



### 175H Caliper Disc Brake Hydraulic Brake Retractable Piston, Aluminum Housing

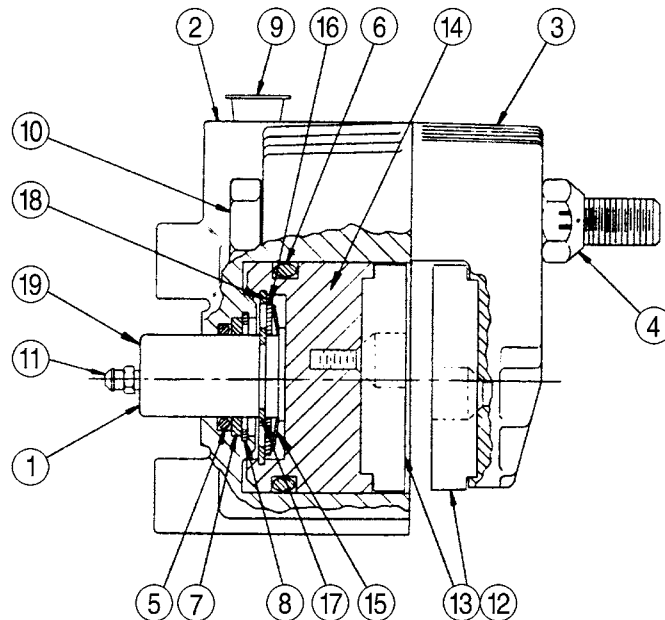
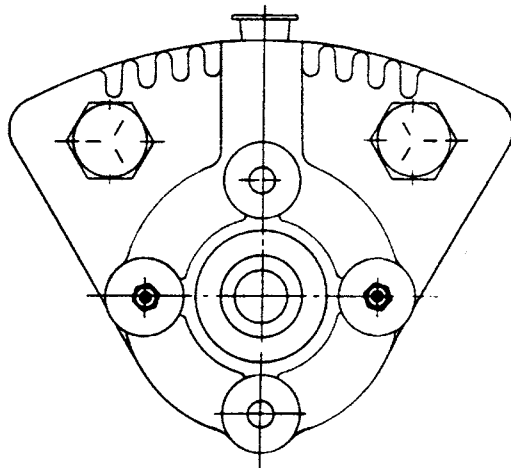
#### MODELS AVAILABLE:

##### Automotive Brake Fluid

- 3010-0001 No Linings
- 3010-0101 Soft Linings
- 3010-0201 Hard Linings

##### Mineral Base (Red) Fluid

- 3010-0000 No Linings
- 3010-0100 Soft Linings
- 3010-0200 Hard Linings



### Parts List

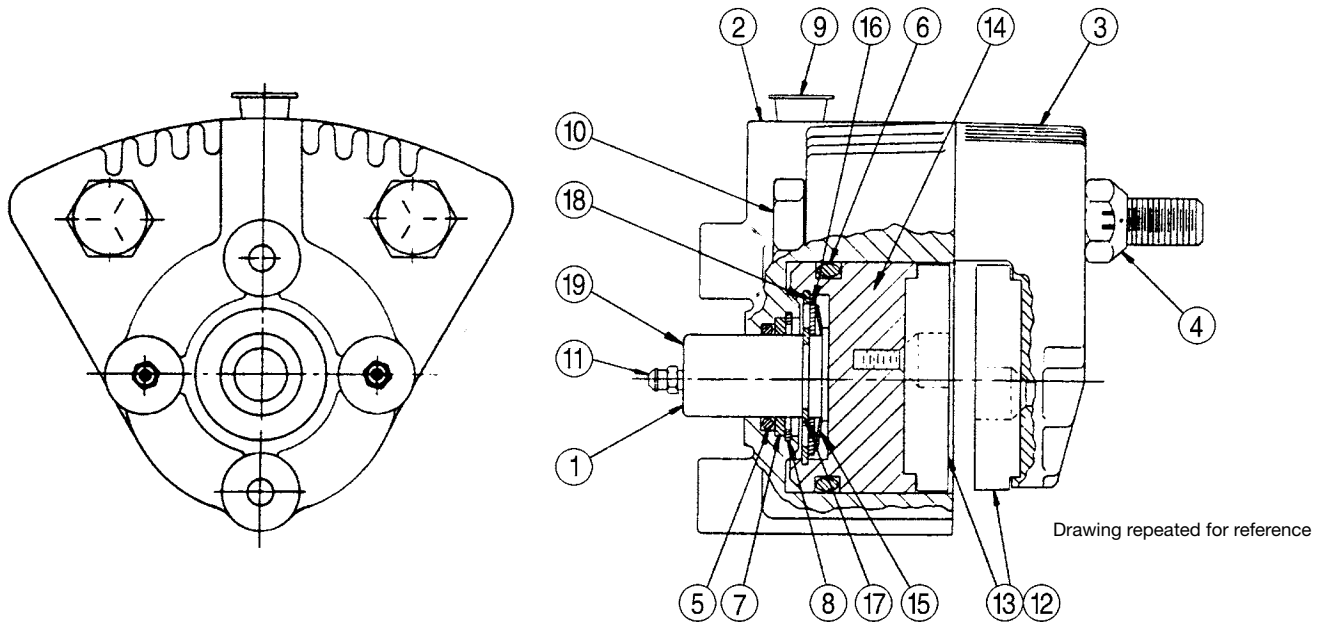
ITEM	PART NO.	DESCRIPTION	Quantity					
			3010-0000	3010-0100	3010-0200	3010-0001	3010-0101	3010-0201
§1.	3010-1001	Piston Body	1	1	1	1	1	1
2.	3010-1006	175 Housing, Mineral Fluid	1	1	1			
	3010-1013	175 Housing, Automotive Brake Fluid				1	1	1
3.	3010-1008	Anvil	1	1	1	1	1	1
4.	0720-1008	Lock Nut	2	2	2	2	2	2
*5.	3005-1012	O-Ring, Buna-N	1	1	1			
	3025-1014	O-Ring, EPR				1	1	1
*6.	1001-1075	O-Ring, Buna-N	1	1	1			
	3025-1013	O-Ring, EPR				1	1	1
*7.	3005-1015	Drag Ring	1	1	1	1	1	1
*8.	3005-1017	Retaining Ring	1	1	1	1	1	1
9.	3005-1018	Caplug	1	1	1	1	1	1
10.	3010-1011	Hex Head Bolt, Grade 5, 3.0"	2	2	2	2	2	2

ITEM	PART NO.	DESCRIPTION	Quantity					
			3010-0000	3010-0100	3010-0200	3010-0001	3010-0101	3010-0201
11.	0720-1099	Bleeder Screw, 1/4-28 NPT	2	2	2	2	2	2
12.	3005-1027	Flat Head Screw, .50" NC		2	2		2	2
13.	3010-1014	Hard Lining			2			2
	3010-1015	Soft Lining		2			2	
*§14.	3010-1000	Piston	1	1	1	1	1	1
§15.	3010-1002	Belleville Spring Washer	1	1	1	1	1	1
§16.	3010-1003	Washer	1	1	1	1	1	1
§17.	3010-1004	Inner Retaining Ring	1	1	1	1	1	1
*§18.	3005-1004	Outer Retaining Ring	1	1	1	1	1	1
§19.	3010-9000	Piston Body Subassembly	1	1	1	1	1	1

\* Overhaul Kit 3010-9004 [Automotive Brake Fluid]

Overhaul Kit 3010-9001 [Mineral Base (Red) Fluid]

§Available only in Piston/Body Subassembly 3010-9000



### INSTALLATION

Mount the brake using the two SAE Grade 5 hex bolts. Tighten the nuts to 20 ft-lbs (27.12 N-m). Care must be taken when mounting the brake that the lining faces are parallel to the disc. Use shims, if required. To prevent excessive wear, be sure the disc does not rub against the linings when the piston is retracted. Disc must be kept free of dirt and grease for maximum life and braking action.

**MAKE CERTAIN THAT THE SEALS IN THE CALIPER ARE COMPATIBLE WITH THE FLUID BEING USED.**

***EPR SEALS - ARE FOR USE WITH AUTOMOTIVE BRAKE FLUID ONLY.***

***BUNA-N SEALS - ARE FOR USE WITH MINERAL BASE (RED) FLUID ONLY.***

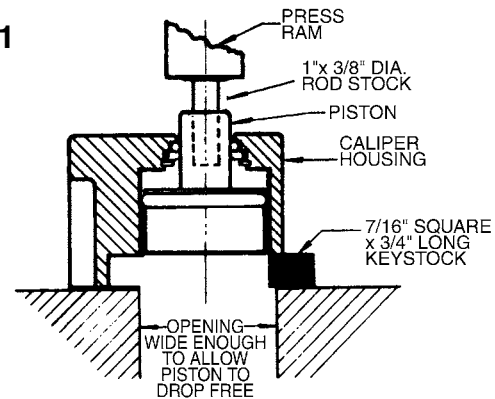
NOTE: EPR Seals are included in Overhaul Kit 3010-9004 [Automotive Brake Fluid]. Buna-N Seals are included in Overhaul Kit 3010-9001 [Mineral Base (Red) Fluid].

Caliper must be mounted at the 3 o'clock or 9 o'clock position for proper bleeding to take place. Bleed through the topmost bleeder only. If the brake is not mounted in this position, it must be removed and held in this position with a 1/8" shim between the linings while bleeding.

### DISASSEMBLY

1. Disconnect the hydraulic lines and remove the brake from its mounting.

**FIG. 1**



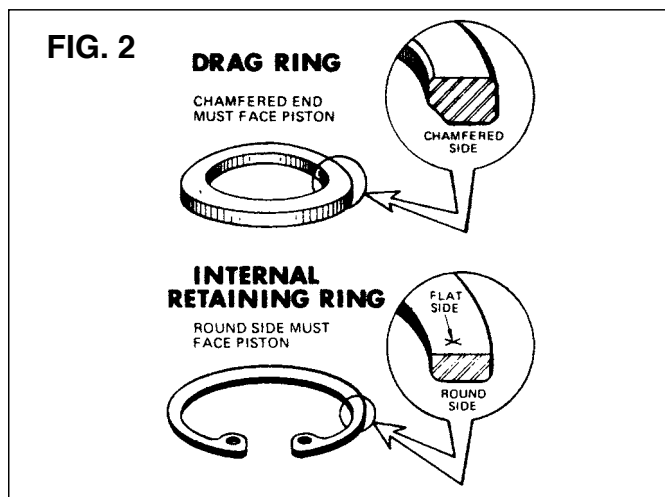
2. Remove the Bleeder Screws (#11).
3. Remove the Anvil Housing (#3).
4. Position the brake housing on an arbor press bed with the bore facing down. Insert the end of a 1" long piece of 3/8" diameter steel rod stock into the top of the Piston Body Subassembly (#19). Then, press the Piston Subassembly free from the Housing (#2).
5. Remove the Internal Retaining Ring (#8) with a retaining ring pliers.
6. Remove the small O-Ring (#5) from its recess in the Housing (use a needle or O-Ring pick to pry the O-Rings out of the

grooves). Then, remove the large O-Ring (#6) from its groove on the Piston Subassembly.

7. Clean the caliper housing with solvent and a stiff brush. Dry the caliper thoroughly with compressed air, or allow sufficient time for the solvent to thoroughly evaporate before reassembling. DO NOT soak the Piston Body Subassembly (#19) in solvent. Instead, wipe it clean with a lint free towel moistened with solvent. DO NOT disassemble the Piston Body Subassembly.

#### REASSEMBLY

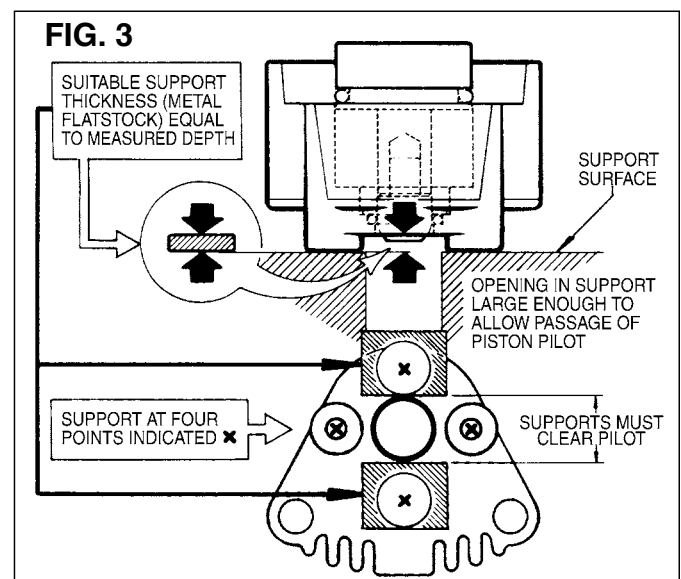
1. Lubricate the large O-Ring (#6) and the small O-Ring (#5), the Piston Body Subassembly (#19) and the Housing (#2) bore with the appropriate fluid [Mineral base (Red) fluid for calipers with Buna-N seals, Automotive brake fluid for calipers with EPR seals] before reassembly.
2. Install the large O-Ring (#6) on the Piston Body Subassembly (#19). Then, install the small O-Ring (#5) in the recess of the Housing (#2).
3. Next, prepare to install the Drag Ring (#7). Notice that there is a large chamfer on one edge of the inside diameter of the Drag Ring. The Drag ring must be installed in its recess in the Housing with the chamfered end facing TOWARDS the Piston Body Subassembly.



4. Install the Internal Retaining Ring (#8) into its recess in the Housing (#2) with the round side of the ring facing out towards the Piston Subassembly (#19).
5. Set the caliper Housing down with the open bore facing upward on the bed of an arbor press. Make certain to support the Housing equally, using two pieces of flat keystone 7/16" square by 3/4" long. It is CRITICAL that the piston and the bore be parallel when the assembly is pressed together.
6. Hold the Piston Body upward. Place the Pilot Pin\* (P/N 3005-1045) in the stem of the Piston Body. Lower the Housing (#2) over the Piston (#14) and Pilot Pin. Hold assembly firmly together in hands and turn upside-down after the bullet nose

of the Pilot Pin enters the Drag Ring (#7). Place the Housing over opening of the arbor press bed that will clear the passage of the Pilot Pin and the Piston. The two pieces of keystone must be positioned on the press bed to support the circular faced areas but must not interfere with free passage of the Piston and Pilot Pin.

7. **CAUTION:** The Piston (#14) should enter the bore of the Housing (#2) and the stem of the Piston Body (#1) should move through the Drag Ring (#7) without any pressure buildup (hydraulic press). Resistance to assembly indicates that the set-up is faulty. Inspect and correct misalignment as indicated. Press the piston in until it bottoms in bore of Housing.
8. Next, install the new friction Lining (#13) in the Piston (#14) using one Flat Head Screw (#12). Install the other new Lining in the Anvil Housing (#3), using the other Flat Head Screw.
9. Reinstall the Bleeder Screws (#11). DO NOT tighten Bleeder Screws excessively, or the threads may be damaged.
10. Put the Housing (#2) and the Anvil Housing (#3) together, using the two Grade 5 bolts (#10) and the Lock Nuts (#4). Then, remount the brake, tightening the bolts to 20 ft-lbs (27.12 N-m).



**MAXIMUM OPERATING PRESSURE: 1000 PSI**

11. Bleed the brake accordingly.

\*NOTE: Pilot Pin 3005-1045 must be ordered separately from the Airheart® Brake Company.

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