

Autogap Installation for Sizes 825-1525 Basic Brakes & Clutches

Installation Instructions

P-1366-WE
819-0016



An **Altra Industrial Motion** Company

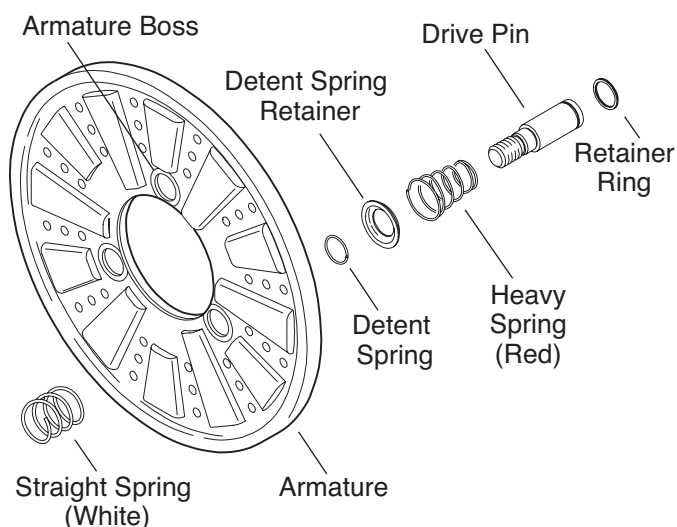
⚠ WARNING Failure to follow these instructions may result in product damage, equipment damage, and serious or fatal injury to personnel.



Scan to watch!

Normal Duty Clutch or Brake Autogap
Installation and Settings Video

<https://p.widencdn.net/vbwwid/V-0087-WE>



Assembly Instructions

Step 1. Place white springs over the armature bosses on back side of armature. (See Figure 1)



Figure 1

Step 2. Place the brake hub or your sheave or sprocket over the white springs and turn the armature over so that it is friction face up. (See Figure 2)



Figure 2

Step 3. Compress heavy spring (red) against retainer ring by sliding detent spring towards head of pin. (See Figure 3)



Compressed

Figure 3

Drive Pins Should be Retained with Threadlocker

Before installing the drive pins, apply a good grade of thread threadlocker such as Loctite®, or equivalent, to the threaded portion only. Caution must be taken to prevent the threadlocker from getting on the bearing surface of the pin.

Step 4. Insert the drive pins through the friction face side of the armature (segmented side) and tighten into the hub or your sheave or sprocket. (See Figure 4)

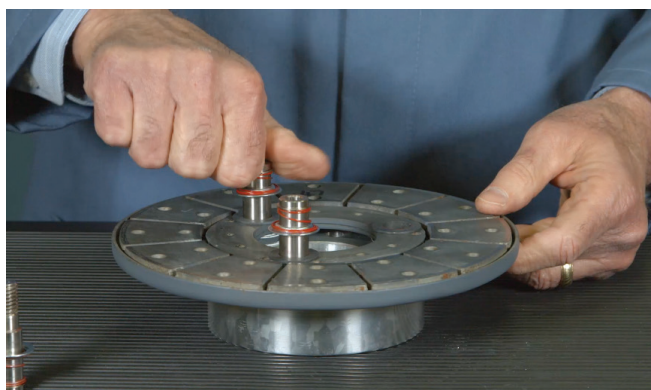


Figure 4

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

Step 5. Draw drive pins up tightly until shoulder of the pin is against the face of the hub or of your sheave or sprocket (since threads are class No. 3, pins may seem to bind)

Step 6. Check to see that the armature is completely compressed against the face of the hub. To set the autogap, slide the detent spring retainers against the armature face. (See Figure 5)

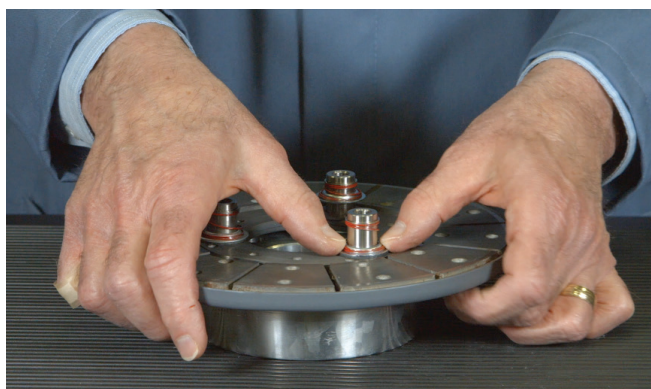


Figure 5

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

Step 7. Loosely assemble the armature and hub to a taperlock bushing or assemble the armature and sheave or sprocket to your bearing that will support the assembly.

Step 8. Slide this assembly onto the machine shaft until the face of the armature contacts the face of the magnet or rotor. Slide the assembly back to provide a clearance of 1/16th inch between the armature and the magnet or rotor face. Tighten the bushing or secure the bearing for your sheave or sprocket.

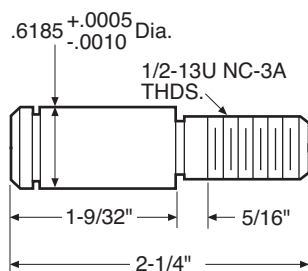
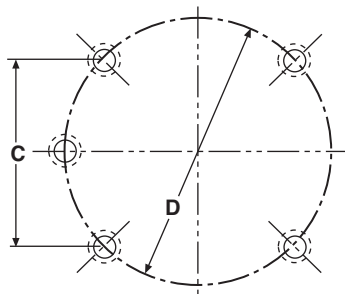
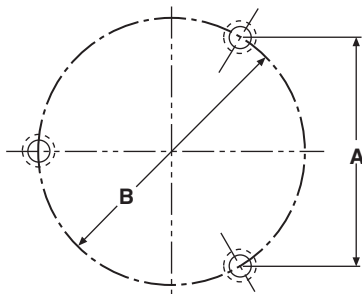
Step 9. Check the assembly by pressing the armature into contact with the friction face and then releasing. The armature should spring back approximately 3/64 inch. This gap will be automatically maintained through the life of the unit.

Note: During the assembly of the clutch or brake components, the units must be checked for concentricity and squareness to the shaft. This is accomplished by using a dial indicator. The following table gives the check points and tolerances. (See Figure 6 on next page)

Unit	PB - Primary Brake		SF - Stationary Field Clutch		
Part Check	Magnet	Armature	Rotor	Field	Armature
Concentricity	.010 T.I.R. Outside Diameter	.010 T.I.R. Drive Pins	.006 T.I.R. Pilot Dia. I.D.	.006 T.I.R. Outside Diameter	.006 T.I.R. Drive Pins
Squareness	.006 T.I.R. Outer Pole of Face	.006 T.I.R. Face		.006 T.I.R. Outer Pole of Face	.006 T.I.R. Face

Figure 6 - Tolerance Table

Machining Instructions for Gear, Sprocket, or Pulley



For Sizes 825 through 1525

Unit Size	A	B
825	$3.085 \pm .001$	$3.563 \pm .001$
1000	$4.548 \pm .002$	$5.252 \pm .002$
Unit Size	C	D
1225	$4.155 \pm .002$	$5.877 \pm .002$
1525	$6.010 \pm .002$	$8.500 \pm .002$

1. Chordal dimensions "A" or "C" must be held for all chords between pin holes.
2. Drill $27/64$ inch diameter holes to a sufficient depth and tap for $1/2-13\ NC-3A$ one inch minimum full threads. Pin holes must be square with plane of mounting surface and magnet mounting.
3. Ream $.500/.501$ to a $3/8$ inch depth and to be concentric with tapped holes.

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

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