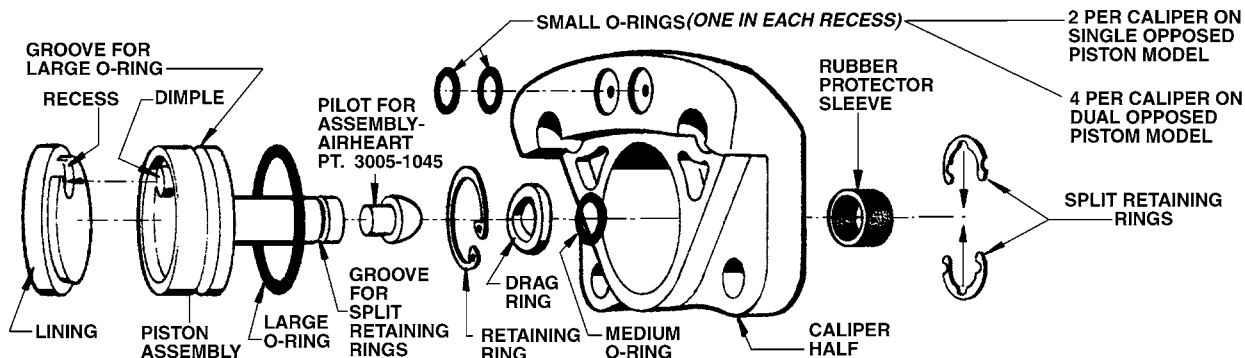


175-06

HYDRAULIC CALIPERS

OVERHAUL KIT – 3015-9000 for Single Piston Units OVERHAUL KIT – 3020-9002 for Dual Piston Units



WARNING

Wear eye protection, gloves, and clothing during installation. Brake fluid may cause eye irritation. In case of eye contact, flush with water for 20 minutes and get immediate medical attention.

DISASSEMBLY:

- (1) Remove and discard split retaining rings and old rubber protector sleeves. The rings may be separated by inserting the blade of a small screwdriver between one of the joints in the ring halves and twisting.
- (2) Remove 3/8" bolts which hold the caliper halves together. Discard small o-rings.
- (3) Remove pistons by inserting a 3/8" bolt into the drilled end of retainer body and tapping with a mallet. As piston approaches end of bore, tap cautiously to avoid dropping piston. Remove worn pucks. Be sure all lining material and adhesive is removed from piston or cracking of new linings may occur.
- (4) Using a sharp needle or pin, pick out the large o-ring and discard. Be careful not to damage piston or bore since any scratches may cause leakage and brake failure.
- (5) Remove retaining ring, drag ring, and medium o-ring from caliper housing and discard o-ring and drag ring.

NOTE:

THE DRAG RING IS PURPOSELY DEFORMED AND IS NOT EXACTLY ROUND. **DO NOT** ATTEMPT TO OPEN UP HOLE WITH A DRILL, ETC. PISTONS WILL NOT RETRACT CORRECTLY IF DRAG RING IS ALTERED.

- (6) Clean the caliper halves by soaking in solvent and brushing, or clean as well as possible. **DO NOT** soak the piston and body assemblies in solvent. Merely wipe them. If especially grimy, wipe them with a cloth moistened with solvent.

PRE-ASSEMBLY:

- (1) Inspect caliper, piston and all internal parts for cracks, scores or any defects. Replace any defective parts.
- (2) Lubricate all o-rings and bore of caliper with a light coat of brake lubricant or vegetable base shortening. Do not get any lubricant on area of piston where lining will be installed.

ASSEMBLY:

- (1) All parts must be dry before re-assembling. Allow time for solvent to evaporate, or blow dry (solvent will damage o-rings). Install large and medium size o-rings.
- (2) Install new drag ring with radiused side of inside diameter facing retaining ring. Install retaining ring.
- (3) Lubricate the body lightly with brake lubricant or vegetable base shortening. Lay a caliper half on the parallel support blocks on the press with the bore facing upward. Set the bullet-nose of the pilot into the center hole of the cylinder-bore. Set the hole in the end of the body over the stem of the pilot and prepare to press the piston into the bore.

CAUTION

EXERCISE CARE AS YOU PRESS PISTON INTO BORE. MAKE SURE THAT PISTON IS CENTERED AND SQUARE BEFORE IT ENTERS BORE OF CALIPER. OBSERVE O-RING AS IT ENTERS BORE – DO NOT ALLOW O-RING TO BE PINCHED. PRESS PISTON DOWN AS FAR AS IT WILL GO. DO NOT USE EXCESSIVE FORCE ON PISTON AS THIS WILL CAUSE THE HOUSING TO BREAK.

- (4) When all pistons are pressed in place, prepare to attach the pucks. Put a dab of 3M trim adhesive about as big around as a dime and less than half as thick onto the center of each piston. Put the same size dab on each puck. Do not use too much cement as it will contaminate the bore. Set the pucks into place making sure that each shallow hole goes over the anti-rotation lug on the piston. Allow a half hour for the cement to cure partially. Be careful to avoid disturbing the pucks when handling caliper.
- (5) Put the small o-rings into the recesses of the caliper half which has the mounting lugs. Exercise care to keep the small o-rings in place, fasten the caliper halves together. Tighten bolts evenly to 20 lb.-ft. with a torque wrench. A torque wrench must be used. Excessive tightening can damage the calipers. Insufficient tightening will result in excessive flexure and possible drag.
- (6) Slip rubber protector sleeves over bodies. Snap split retaining rings into place.
- (7) Install caliper on vehicle and reconnect brake line.
- (8) Completely bleed air from brake system. Air trapped in lines can cause loss of pedal and spongy feeling on brake.
- (9) New linings must be burnished before full braking potential may be realized.