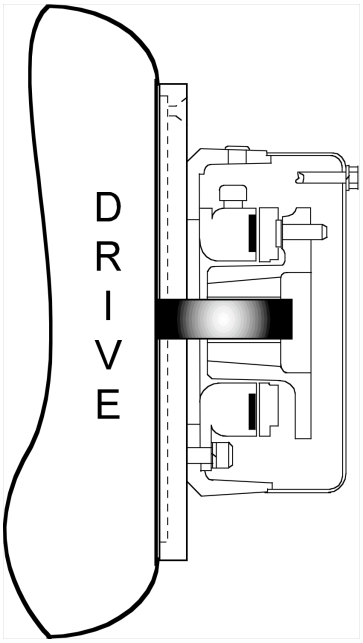
Inertia Dynamics Dynacorp Clutches and Brakes

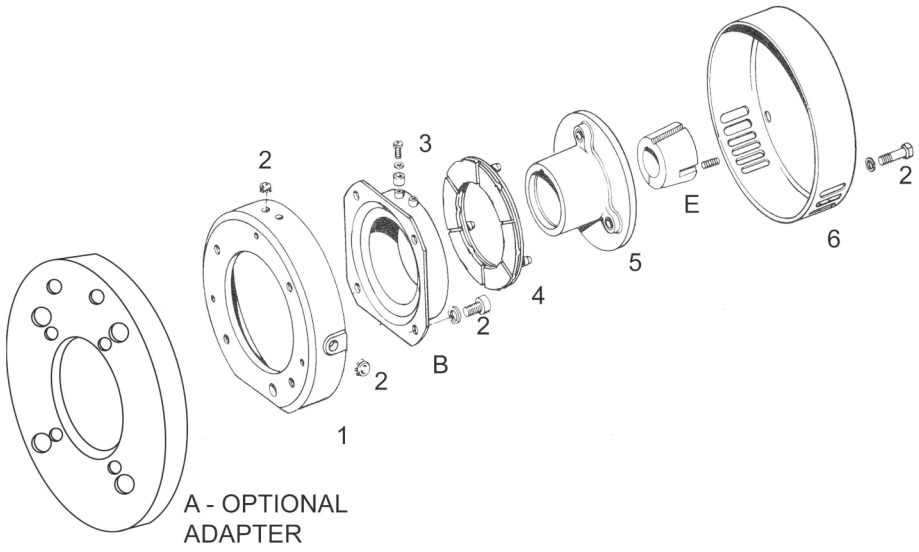
Assembly Instructions and Repair Parts

305062-40 Friction Brake for Eddy Current Drives – 90VDC Magnet, 1-1/8 Shaft, Pin Drive
305062-49 Friction Brake for Eddy Current Drives – 45VDC Magnet, 1-1/8 Shaft, Pin Drive

Product Function
Stop, Power Applied Product: Stops when DC power is applied to Brake magnet.

Parts





Item	Quantity	305062-40	305062-49	Description
A	1	305782	305782	Adapter 8-1/2 to 4-1/2 Pilot
1	1	305780-1	305780-1	Cast Adapter
2	1	326578	326578	Motor Brake Mounting Accessories
3	1	326146-1	326146-1	Brake Magnet Accessories
B	1			Brake Magnet
		305354		90 Volt DC (219 Ohms, .41 Amps)
			305357-5	45 Volt DC (59.8 Ohms, .75 Amps)
4	1	305381	305381	Armature Plate with Pins
5	1	305450-2	305450-2	Armature Hub
E	1	326058-11	326058-11	Taper Bushing, 1215 x 1-1/8 Bore
6	1	305793	305793	Brake Cover

Dynacorp – an Inertia Dynamics Product Line
31 Industrial Park Road, New Hartford, CT 06057
Toll-Free: 1-800-800-6445 • Main Phone: (860) 379-1252 • sales@idicb.com
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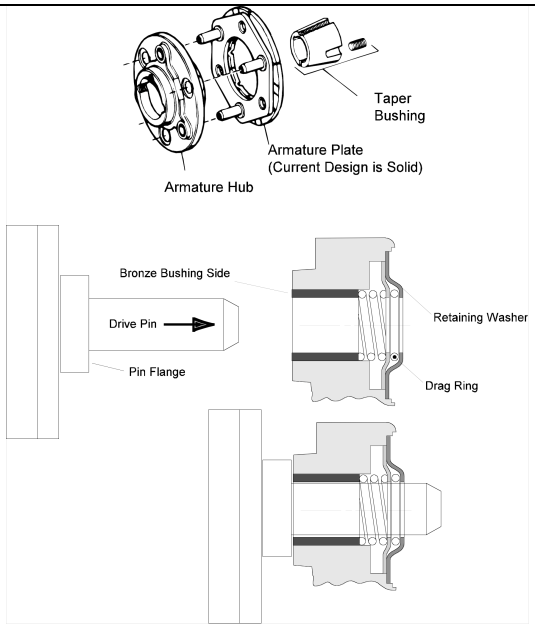
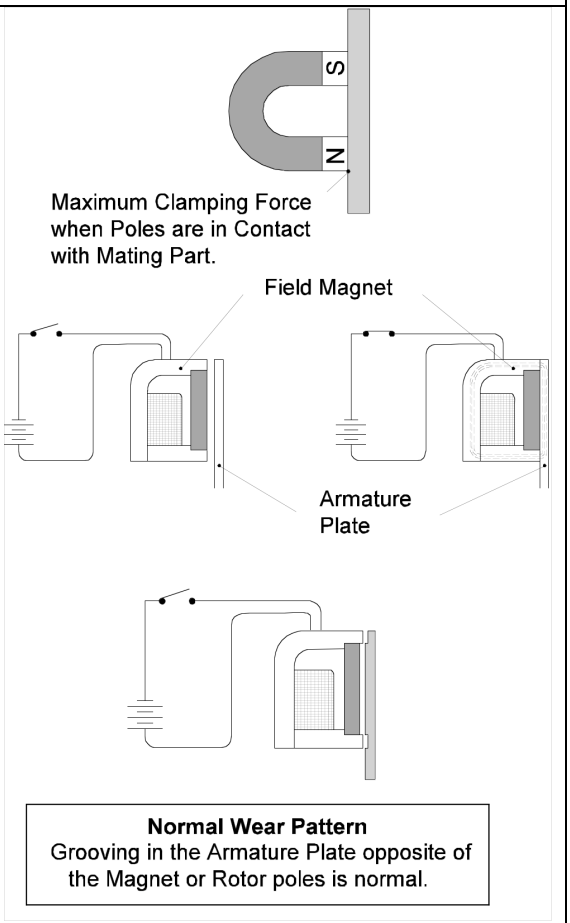
1	Armature and Hub Assembly Items 4 and 5 Place the Armature Hub over the drive pins. 1) Drive Pins must enter through the Bronze Bushing Side of Hub. 2) Adjust the drag ring so it is centered on the pin, if it is not centered on the pin it can be pushed though the retaining washer and damaging the Hub. Press Armature down onto Hub until the pin's flange bottom on Hub. Support Hub when assembling, pins will extend 1/32 out of hub. Use caution - armature is ground flat and should not be bent or distorted. Air Gap Position assembly on shaft to .060 gap between Armature and Magnet, tighten Taper Bushing to manufactures specifications included with Bushing. .060 is an approximate dimension and may very from Brake to Brake. After wiring apply DC voltage, armature should engage and release when power is removed. Armature will return to its natural position. The gap is correct as long as the armature will engage and release; It is self adjusting.	
2	Run-In or Burnishing – Our Friction products transmit torque by clamping two objects together electromagnetically. This clamping force requires a metal-to-metal contact between the magnetic poles and armature plate. The same as a horseshoe permanent magnet and a bar of steel. The strongest clamping action occurs when they are in contact. Clutches and brakes are manufactured with the friction material slightly undercut below the magnet poles. This is done to ensure full pole contact when first operated. If the application requires full rated torque, it will be necessary to wear-in the surfaces of the armature and mating magnetic pole surfaces. This wear-in of the friction surfaces is called burnishing. Many applications do not require the full rated torque of the unit and do not require burnishing. If burnishing is required it is best when performed on the actual machine to maintain alignment of the grooves created during this process. Burnish time is dependent upon speed, load, and duty cycle. Burnishing can be accomplished by reducing the voltage to 30 or 40% of the rated voltage and cycling the unit on and off in the application. At the reduced voltage, the unit will slip under load and wear it self in. The unit should be cycled "on" 2 seconds and "off" 10 seconds to prevent the friction surfaces from overheating.	

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