

Autogap Installation for Size 500 Basic Brakes & Clutches

P-1381
819-0112

Installation Instructions

⚠ WARNING Failure to follow these instructions may result in product damage, equipment damage, and serious or fatal injury to personnel.

Be sure that straight springs do not get caught under shoulder of drive pins.

Assembly Instructions Brake or Clutch Coupling Installation

Step 1

Place straight springs over armature boss on back side of armature.



Step 2

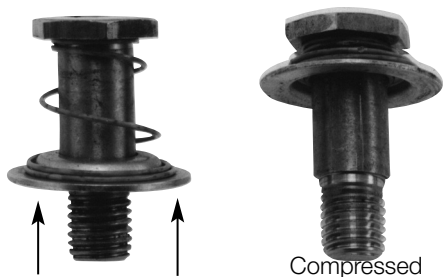
Place armature hub over straight springs assembled in Step 1.



Straight springs must fit into grooves in armature hub.

Step 3

Compress conical spring against retainer ring by sliding detent spring towards head of all 3 pins.



Step 4

Insert assembled drive pins through armature hub, through straight springs and into threaded holes in back of armature. Drive pins require application of Grade "AA" Loctite® Sealant on threads.

Step 5

Draw drive pins up tightly until shoulder of pin is against face of armature boss, (since threads are class No. 3 fit, pins may seem to bind).

Step 6

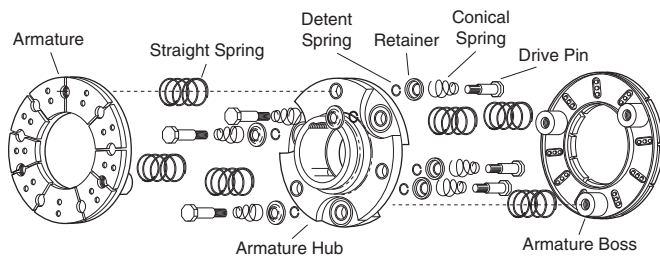
Compress the retainers against the armature hub and check to see that the armature hub is held tightly to the armature bosses. This position must not be disturbed during completion of assembly.

Step 7

Slide the armature and armature hub with taperlock bushing over the shaft. Place armature face approximately 1/32" from the magnet face and secure the taperlock bushing to the shaft. This gap will be automatically maintained throughout the life of the unit. The unit should be checked for concentricity and squareness to the shaft by means of a dial indicator. The unit should be concentric to the shaft within .010 T.I.R. and square to the shaft within .006 T.I.R.



Autogap Installation for Clutch/Brake Combination



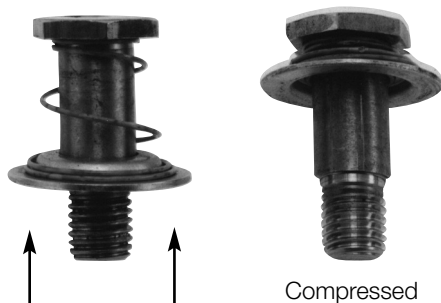
Step 1

Place straight springs over armature bosses on back side of both armatures.



Step 2

Compress conical spring against retainer ring by sliding detent spring towards head of all 6 pins.



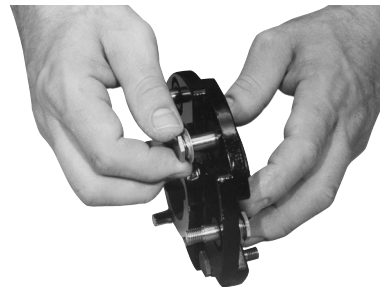
Step 3

Insert (3) of the compressed drive pins through the armature hub so that the threaded end of the pins comes through on the side of the armature hub with the groove around the hole.



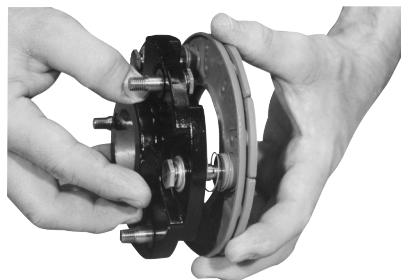
Step 4

Repeat Step 3 above for the remaining (3) drive pins inserting them from opposite side of armature hub through remaining (3) holes.



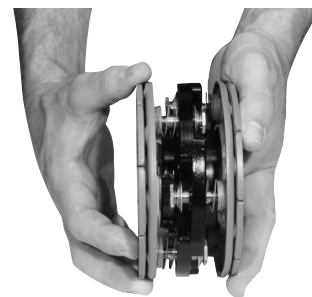
Step 5

Holding the pins in position. Place the armature hub over one armature. Note: Make sure that the straight springs on the armature bosses fit into the grooves in the armature hub. Drive pins require application of Grade "AA" Loctite Sealant on threads.



Step 6

Draw these (3) drive pins up tightly until shoulder of pin is against face of armature boss (since threads are class No. 3 fit, pins may seem to bind.)



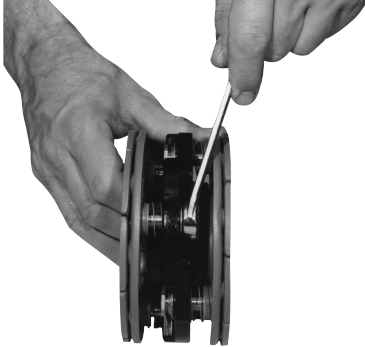
Step 7

Place the armature hub and armature assembled in steps 5 & 6 over the remaining armature.

Note: Make sure that the three remaining straight springs on the armature bosses fit into the grooves in the armature hub. Drive pins require application of Grade "AA" Loctite Sealant on threads.

Step 8

Draw drive pins up tightly until shoulder of pin is against face of armature boss, (since threads are class No. 3 fit, pins may seem to bind). **Note:** Rotate tightening of drive pins tightening each drive pin a few turns at a time.



Step 9

Compress one of the armatures and armature hub together until the armature hub bottoms on the armature boss. On each pin, slide the retainer down tightly against the armature hub. Turn the assembly over and repeat this procedure for remaining armature.

Note: This position must not be disturbed during completion of assembly.



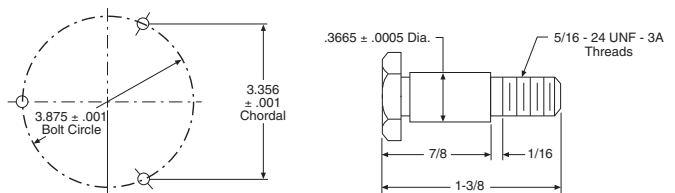
Step 10

Slide the assembly with taperlock bushing over the shaft. Place the face of the armature approximately 1/32" from the brake magnet face and fix the taperlock bushing to the shaft.

Step 11

Place the clutch magnet approximately 1/32" from the armature face, and tighten the taperlock bushing to the shaft. The unit should then be checked for concentricity and squareness to the shaft by means of a dial indicator. The unit should be concentric to the shaft within .010 T.I.R. and square to the shaft within .006 T.I.R. With the previous steps followed, the autogap will maintain automatic adjustment for wear throughout the life of the unit.

Machining Instructions for Gear, Sprocket, or Pulley



As in the case of a clutch, the customer may wish to mount the armature to his pulley, hub, etc. These dimensions must be followed for adaptation to the armature.

1. The chordal dimension must be held for all chords between pin holes.
2. Sleeve bearings (Oilite Bronze) must be provided in the holes of pulley or hub with an I.D. of $.376 \pm .001$ at the chordal and bolt circle dimensions shown above.
3. The drive pins must be square with plane of mounting surface and magnet within .006 T.I.R.

Our standard armature hub may also be used for the mounting of a gear, sprocket or pulley.

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