remove two Capscrews, item #5, and slide Detent End Cap, item #6, and Cover Plate, item #7 off the Spool.
- 3. Do not remove Quad Seal, item #8, from Valve Housing.
- 4. Clean mounting face of Valve Body and Spool to remove dirt, grease, and paint.
- 5. Continue with Air-Shift Installation Instructions.

## **SPRING RETURN REMOVAL**

- 1. Remove Spirol Pin, item #1, from Spool, End Cap, retain for re-use.
- 2. Remove two Capscrews, item #2, and slide Spring-Return End Cap, item #3, off the Spool and Spring Return assembly.
- 3. Remove Spool with Spring-Return assembly from Valve Body Cover Plate, item #4, and Quad Seal, item #5, will come off with Spool. Once Spool is removed from Valve Body, remove Cover Plate and Quad Seal from Spool. Retain Quad Seal for re-use.
- Compress Spring by pushing against Spring Guide, item #6, to expose Retaining Ring, item #7. (This may require the use of an Arbor Press; force to compress Spring is 50-55 lbs.). Remove Retaining Ring.
- 5. Remove Spring, item #8; Spring Guide, item #9; and Retaining Ring, item #10.

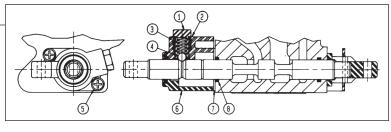
## ACM-400 INSTALLATION

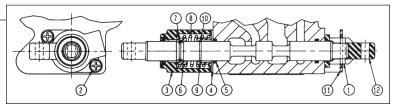
ITEM	QTY	PART NUMBER	DESCRIPTION
1-5	1	PS-1400-AV	Piston Sub-Assembly
1			Piston
23			Quad Seal Ring*
			Spring Retainer
45			Spring
5			Wire Ring
6	1	PS-1402-AV	Spring Retainer
7	1	PS-1406-AV	"Ò" Rǐng
8	1	PS-1403-AV	"O" Ring
9	1	PS-1404-AV	Clevis Pin
10	1	PS-1405-AV	Snap Ring
11	1	PS-1407-AV	Pressure Cap

- 1. Place Spring Retainer, item #6, and "0"ring, item #7, over Spool, and locate against Valve Body.
- 2. Carefully locate "O"ring, item #8, into large detent groove of Spool. Apply light coating of grease to "O"ring.
- 3. While holding opposite end of Spool push on piston sub-assembly until piston hole lines up with spool hole. Slide in Clevis Pin, item #9, and attach Snap Ring, item #10.
- 4. Pressure Cap, item #11, should be positioned over this assembly and located against Valve Body. Attach with 2 Cap Screws, item #12. After Cap Screws are finger tight, move Spool (from other end) to ensure centering of the Air-Shift assembly. Tighten Cap Screws to 12 ft-lbs torque.

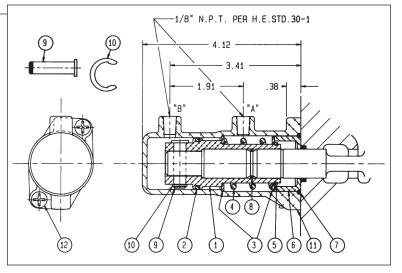


Muncie Power Products, Inc. Member of the Interpump Hydraulics Group General Offices and Distribution Center • P.O. Box 548 • Muncie, IN 47308-0548 (765) 284-7721 • FAX (765) 284-6991 • E-mail info@munciepower.com Web site http://www.munciepower.com Drive Products, Exclusive Agents for Canada, ISO Certified by an Accredited Registrar





- 6. Clean mounting face of Valve Body and Spool to remove dirt, grease, and paint.
- 7. Lightly oil Spool and slide into Valve Body.
- 8. Align hole in Spool with slotted hole in Spool End Cap, item #12, and install Spiral Pin, item #1. Spiral Pin should not interfere with Bracket, item #11, when Spool is operated.
- 9. Slide Quad Seal, item #5, over spool and locate in counterbore in valve body.
- 10. Continue with Air-Shift Installation Instructions.



- 5. Cut Air Line to required length. Connect Air Supply to Control Valve and Control Valve to Shift Kit. Check operation of Spool.
  - a. Minimum air pressure required: 80 psi.
  - b. Air supplied to Port "A" shifts Spool to RAISE position.
  - c. Air supplied to Port "B" shifts Spool to LOWER position.
  - d. Air Dryer or Water Filter in the Air Supply recommended for proper cold weather operation.

IN02-04 Printed in the U.S.A. ©Muncie Power Products, Inc. 2002