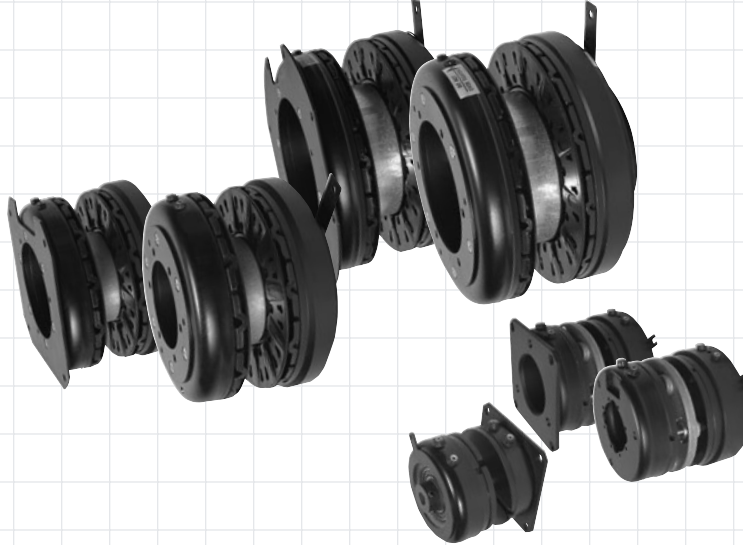


# Clutch-Brake Couplings



## Description

Dynacorp® offers a wide range of flange mounted clutch-brake couplings. They are stationary field designs – either pin or spline drive – inside or outside mount.

## Section Index

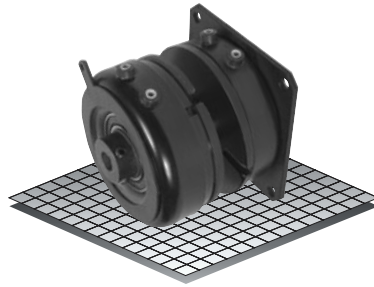
**Product -** Complete information is shown for each product; including specifications, drawings, dimensions, parts list, recommended controls and information for ordering.

Model	Nominal Size	Style	Static Torque (In.-Lbs.)	Maximum HP @ 1800 RPM	Page
304	4 inch	Spline Drive	264	1-1/2	I-2
305	5 inch	Pin Drive	684	3	I-4
308	8 inch	Pin Drive	2100	10	I-6
310	10 inch	Pin Drive	3600	15	I-8

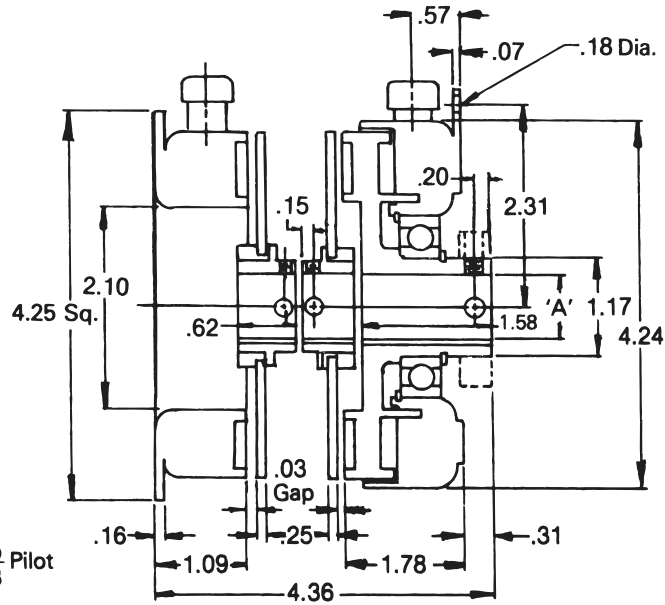
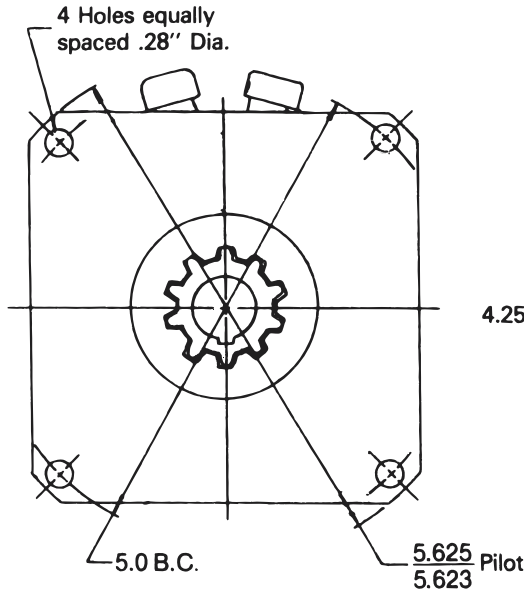
# Clutch-Brake Coupling

Model

● 304



- ▶ Stationary Field
- ▶ Bearing Mounted
- ▶ Spline Drive



Bore "A"	"B" Keyway
1/2"	.125 x .062
5/8"	.187 x .094
3/4"	.187 x .094

## Technical Data and Torque (In. Lb.)

Model No.	Wt. Lbs.	Static Torque in. lb.	Max. Speed RPM	Coil Voltage vdc	* Rated Current amps	RPM									
						0	300	600	900	1200	1500	1800	2400	3000	3600
304	6.0	264	3600	90	.13	264	216	192	180	168	156	156	144	132	120

\* Rated current at 90v.

Customer must maintain:

1. Concentricity between mounting flange and shaft within .006.
2. Perpendicularity between mounting surface and shaft within .006.

Refer to Section M for torque and heat dissipation curves.

## Order Parts for Assembly No. FC304170

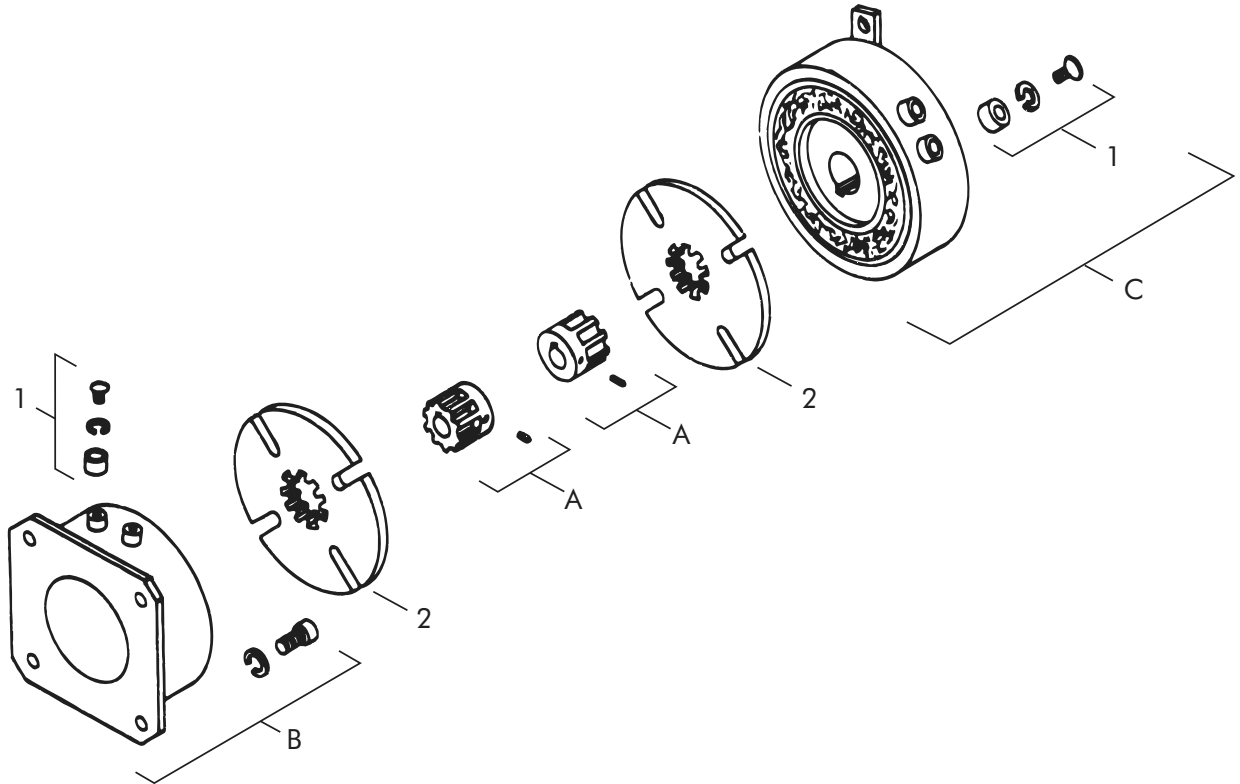
	Magnet Accessory	Armature Plate	Magnet (Brake)	Armature Hub Assembly			Bearing Mounted Rotor & Field		
				Bore			Bore		
				1/2"	5/8"	3/4"	1/2"	5/8"	3/4"
24 Volts	326146-2	304390-11	304353	303451-3	303451-5	303451-8	304773-1	304773-3	304773-5
90 Volts	326146-2	304390-11	304354	303451-3	303451-5	303451-8	304774-1	304774-3	304774-5

To order, specify:

- 2, Magnet Accessories
- 2, Armature Plates
- 1, Magnet (Brake)
- 2, Armature Hub Assemblies of required Bores
- 1, Bearing Mounted Rotor & Field of required Voltage and Bore

For controls, see Section K.

# Clutch-Brake Coupling – Replacement Parts



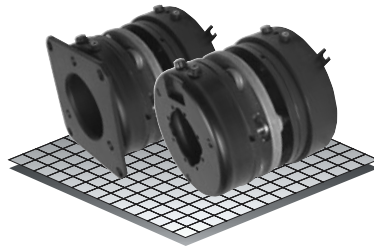
## Replacement Parts

Item	Qty.	Description	Part No.	Item	Qty.	Description	Part No.
1	2	Magnet Accessories	326146-2	C	1	Bearing Mounted Rotor & Field	
2	2	Armature Plate	304390-11			24 Volts, 1/2" Bore	304773-1
B	1	Magnet (Brake)				24 Volts, 5/8" Bore	304773-3
		6 Volts	304351			24 Volts, 3/4" Bore	304773-5
		24 Volts	304353			90 Volts, 1/2" Bore	304774-1
		90 Volts	304354			90 Volts, 5/8" Bore	304774-3
A	2	Armature Hub Assembly				90 Volts, 3/4" Bore	304774-5
		1/2" Bore	303451-3				
		5/8" Bore	303451-5				
		3/4" Bore	303453-8				

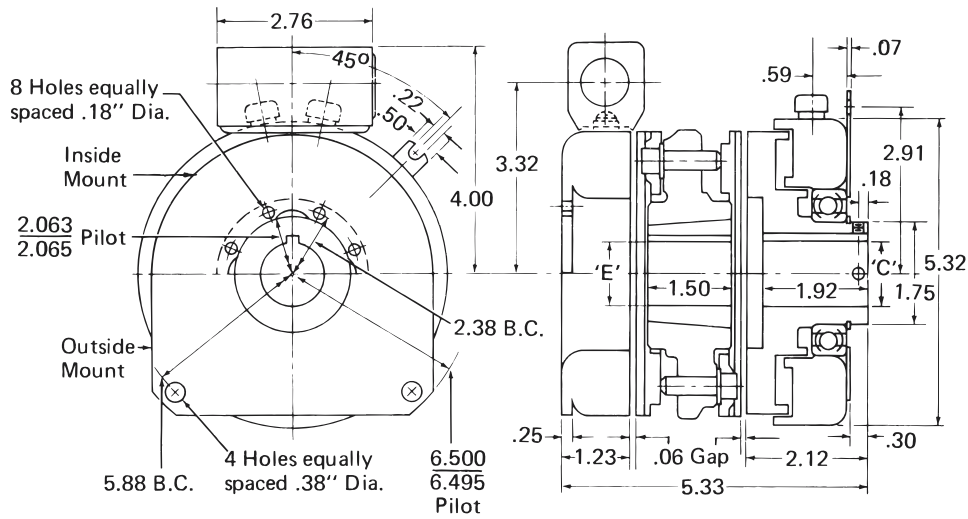
# Clutch-Brake Coupling

Model

● 305



- ▶ Stationary Field
- ▶ Bearing Mounted
- ▶ Pin Drive



### Bushing 1215

Bore "E"	Keyway	Part No.
1/2"	.500 .125 x .062	326058 - 1
9/16"	.562 .125 x .062	326058 - 2
5/8"	.625 .187 x .093	326058 - 3
11/16"	.687 .187 x .093	326058 - 4
3/4"	.750 .187 x .093	326058 - 5
13/16"	.812 .187 x .093	326058 - 6
7/8"	.875 .187 x .093	326058 - 7
15/16"	.937 .250 x .125	326058 - 8
1"	1.000 .250 x .125	326058 - 9
1-1/16"	1.062 .250 x .125	326058 - 10
1-1/8"	1.125 .250 x .125	326058 - 11
1-3/16"	1.187 .250 x .125	326058 - 12
1-1/4"	1.250 .250 x .125	326058 - 13

### Technical Data and Torque (In. Lb.)

Model No.	Wt. Lbs.	Static Torque in. lb.	Max. Speed RPM	Coil Voltage vdc	* Rated Current amps	RPM									
						0	300	600	900	1200	1500	1800	2400	3000	3600
305	11.0	684	3600	90	.41	684	624	564	516	468	420	384	324	288	252

\* Rated current at 90v.

Refer to Section M for torque and heat dissipation curves.

Customer must maintain:

1. Concentricity between mounting flange and shaft within .006.
2. Perpendicularity between mounting surface and shaft within .006.

### Order Parts for Assembly No. FC305166 and FC305167

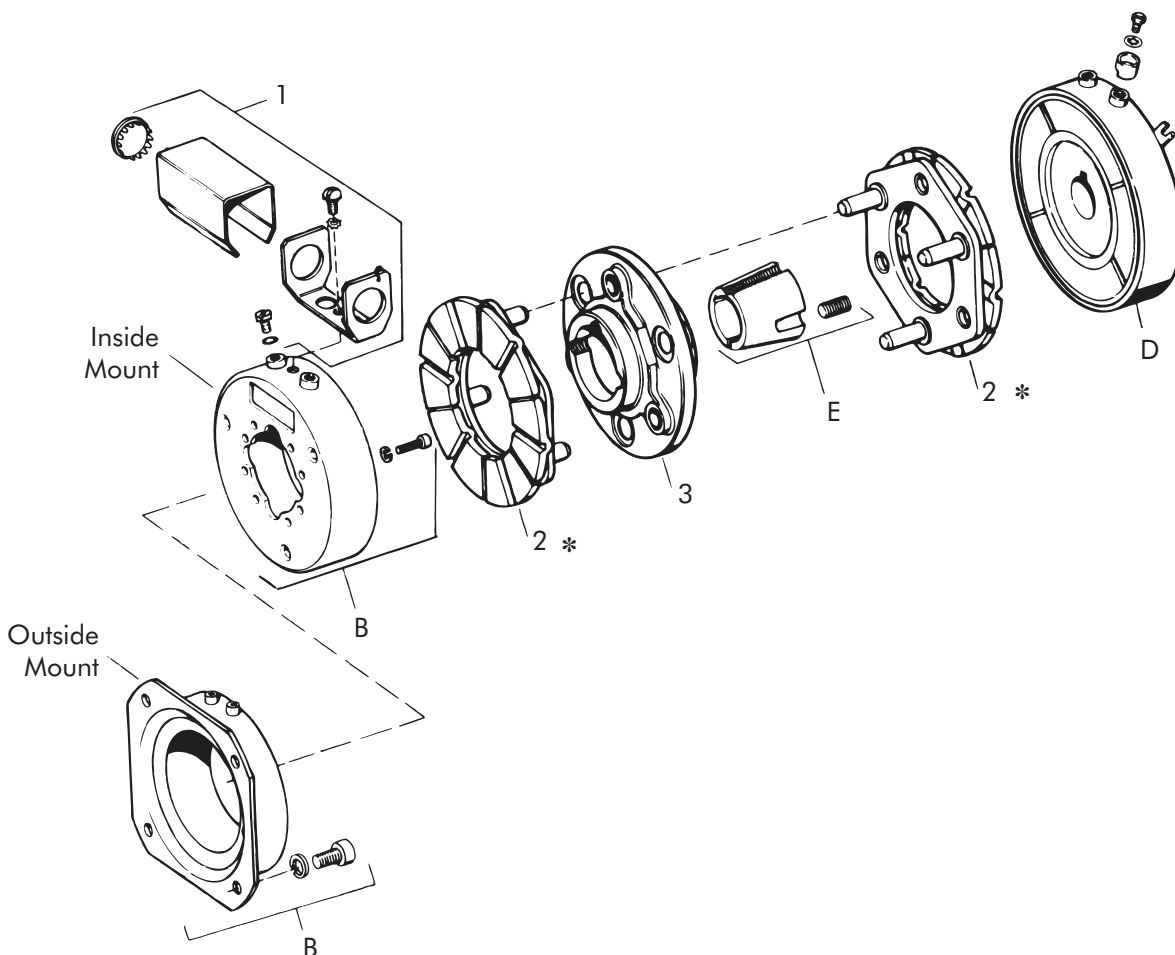
	Magnet Accessory	Armature Plate Assembly	Armature Hub Assembly	Bearing Mounted Rotor & Field (Clutch)					FC305166	FC305167	(1215) Taper Bushing
				Bore					Magnet (Brake)		
				3/4"	7/8"	1"	1-1/8"	1-1/4"	Inside Mount	Outside Mount	
24 Volts	326143	305381	305450	305773-1	305773-2	305773-4	305773-5	305773-6	305343	305353	326058-XX
90 Volts	326143	305381	305450	305774-1	305774-2	305774-4	305774-5	305774-6	305344	305354	326058-XX

To order, specify:

- 1, Magnet Accessory
- 2, Armature Plate Assemblies
- 1, Armature Hub Assembly
- 1, Magnet (Brake) of required Voltage for either Inside Mount or Outside Mount
- 1, Bearing Mounted Rotor & Field of required Bore size and Voltage
- 1, Taper Bushing (1215) of required Bore size

For controls, see Section K.

# Clutch-Brake Coupling – Replacement Parts



## Replacement Parts

Item	Qty.	Description	Part No.	Item	Qty.	Description	Part No.
1	1	Magnet Accessories	326143	D	1	Bearing Mounted Rotor & Field	
2	2	Armature Plate	305381			24 Volts, 3/4" Bore	305773-1
3	1	Armature Hub Assembly	305450			24 Volts, 7/8" Bore	305773-2
B	1	Magnet (Brake)				24 Volts, 1" Bore	305773-4
		24 Volts, Inside Mount	305343			24 Volts, 1-1/8" Bore	305773-5
		90 Volts, Inside Mount	305344			24 Volts, 1-1/4" Bore	305773-6
		24 Volts, Outside Mount	305353			90 Volts, 3/4" Bore	305774-1
		90 Volts, Outside Mount	305354			90 Volts, 7/8" Bore	305774-2
						90 Volts, 1" Bore	305774-4
						90 Volts, 1-1/8" Bore	305774-5
						90 Volts, 1-1/4" Bore	305774-6
				E	1	Taper Bushing (1215)	326058-XX

\* Current design armatures are solid.

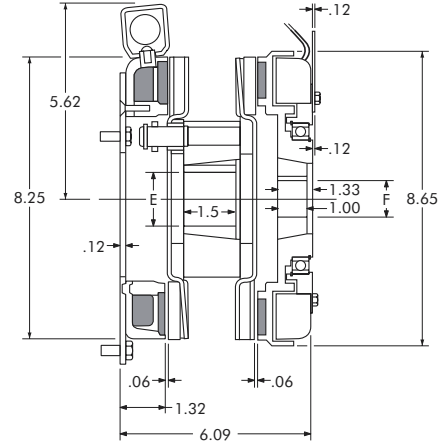
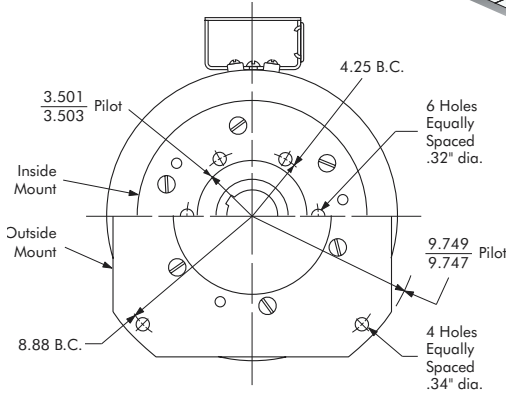
# Clutch-Brake Coupling

Model

● 308



- ▶ Stationary Field
- ▶ Bearing Mounted
- ▶ Pin Drive



## Bushing 1615

Bore "E"	Keyway	Part No.
1/2"	.500 .125 x .062	326015 - 1
9/16"	.562 .125 x .062	326015 - 2
5/8"	.625 .187 x .093	326015 - 3
11/16"	.687 .187 x .093	326015 - 4
3/4"	.750 .187 x .093	326015 - 5
13/16"	.812 .187 x .093	326015 - 6
7/8"	.875 .187 x .093	326015 - 7
15/16"	.937 .250 x .125	326015 - 8
1"	1.000 .250 x .125	326015 - 9
1-1/16"	1.062 .250 x .125	326015 - 10
1-1/8"	1.125 .250 x .125	326015 - 11
1-3/16"	1.187 .250 x .125	326015 - 12
1-1/4"	1.250 .250 x .125	326015 - 13
1-5/16"	1.312 .312 x .156	326015 - 14
1-3/8"	1.375 .312 x .156	326015 - 15
1-7/16"	1.437 .375 x .187	326015 - 16
1-1/2"	1.500 .375 x .187	326015 - 17
1-9/16"	1.562 .375 x .187	326015 - 18
1-5/8"	1.625 .375 x .187	326015 - 19
*1-3/8"	1.375 .375 x .125	326015 - 20
*1-5/8"	1.625 .375 x .125	326015 - 21

## Bushing 1610

Bore "F"	Keyway	Part No.
1/2"	.500 .125 x .062	326642 - 1
9/16"	.562 .125 x .062	326642 - 2
5/8"	.625 .187 x .093	326642 - 3
11/16"	.687 .187 x .093	326642 - 4
3/4"	.750 .187 x .093	326642 - 5
13/16"	.812 .187 x .093	326642 - 6
7/8"	.875 .187 x .093	326642 - 7
15/16"	.937 .250 x .125	326642 - 8
1"	1.000 .250 x .125	326642 - 9
1-1/16"	1.062 .250 x .125	326642 - 10
1-1/8"	1.125 .250 x .125	326642 - 11
1-3/16"	1.187 .250 x .125	326642 - 12
1-1/4"	1.250 .250 x .125	326642 - 13
1-5/16"	1.312 .312 x .156	326642 - 14
1-3/8"	1.375 .312 x .156	326642 - 15
1-7/16"	1.437 .375 x .187	326642 - 16
1-1/2"	1.500 .375 x .187	326642 - 17
1-9/16"	1.562 .375 x .187	326642 - 18
1-5/8"	1.625 .375 x .187	326642 - 19

## Technical Data and Torque (In. Lb.)

Model No.	Wt. Lbs.	Static Torque in. lb.	Max. Speed RPM	Coil Voltage vdc	* Rated Current amps	RPM									
						0	300	600	900	1200	1500	1800	2400	3000	3600
308	38.0	2100	3600	90	.57	2100	1848	1596	1428	1344	1260	1128	888	720	588

\* Rated current at 90v.

Refer to Section M for torque and heat dissipation curves.

- Customer must maintain:
1. Concentricity between mounting flange and shaft within .010.
  2. Perpendicularity between mounting surface and shaft within .010.

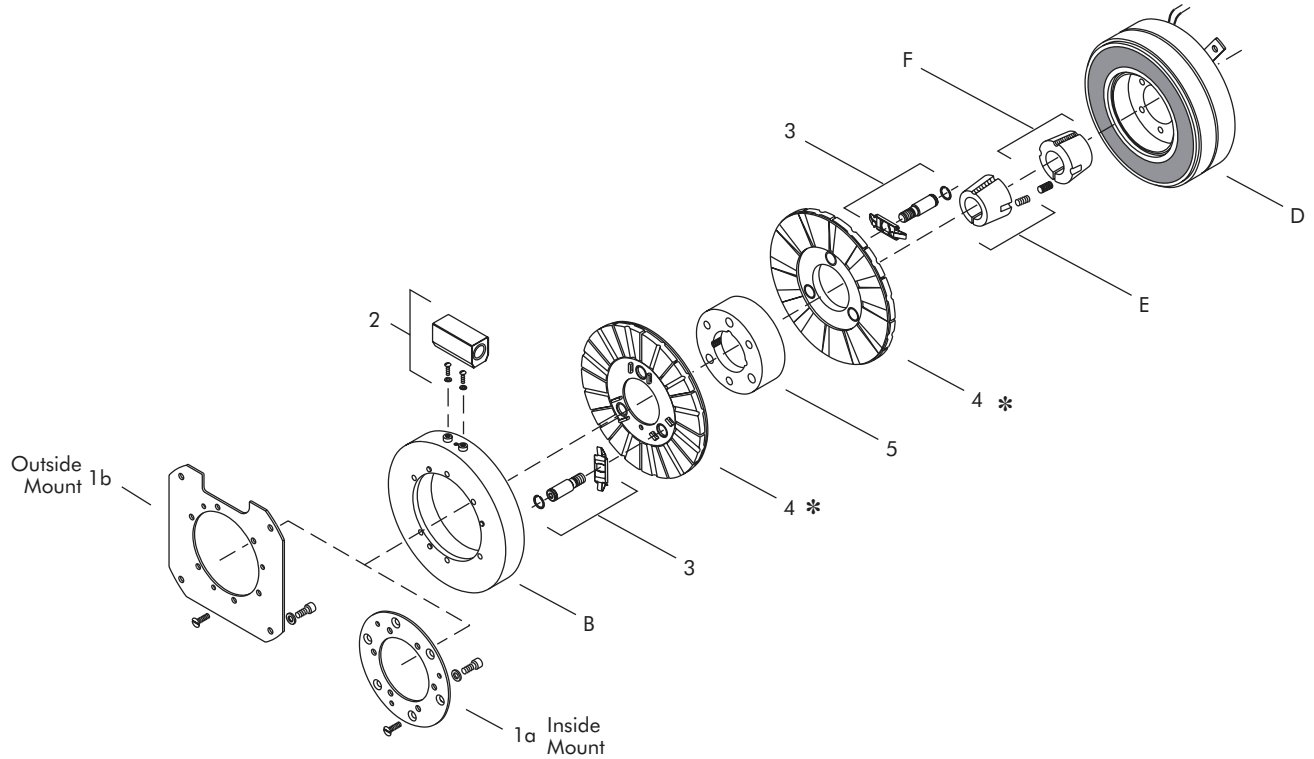
## Order Parts for Assembly No. FC308166-3 and FC308167-3

	Magnet Accessory	Armature Plate Assembly	Armature Hub Assembly	Magnet	Bearing Mounted Rotor & Field	(1615) Taper Bushing	(1610) Taper Bushing	FC308166-3		FC308167-3	
								Mounting Plate w/accy	Inside Mount	Outside Mount	Ajusto-gap® Accessory
24 Volts	326078	308380	308450	308373	308773	326015-XX	326642-XX	308481	308491	326075	
90 Volts	326078	308380	308450	308374	308774	326015-XX	326642-XX	308481	308491	326075	

- To order, specify:
- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>1, Mounting Plate w/Accessories for either Inside Mount or Outside Mount</li> <li>1, Magnet Accessory</li> <li>2, Armature Plate Assemblies</li> <li>1, Magnet of required Voltage</li> <li>1, Taper Bushing (1615) of required Bore size</li> </ul> | <ul style="list-style-type: none"> <li>2, Ajusto-gap® Accessories</li> <li>1, Armature Hub Assembly</li> <li>1, Bearing Mounted Rotor &amp; Field of required Voltage</li> <li>1, Taper Bushing (1610) of required Bore size</li> </ul> |
|---|---|

For controls, see Section K.

# Clutch-Brake Coupling – Replacement Parts



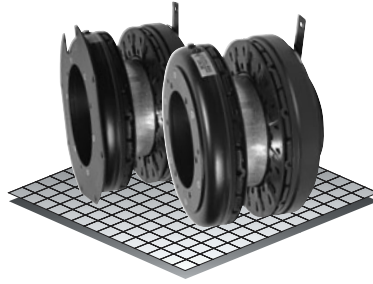
## Replacement Parts

Item	Qty.	Description	Part No.	Item	Qty.	Description	Part No.
1	1	Mounting Plate w/Accessory		D	1	Bearing Mounted Rotor & Field	
1a		Inside Mount	308481			24 Volts	308773
1b		Outside Mount	308491			90 Volts	308774
2	1	Brake Magnet Accessory	326078	E	1	Taper Bushing (1615)	326015-XX
3	2	Adjusto-gap® Accessory	326075	F	1	Taper Bushing (1610)	326642-XX
4	2	Armature Plate Assembly	308380				
5	1	Armature Hub	308450				
B	1	Magnet					
		24 Volts	308373				
		90 Volts	308374				

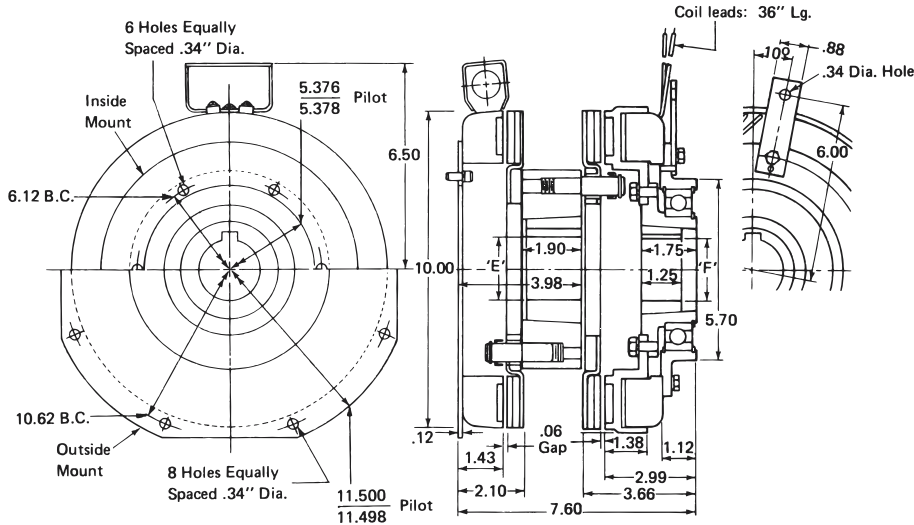
\* Current design armatures are solid.

# Clutch-Brake Coupling

Model  
● 310



- ▶ Stationary Field
- ▶ Bearing Mounted
- ▶ Pin Drive



## Bushing 2517

Bore "E"	Keyway	Part No.
1/2"	.500 .125 x .062	326039 - 1
9/16"	.562 .125 x .062	326039 - 2
5/8"	.625 .187 x .093	326039 - 3
11/16"	.687 .187 x .093	326039 - 4
3/4"	.750 .187 x .093	326039 - 5
13/16"	.812 .187 x .093	326039 - 6
7/8"	.875 .187 x .093	326039 - 7
15/16"	.937 .250 x .125	326039 - 8
1"	1.000 .250 x .125	326039 - 9
1-1/16"	1.062 .250 x .125	326039 - 10
1-1/8"	1.125 .250 x .125	326039 - 11
1-3/16"	1.187 .250 x .125	326039 - 12
1-1/4"	1.250 .250 x .125	326039 - 13
1-5/16"	1.312 .312 x .156	326039 - 14
1-3/8"	1.375 .312 x .156	326039 - 15
1-7/16"	1.437 .375 x .187	326039 - 16
1-1/2"	1.500 .375 x .187	326039 - 17
1-9/16"	1.562 .375 x .187	326039 - 18
1-5/8"	1.625 .375 x .187	326039 - 19
1-11/16"	1.687 .375 x .187	326039 - 20
1-3/4"	1.750 .375 x .187	326039 - 21
1-13/16"	1.812 .500 x .250	326039 - 22
1-7/8"	1.875 .500 x .250	326039 - 23
1-15/16"	1.937 .500 x .250	326039 - 24
2"	2.000 .500 x .250	326039 - 25
2-1/16"	2.062 .500 x .250	326039 - 26
2-1/8"	2.125 .500 x .250	326039 - 27
2-3/16"	2.187 .500 x .250	326039 - 28
2-1/4"	2.250 .500 x .250	326039 - 29
2-5/16"	2.312 .625 x .187	326039 - 30
2-3/8"	2.375 .625 x .187	326039 - 31
2-7/16"	2.437 .625 x .187	326039 - 32
2-1/2"	2.500 .625 x .187	326039 - 33

## Bushing 2012

Bore "F"	Keyway	Part No.
1/2"	.500 .125 x .062	326167 - 8
9/16"	.562 .125 x .062	326167 - 9
5/8"	.625 .187 x .093	326167 - 10
11/16"	.687 .187 x .093	326167 - 11
3/4"	.750 .187 x .093	326167 - 12
13/16"	.812 .187 x .093	326167 - 13
7/8"	.875 .187 x .093	326167 - 14
15/16"	.937 .250 x .125	326167 - 15
1"	1.000 .250 x .125	326167 - 16
1-1/16"	1.062 .250 x .125	326167 - 17
1-1/8"	1.125 .250 x .125	326167 - 18
1-3/16"	1.187 .250 x .125	326167 - 19
1-1/4"	1.250 .250 x .125	326167 - 7
1-5/16"	1.312 .312 x .156	326167 - 20
1-3/8"	1.375 .312 x .156	326167 - 6
1-7/16"	1.437 .375 x .187	326167 - 21
1-1/2"	1.500 .375 x .187	326167 - 1
1-9/16"	1.562 .375 x .187	326167 - 22
1-5/8"	1.625 .375 x .187	326167 - 2
1-11/16"	1.687 .375 x .187	326167 - 23
1-3/4"	1.750 .375 x .187	326167 - 3
1-13/16"	1.812 .500 x .250	326167 - 24
1-7/8"	1.875 .500 x .250	326167 - 4
1-15/16"	1.937 .500 x .187	326167 - 25
2"	2.000 .500 x .187	326167 - 5

## Technical Data and Torque (In. Lb.)

Model No.	Wt. Lbs.	Static Torque in. lb.	Max. Speed RPM	Coil Voltage vdc	* Rated Current amps	RPM							
						0	300	600	900	1200	1500	1800	2400
310	65.0	3600	2400	90	.60	3600	3144	2616	2088	1788	1596	1416	1044

\* Rated current at 90v.

Customer must maintain:

1. Concentricity between mounting flange and shaft within .010.
2. Perpendicularity between mounting surface and shaft within .010.

Refer to Section M for torque and heat dissipation curves.

## Order Parts for Assembly No. FC310166 and FC310167

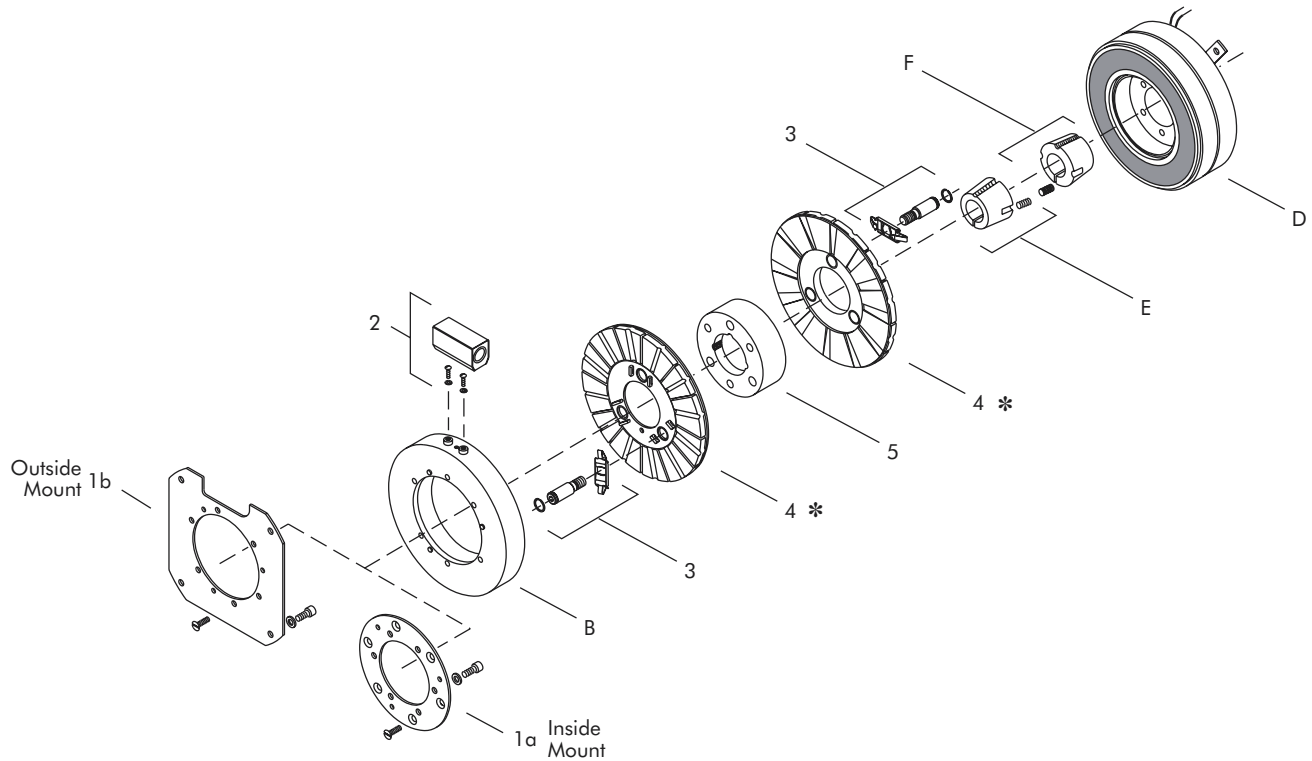
	Magnet Accessory	Armature Plate Assembly	Armature Hub	Magnet	Bearing Mounted Rotor & Field	(2517) Taper Bushing	(2012) Taper Bushing	FC310166		Ajusto-gap® Accessory
								FC310167		
								Mounting Plate w/accy	Mounting Plate w/accy	
24 Volts	326078	310380	310450	310373	310773	326039-XX	326167-XX	310481	310491	326075
90 Volts	326078	310380	310450	310374	310774	326039-XX	326167-XX	310481	310491	326075

To order, specify:

1, Mounting Plate w/Accessory for either Inside Mount or Outside Mount	2, Ajusto-gap® Accessories
1, Magnet Accessory	1, Armature Hub Assembly
2, Armature Plate Assemblies	1, Bearing Mounted Rotor & Field of required Voltage
1, Magnet of required Voltage	1, Taper Bushing (2012) of required Bore size
1, Taper Bushing (2517) of required Bore size	

For controls, see Section K.

# Clutch-Brake Coupling – Replacement Parts



## Replacement Parts

Item	Qty.	Description	Part No.	Item	Qty.	Description	Part No.
1	1	Mounting Plate w/Accessory		D	1	Bearing Mounted Rotor & Field	
1a		Inside Mount	310481			24 Volts	310773
1b		Outside Mount	310491			90 Volts	310774
2	1	Brake Magnet Accessory	326078	E	1	Taper Bushing (2517)	326039-XX
3	2	Ajusto-gap® Accessory	326075	F	1	Taper Bushing (2012)	326167-XX
4	2	Armature Plate Assembly	310380				
5	1	Armature Hub	310450				
B	1	Magnet					
		24 Volts	310373				
		90 Volts	310374				

\* Current design armatures are solid.