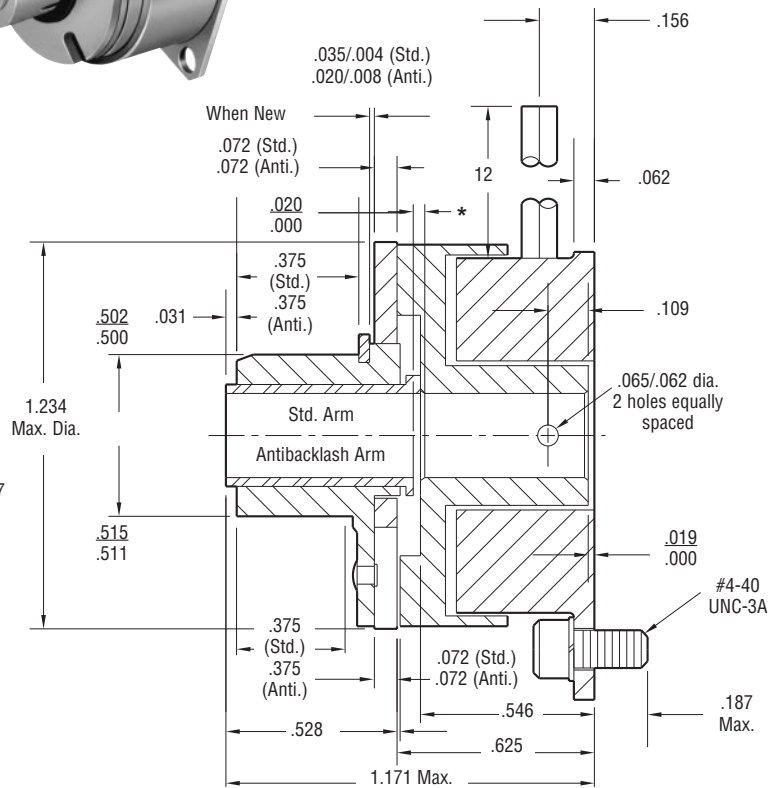
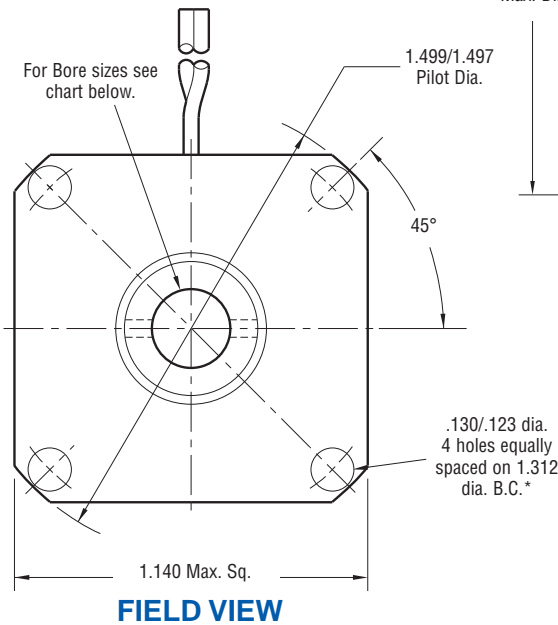
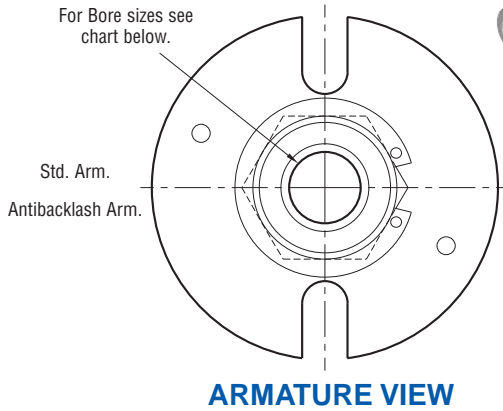
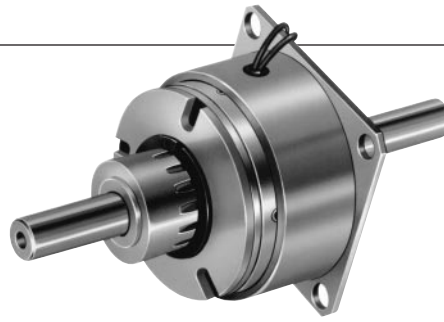


# Clutch

## SF-120 Flange Mounted



### Bore Dimensions

Rotor Bore Dia.	Armature Bore Dia.
.188/.187	.195/.190
.251/.250	.257/.252
.313/.312	—

Static Torque	5 lb.in.
Maximum Speed	3,600 rpm
Standard Voltage	D.C. 6, 24, 90

All dimensions are nominal unless otherwise noted.

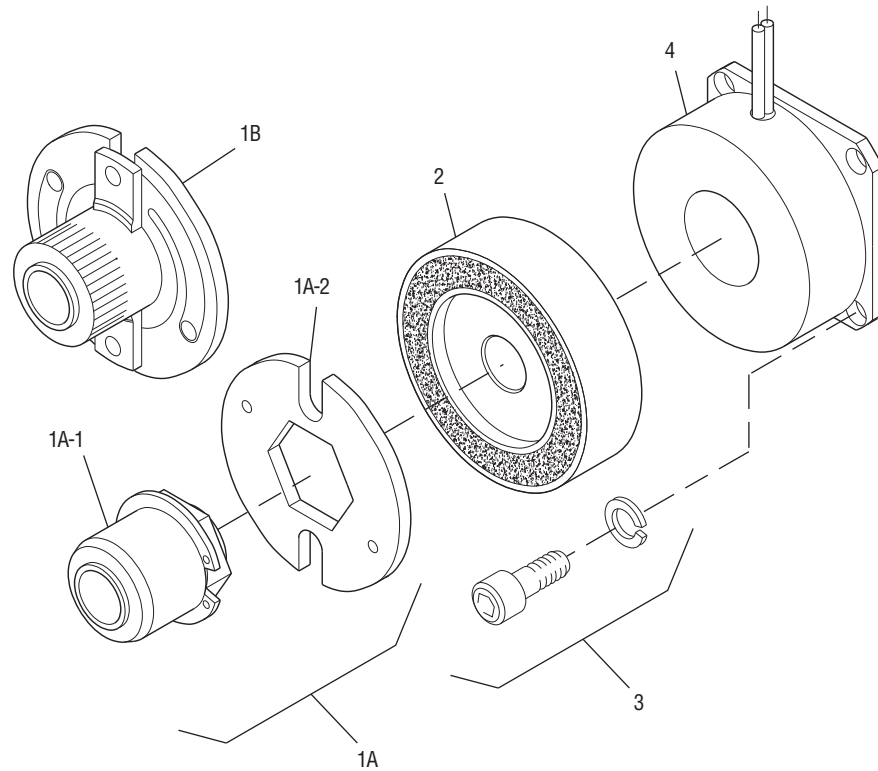
Information on inertia and weights begins on page 239. Coil data is on pages 250 and 251.

### Customer Shall Maintain:

1. Squareness of field mounting face with shaft with .003 T.I.R. measured at pilot dia.
2. Concentricity of field mounting pilot diameter with rotor mounting shaft within .003 T.I.R.



Drawing I-25508



Item	Description	Part Number	Qty.
1A	Armature and Hub		
1A-1	Armature Hub		1
	3/16" Bore	5602-541-009	
	1/4" Bore	5602-541-008	
1A-2	Armature	110-0110	1
1B	Antibacklash Armature		1
	3/16" Bore	5602-111-002	
	1/4" Bore	5602-111-003	
	5/16" Bore	5602-111-007	
2	Rotor		1
	3/16" Bore	5602-751-004	
	1/4" Bore	5602-751-002	
	5/16" Bore	5602-751-003	
3	Mounting Accessory	5101-101-001	1
4	Field		1
	6 Volt	5602-451-003	
	24 Volt	5602-451-005	
	90 Volt	5602-451-007	

**How to Order:**

1. Specify Type of Armature Desired.
2. Specify Bore Size for Item 1A-1 or 1B and Item 2.
3. Specify Voltage for Item 4.
4. See Controls Section.

**Example:**

SF-120 Clutch per I-25508 - 90 Volt  
 Standard Armature  
 1/4" Armature Hub Bore  
 1/4" Rotor Bore

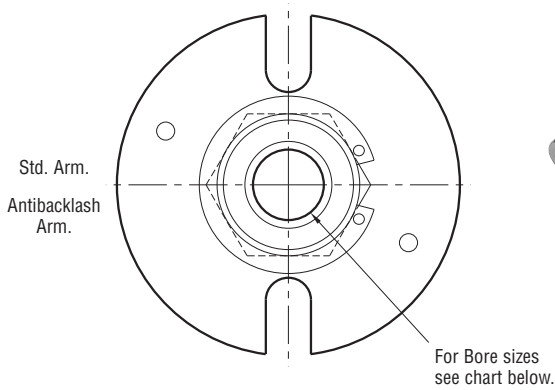
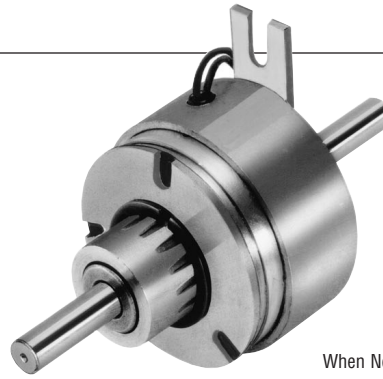
These units meet standards set forth in UL508 and are listed under guide card #NMTR2, file #59164.

These units are CSA certified under file #LR11543.

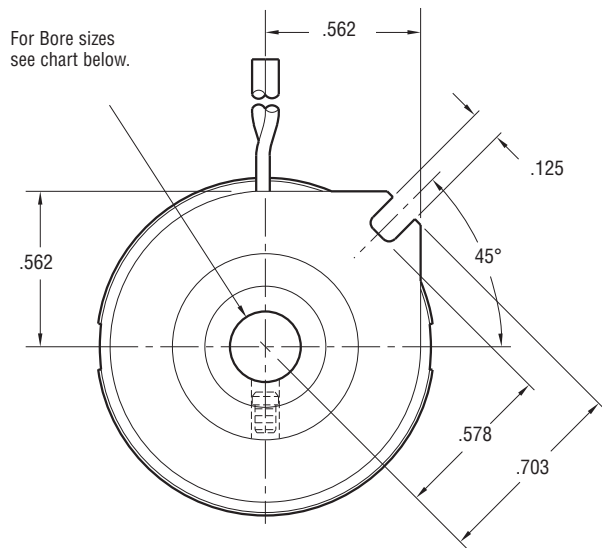
Refer to Service Manual P-200.

# Clutch

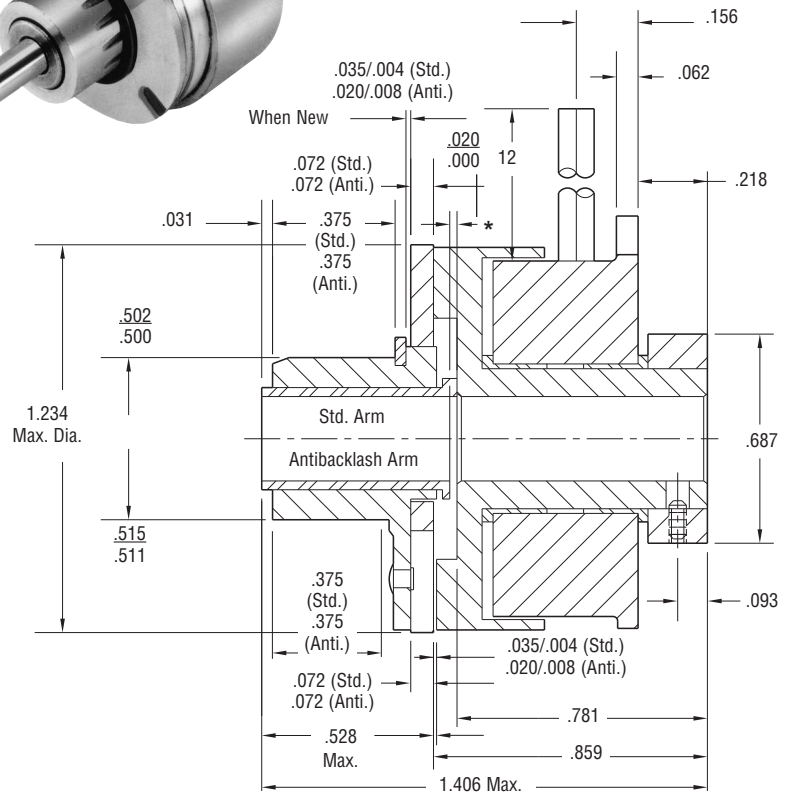
## SF-120 Bearing Mounted



**ARMATURE VIEW**



**FIELD VIEW**



\*Customer shall maintain dimension as noted.

### Bore Dimensions

Rotor Bore Dia.	Armature Bore Dia.
.188/.187	.195/.190
.251/.250	.257/.252
.313/.312	—

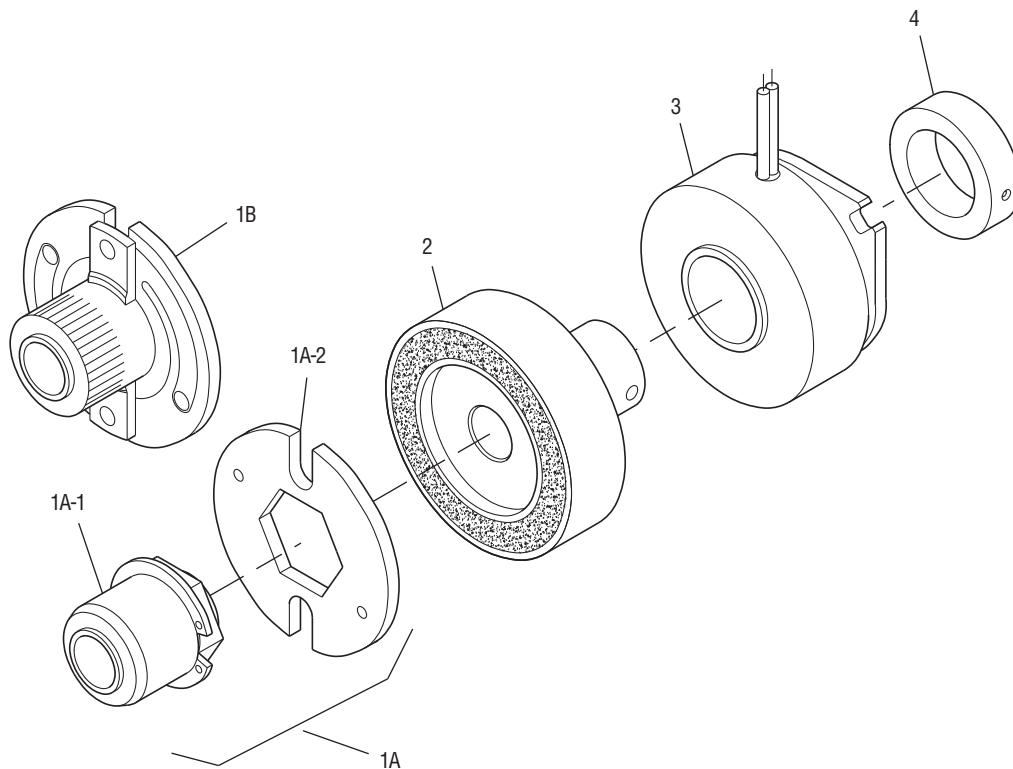
Static Torque	5 lb.in.
Maximum Speed	3,600 rpm
Standard Voltage	D.C. 6, 24, 90

All dimensions are nominal unless otherwise noted.

Information on inertia and weights begins on page 239. Coil data is on pages 250 and 251.



Drawing I-25509



Item	Description	Part Number	Qty.
1A	Armature and Hub		
1A-1	Armature Hub		1
	3/16" Bore	5602-541-009	
	1/4" Bore	5602-541-008	
1A-2	Armature	110-0110	1
1B	Antibacklash Armature		1
	3/16" Bore	5602-111-002	
	1/4" Bore	5602-111-003	
	5/16" Bore	5602-111-007	
2	Rotor		1
	3/16" Bore	5602-751-008	
	1/4" Bore	5602-751-006	
	5/16" Bore	5602-751-007	
3	Field		1
	6 Volt	5602-451-021	
	24 Volt	5602-451-023	
	90 Volt	5602-451-025	
4	Set Collar	5602-266-001	1

**How to Order:**

1. Specify Type of Armature Desired.
2. Specify Bore Size for Item 1A-1 or 1B and Item 2.
3. Specify Voltage for Item 3.
4. See Controls Section.

**Example:**

SF-120 Clutch per I-25509 - 90 Volt  
 Standard Armature  
 1/4" Armature Hub Bore

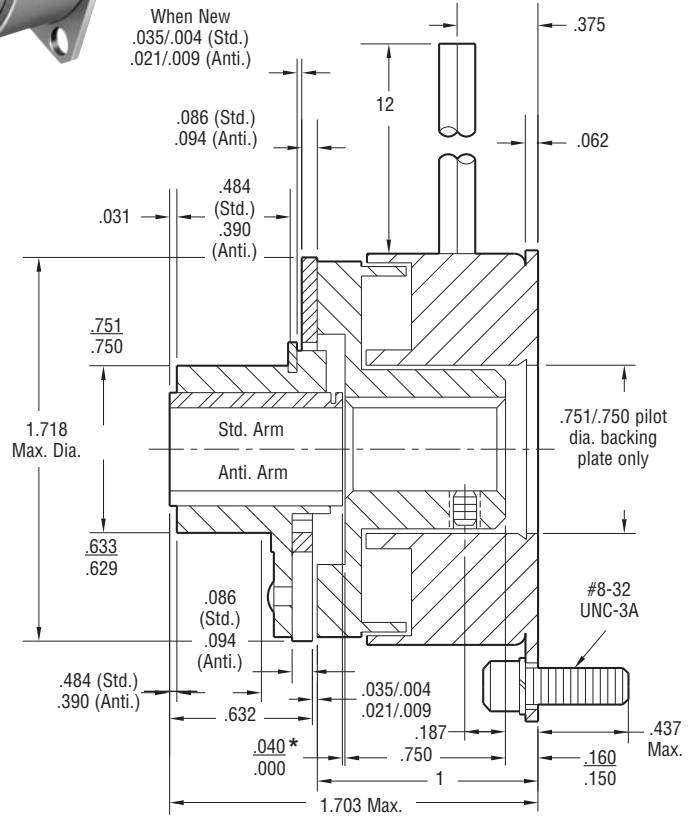
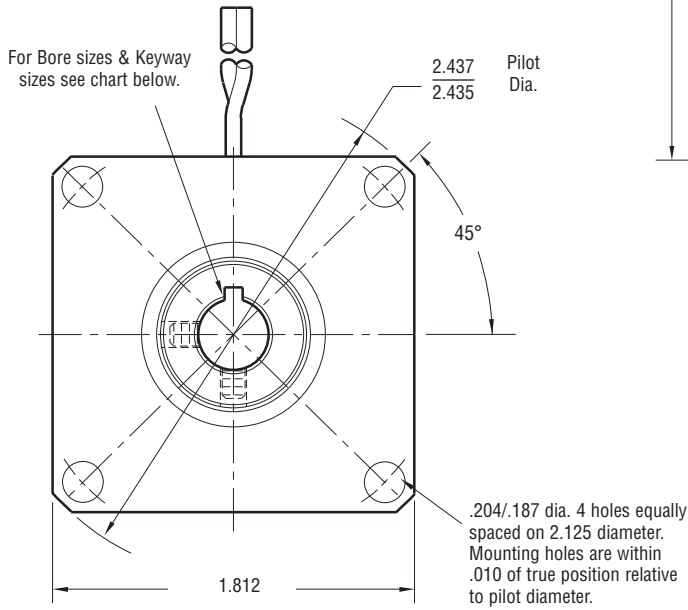
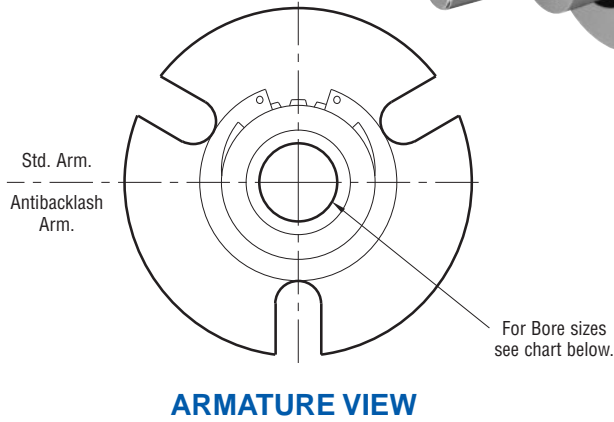
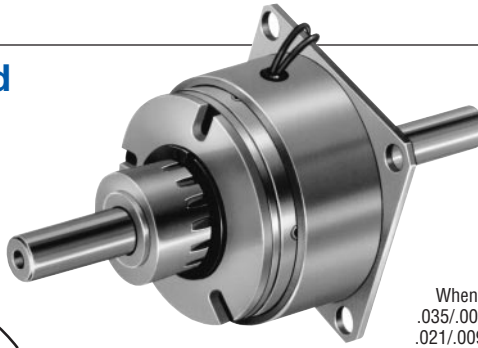
These units meet standards set forth in UL508 and are listed under guide card #NMTR2, file #59164.

These units are CSA certified under file #LR11543.

Refer to Service Manual P-200.

# Clutch

## SF-170 Flange Mounted



\*Diameter over knurl.

### Rotor Bore Dimensions

Rotor Bore Dia.	Keyway	Armature Bore Dia.
.251/.250	.062/.031	.2522/.2507
.313/.312	.062/.031	.3145/.3130
.376/.375	.093/.047	.3773/.3755

Static Torque	15 lb.in.
Maximum Speed	5,000 rpm
Standard Voltage	D.C. 6, 24, 90

All dimensions are nominal unless otherwise noted.

Information on inertia and weights begins on page 239. Coil data is on pages 250 and 251.

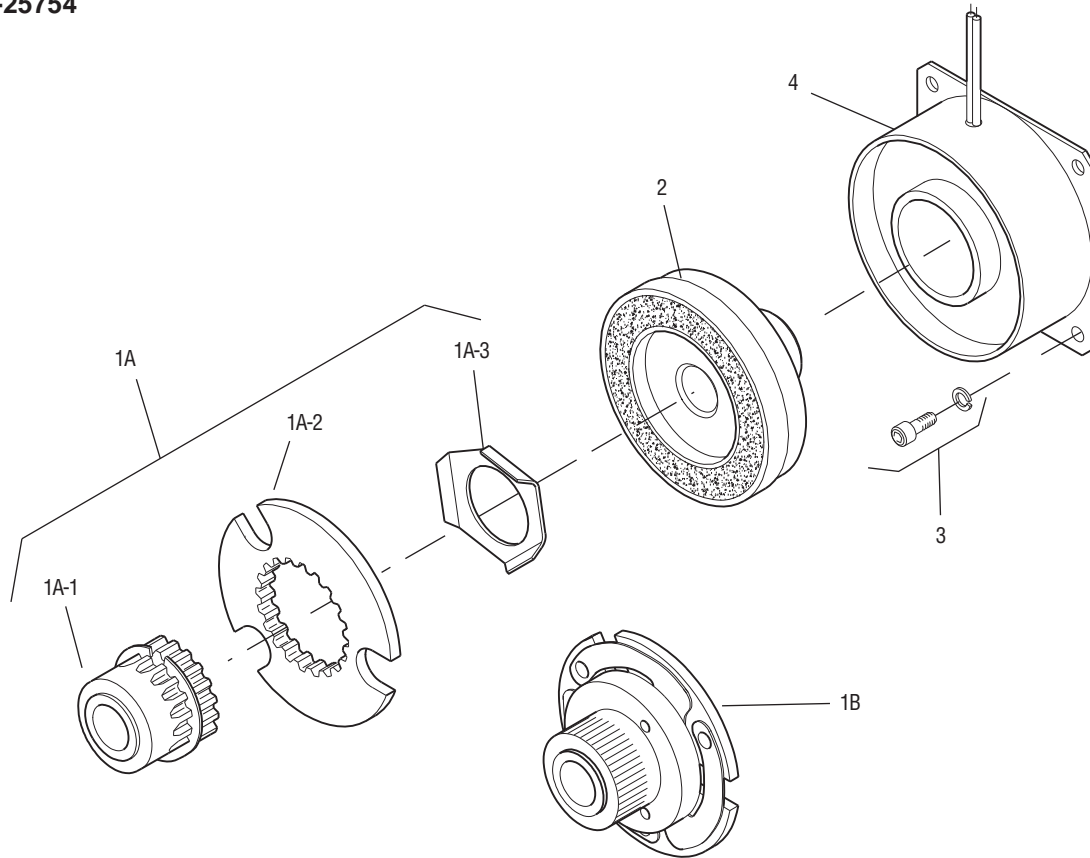
### Customer Shall Maintain:

1. Squareness of field mounting face with shaft with .003 T.I.R. measured at pilot diameter.
2. Concentricity of field mounting pilot diameter with rotor mounting shaft within .003 T.I.R.



SF-170 Flange Mounted

Drawing I-25754



Item	Description	Part Number	Qty.
1A	Armature and Hub		
1A-1	Armature Hub		1
	1/4" Bore	5123-541-002	
	5/16" Bore	5123-541-003	
	3/8" Bore	5123-541-004	
1A-2	Armature	110-0111	1
1A-3	Release Spring	808-0019	1
1B	Antibacklash Armature		1
	1/4" Bore	5603-111-033	
	5/16" Bore	5603-111-034	
	3/8" Bore	5603-111-035	
2	Rotor		1
	1/4" Bore	5603-751-028	
	5/16" Bore	5603-751-029	
	3/8" Bore	5603-751-030	
3	Mounting Accessory	5102-101-001	1
4	Field		1
	6 Volt	5603-451-047	
	24 Volt	5603-451-049	
	90 Volt	5603-451-051	

**How to Order:**

1. Specify Type of Armature Desired.
2. Specify Bore Size for Item 1A-1 or 1B and Item 2.
3. Specify Voltage for Item 4.
4. See Controls Section.

**Example:**

SF-170 Clutch per I-25754 - 90 Volt  
 Antibacklash Armature  
 1/4" Armature Hub Bore  
 1/4" Rotor Bore

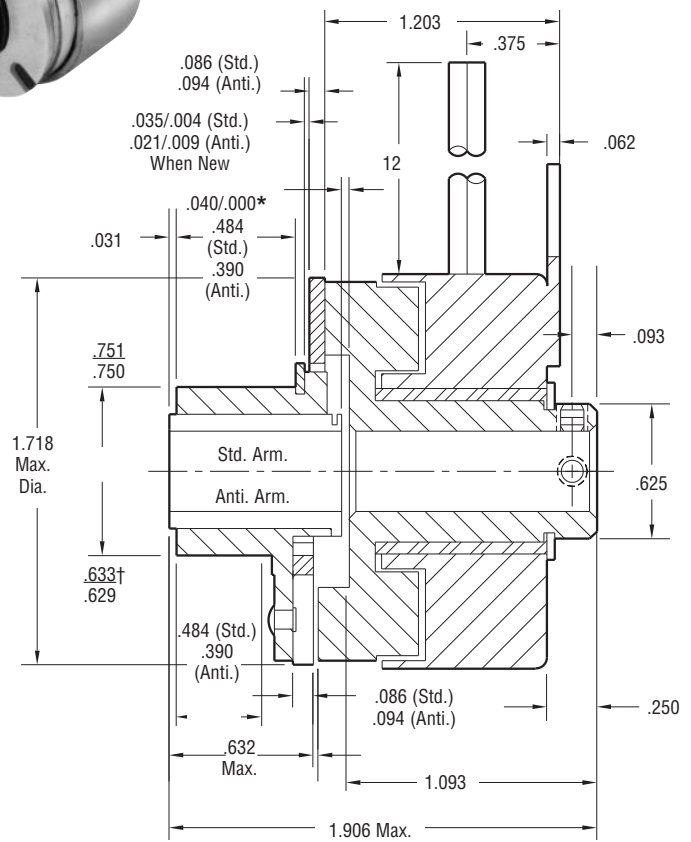
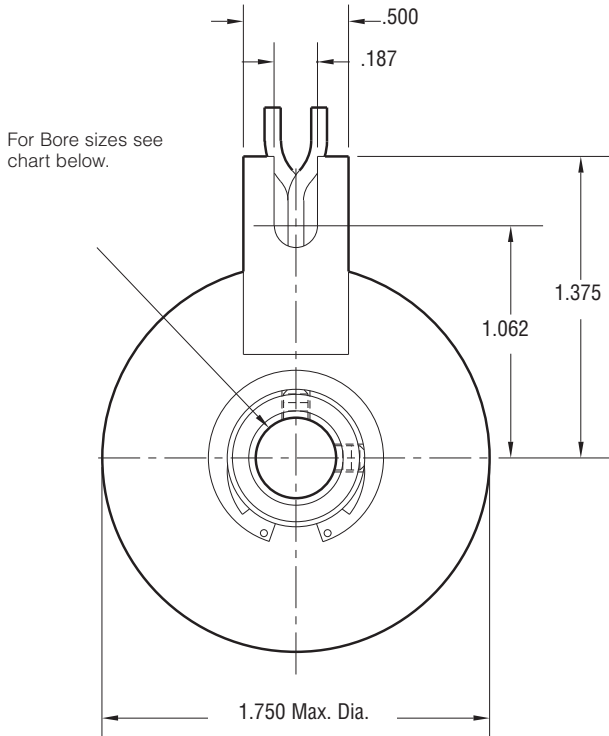
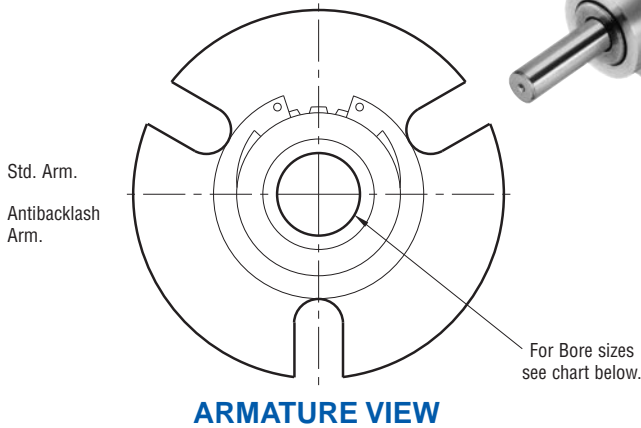
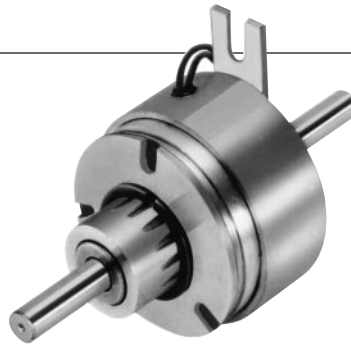
These units meet standards set forth in UL508 and are listed under guide card #NMTR2, file #59164.

These units are CSA certified under file #LR11543.

Refer to Service Manual P-200.

# Clutch

## SF-170 Bearing Mounted



### Bore Dimensions

Rotor Bore Dia.	Armature Bore Dia.
.251/.250	.2522/.2507
.313/.312	.3145/.3130
.376/.375	.3773/.3755

Static Torque	15 lb.in.
Maximum Speed	5,000 rpm
Standard Voltage	D.C. 6, 24, 90

All dimensions are nominal unless otherwise noted.

Information on inertia and weights begins on page 239. Coil data is on pages 250 and 251.

### Customer Shall Maintain:

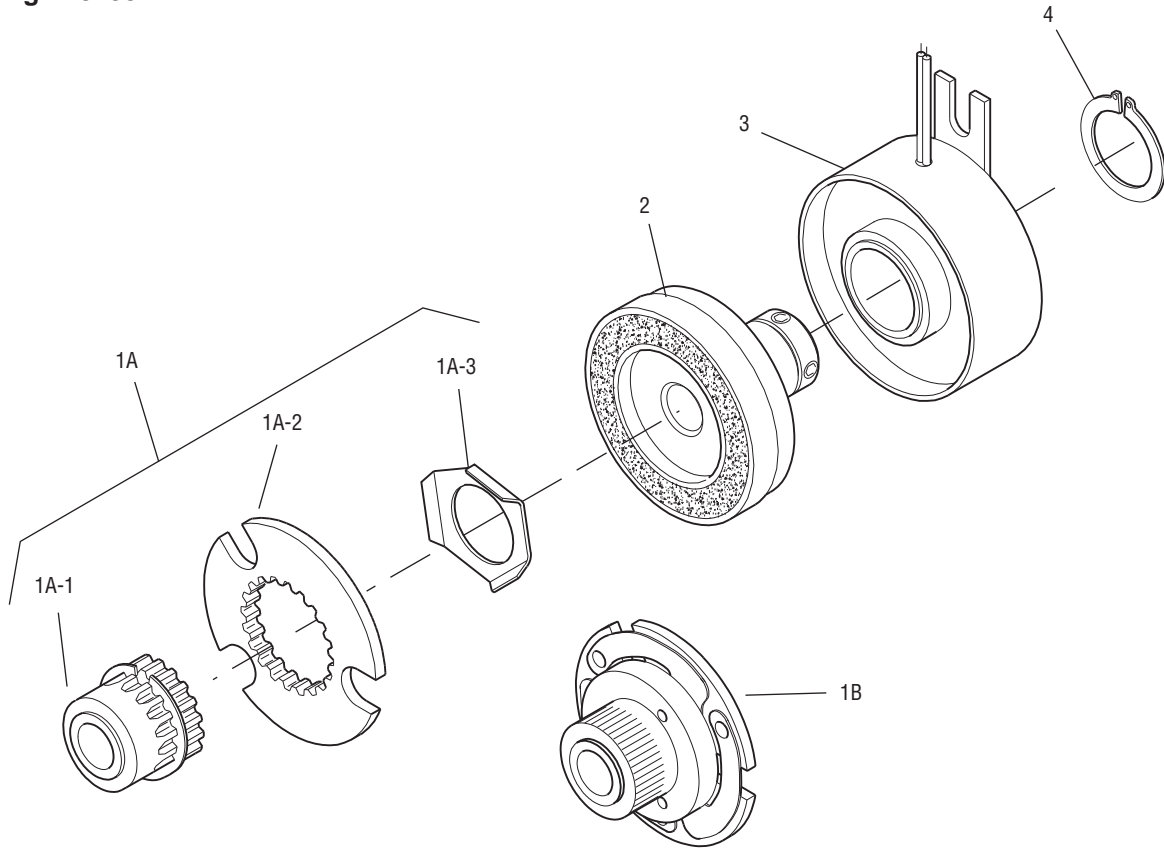
\*Customer shall maintain dimension as noted.

† over knurl



SF-170 Bearing Mounted

Drawing I-25755



Item	Description	Part Number	Qty.
1A	Armature and Hub		
1A-1	Armature Hub		1
	1/4" Bore	5123-541-002	
	5/16" Bore	5123-541-003	
	3/8" Bore	5123-541-004	
1A-2	Armature	110-0111	1
1A-3	Release Spring	808-0019	1
1B	Antibacklash Armature		1
	1/4" Bore	5603-111-033	
	5/16" Bore	5603-111-034	
	3/8" Bore	5603-111-035	
2	Rotor		1
	1/4" Bore	5603-751-019	
	5/16" Bore	5603-751-021	
	3/8" Bore	5603-751-020	
3	Field		1
	6 Volt	5603-451-039	
	24 Volt	5603-451-041	
	90 Volt	5603-451-043	
4	Retainer Ring	748-0024	1

**How to Order:**

1. Specify Type of Armature Desired.
2. Specify Bore Size for Item 1A-1 or 1B and Item 2.
3. Specify Voltage for Item 3.
4. See Controls Section.

**Example:**

SF-170 Clutch per I-25755 - 90 Volt  
Antibacklash Armature  
1/4" Armature Hub Bore

These units meet standards set forth in UL508 and are listed under guide card #NMTR2, file #59164.

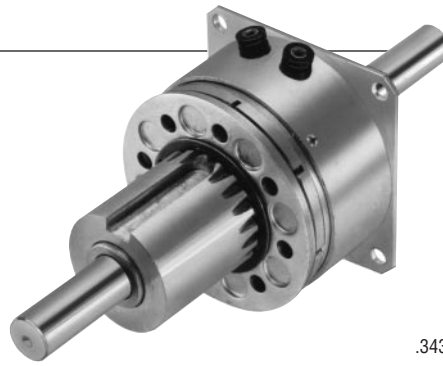
These units are CSA certified under file #LR11543.

Refer to Service Manual P-200.

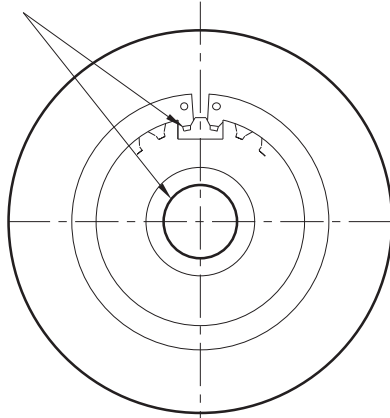


# Clutch

## SF-250 Flange Mounted

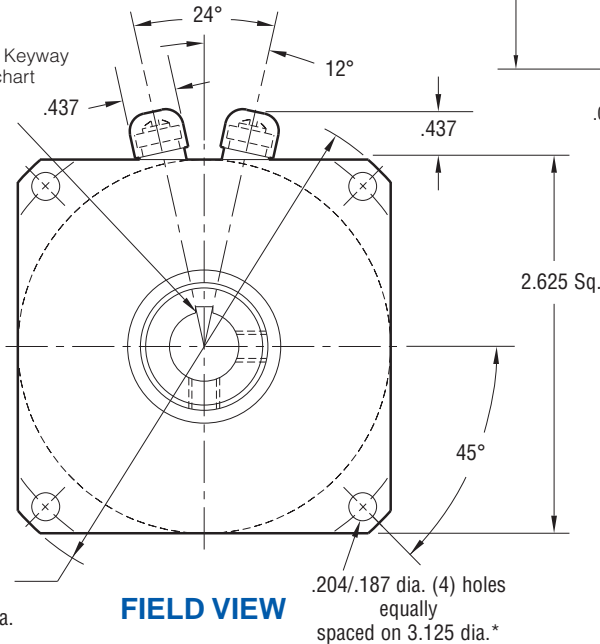


For Bore & Keyway sizes see chart below.

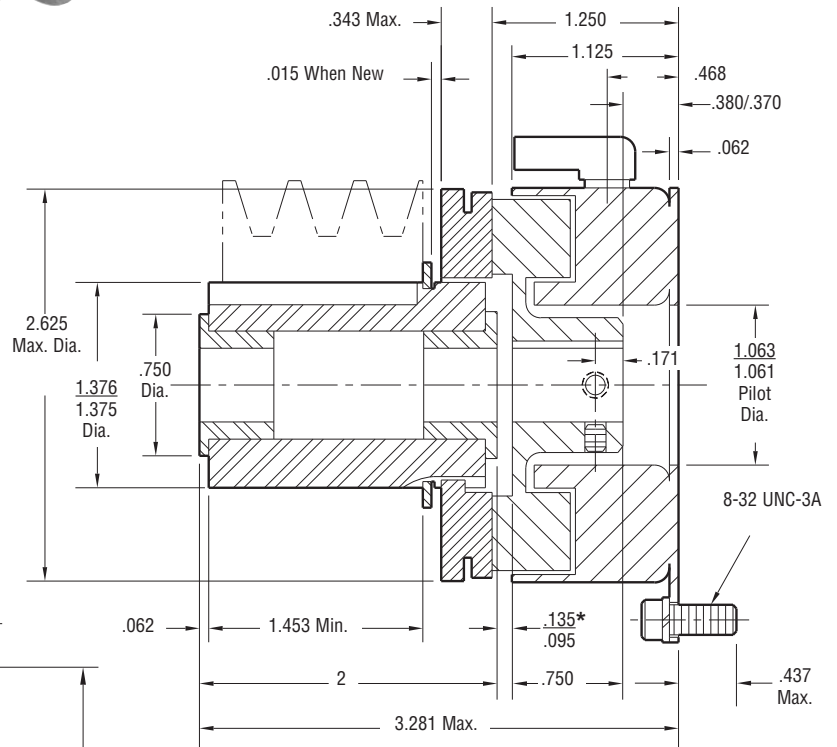


**ARMATURE VIEW**

For Bore & Keyway sizes see chart below.



**FIELD VIEW**



\*Customer shall maintain dimension as noted.

### Bore and Keyway Dimensions

Armature Bore Dia.	Keyway	Rotor Bore Dia.	Keyway
.3750/.3745		.376/.375	.093 x .046
.5000/.4995	.312 x .156	.438/.437	.125 x .031
*.5625/.5620	x 1.250	.501/.500	.125 x .031
.6250/.6245			

\*Available on special order only.

Static Torque	70 lb.in.
Maximum Speed	7,500 rpm
Standard Voltage	D.C. 6, 24, 90

All dimensions are nominal unless otherwise noted. Information on inertia and weights begins on page 239. Coil data is on pages 250 and 251.

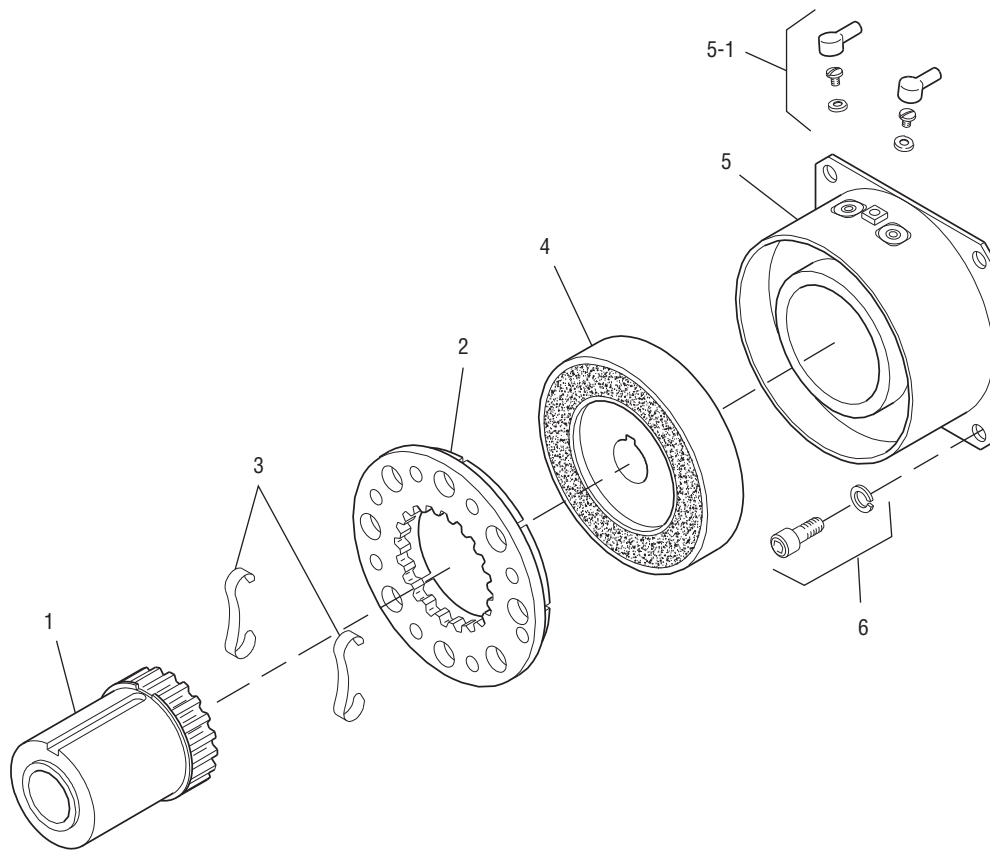
### Customer Shall Maintain:

1. Squareness of field mounting face with shaft within .003 T.I.R. measured at pilot diameter.
2. Concentricity of field mounting pilot diameter with rotor mounting shaft within .003 T.I.R.

\*Mounting holes are within .010 of true position relative to pilot diameter.



Drawing I-25520



Item	Description	Part Number	Qty.
1	Armature Hub		1
	3/8" Bore	5124-541-002	
	1/2" Bore	5124-541-003	
	5/8" Bore	5124-541-005	
2	Armature	5124-111-001	1
3	Release Spring	5103-101-003	1
4	Rotor		1
	3/8" Bore	5103-751-008	
	1/2" Bore	5103-751-010	
5	Field		1
	6 Volt	5103-451-002	
	24 Volt	5103-451-004	
	90 Volt	5103-451-007	
5-1	Terminal Accessory	5103-101-002	1
6	Mounting Accessory	5102-101-001	1

**How to Order:**

1. Specify Bore Size for Item 1 and Item 4.
2. Specify Voltage for Item 5.
3. See Controls Section.

**Example:**

SF-250 Clutch per I-25520 - 90 Volt  
 3/8" Armature Hub Bore  
 3/8" Rotor Bore

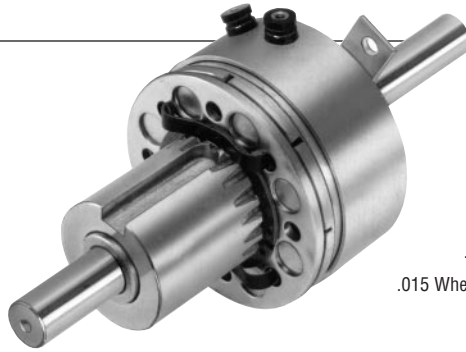
These units meet standards set forth in UL508 and are listed under guide card #NMTR2, file #59164.

These units are CSA certified under file #LR11543.

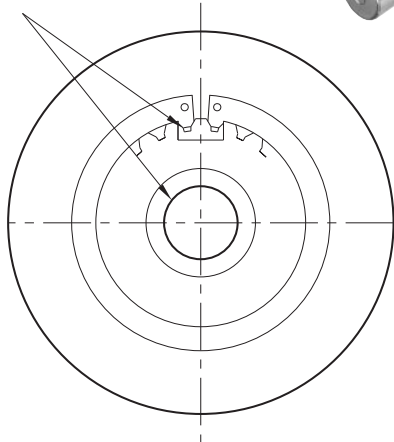
Refer to Service Manual P-200.

# Clutch

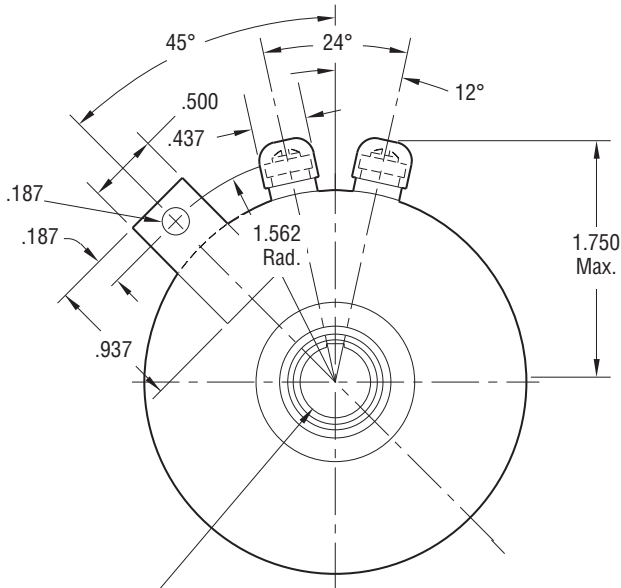
## SF-250 Bearing Mounted



For Bore & Keyway sizes see chart below.

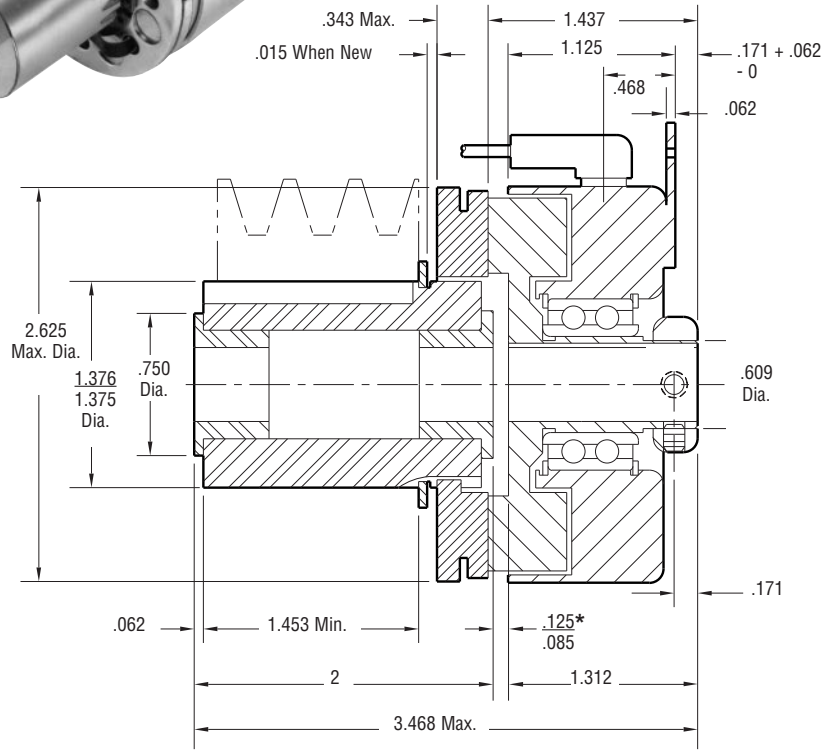


**ARMATURE VIEW**



For Bore & Keyway sizes see chart below.

**FIELD VIEW**



\*Customer shall maintain dimension as noted.

### Bore and Keyway Dimensions

Armature Bore Dia.	Keyway	Rotor Bore Dia.	Keyway
.3750/.3745		.376/.375	.093 x .046
.5000/.4995	.312 x .156	.438/.437*	.125 x .062
.5625/.5620*	x 1.25	.501/.500	.125 x .062
.6250/.6245			

\* Available on special order only.

Static Torque	70 lb.in.
Maximum Speed	7,500 rpm
Standard Voltage	D.C. 6, 24, 90

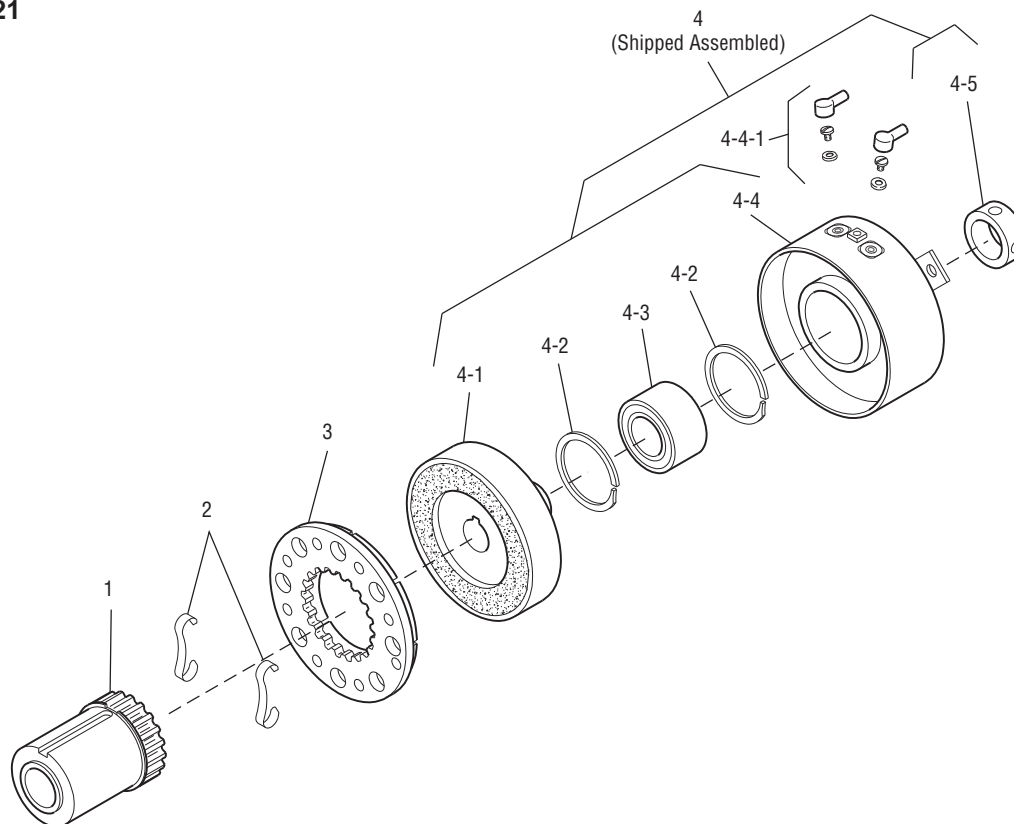
All dimensions are nominal unless otherwise noted.

Information on inertia and weights begins on page 239. Coil data is on pages 250 and 251.



SF-250 Bearing Mounted

Drawing I-25521



Item	Description	Part Number	Qty.
1	Armature Hub		1
	3/8" Bore	5124-541-002	
	1/2" Bore	5124-541-003	
	5/8" Bore	5124-541-005	
2	Release Spring Optional	5103-101-003	1
3	Armature	5124-111-001	1
4	Field and Rotor Assembly		1
	6 Volt – 3/8" Bore	5103-452-002	
	24 Volt – 3/8" Bore	5103-452-004	
	90 Volt – 3/8" Bore	5103-452-007	
	6 Volt – 1/2" Bore	5103-452-016	
	24 Volt – 1/2" Bore	5103-452-018	
	90 Volt – 1/2" Bore	5103-452-021	
4-1	Rotor		1
	3/8" Bore	5103-751-014	
	1/2" Bore	5103-751-016	
4-2	Retainer Ring	748-0371	2
4-3	Ball Bearing	166-0108	1
4-4	Field		1
	6 Volt	5103-451-018	
	24 Volt	5103-451-020	
	90 Volt	5103-451-023	
4-4-1	Terminal Accessory	5103-101-002	1
4-5*	Set Collar	266-0005	1

\*Used with 1/2" Bore only.

**How to Order:**

1. Specify Bore Size for Item 1 and Item 4.
2. Specify Voltage for Item 4.
3. See Controls Section.

**Example:**

SF-250 Clutch per I-25521 - 90 Volt  
 1/2" Armature Hub Bore  
 1/2" Rotor Bore

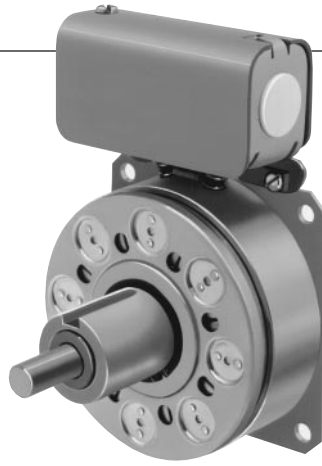
These units meet standards set forth in UL508 and are listed under guide card #NMTR2, file #59164.

These units are CSA certified under file #LR11543.

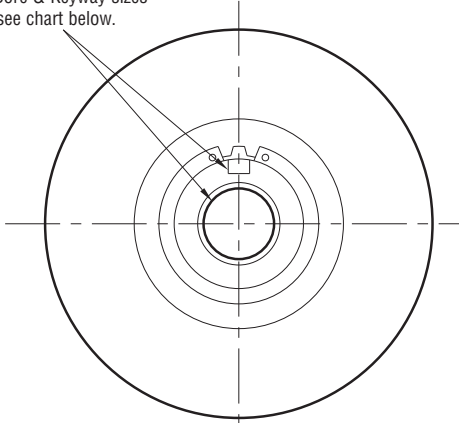
Refer to Service Manual P-200.

# Clutch

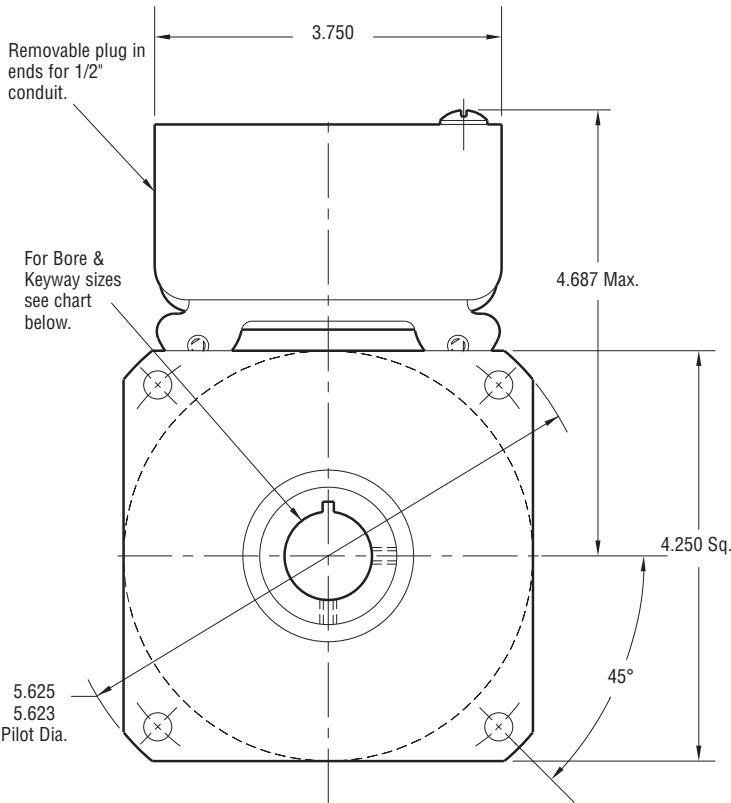
## SF-400 Flange Mounted



For Bore & Keyway sizes see chart below.



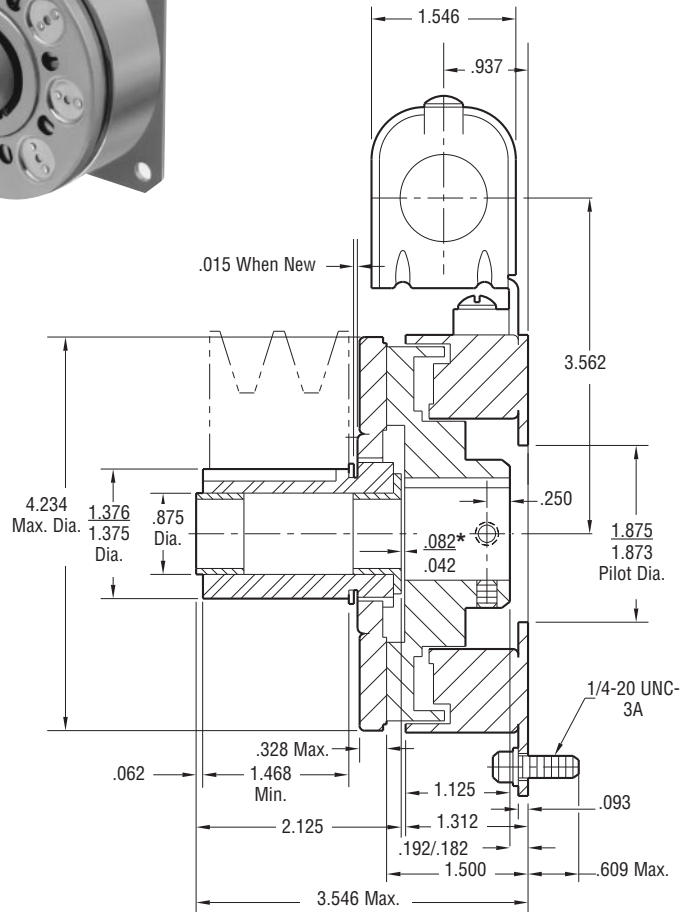
**ARMATURE VIEW**



**FIELD VIEW**

**Customer Shall Maintain:**

1. Squareness of field mounting face with shaft within .003 T.I.R. measured at pilot diameter.
2. Concentricity of field mounting pilot diameter with rotor mounting shaft within .003 T.I.R.
- \*3. Customer shall maintain dimension as noted.



**Bore and Keyway Dimensions**

Armature Bore Dia.	Keyway	Rotor Bore Dia.	Keyway
.5000/.4995	.312 x .156	.501/.500	.125 x .062
.6250/.6245	x 1.25	.626/.625	
.7500/.7495		.751/.750	.187 x .093

Static Torque	270 lb.in.
Maximum Speed	4,500 rpm
Standard Voltage	D.C. 6, 24, 90

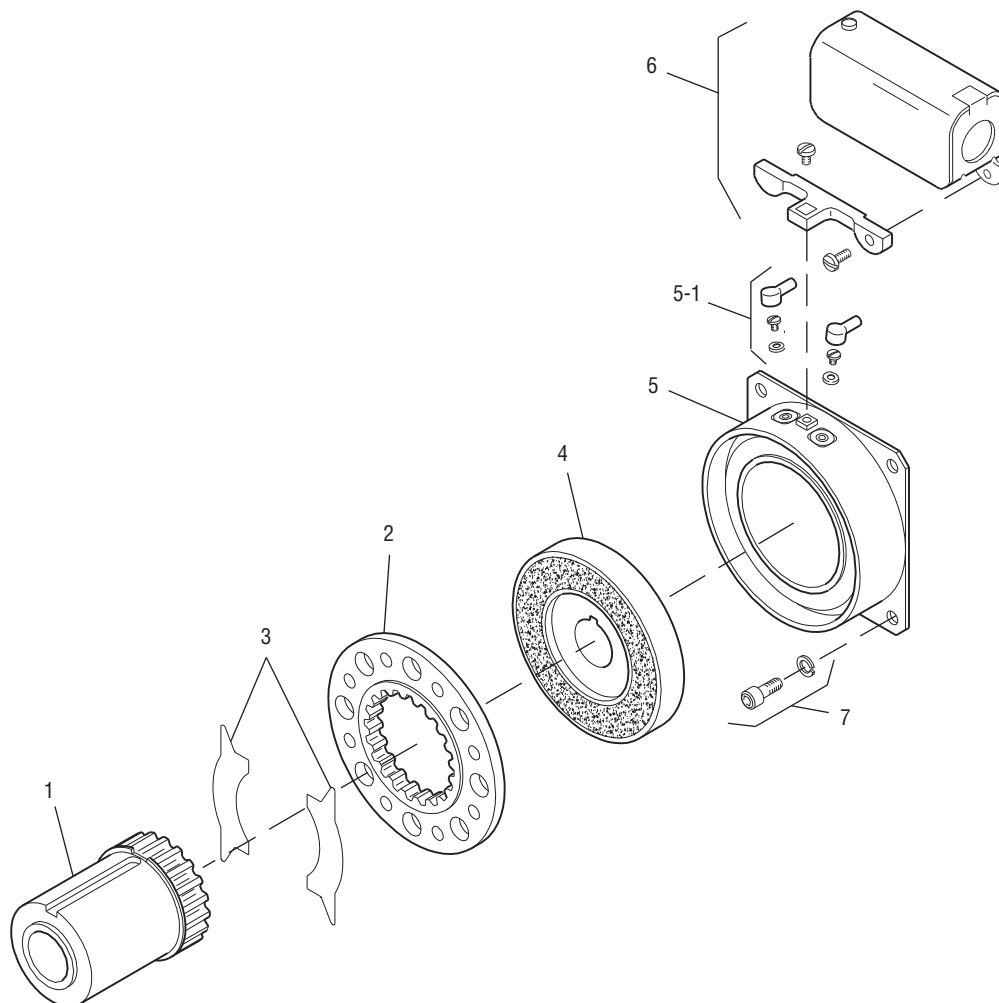
All dimensions are nominal unless otherwise noted.

Information on inertia and weights begins on page 239. Coil data is on pages 250 and 251.



SF-400 Flange Mounted

Drawing I-25695



Item	Description	Part Number	Qty.
1	Armature Hub		1
	1/2" Bore	5125-541-002	
	5/8" Bore	5125-541-003	
	3/4" Bore	5125-541-004	
2	Armature	5125-111-001	1
3	Release Spring	5104-101-003	1
4	Rotor		1
	1/2" Bore	5104-751-033	
	5/8" Bore	5104-751-034	
	3/4" Bore	5104-751-035	
5	Field		1
	6 Volt	5104-451-032	
	24 Volt	5104-451-033	
	90 Volt	5104-451-034	
5-1	Terminal Accessory	5103-101-002	1
6	Conduit Box	5200-101-010	1
7	Mounting Accessory	5104-101-002	1

**How to Order:**

1. Specify Bore Size for Items 1 and 4.
2. Specify Voltage for Item 5.
3. See Controls Section.

**Example:**

SF-400 Clutch per I-25695 - 90 Volt  
 3/4" Armature Hub Bore  
 3/4" Rotor Bore

These units, when used in conjunction with the correct Warner Electric conduit box, meet the standards set of UL508 and are listed under guide card #NMTR2, file #59164.

These units are CSA certified under file #LR11543

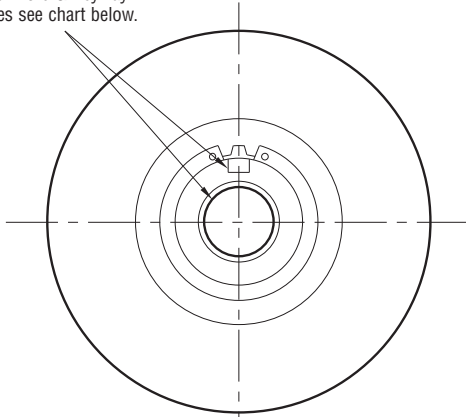
Refer to Service Manual P-200.

# Clutch

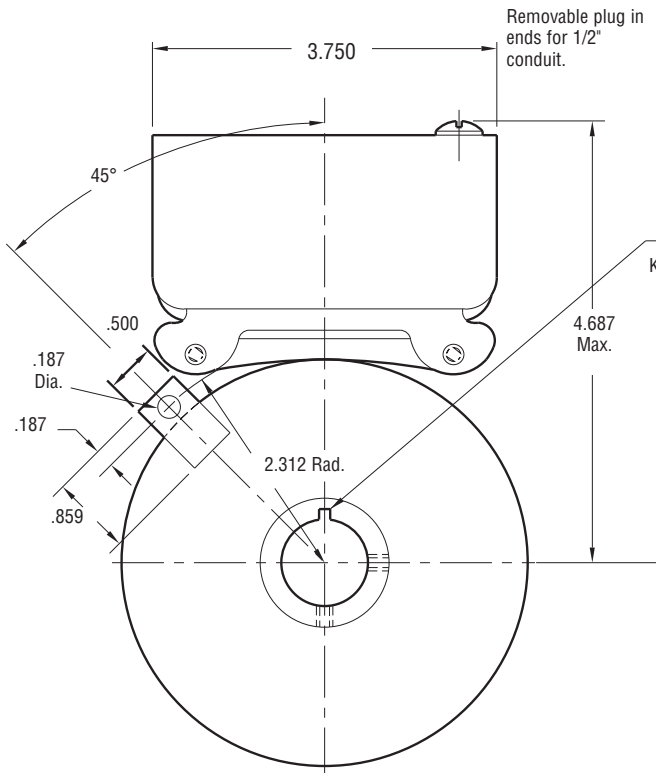
## SF-400 Bearing Mounted



For Bore & Keyway sizes see chart below.

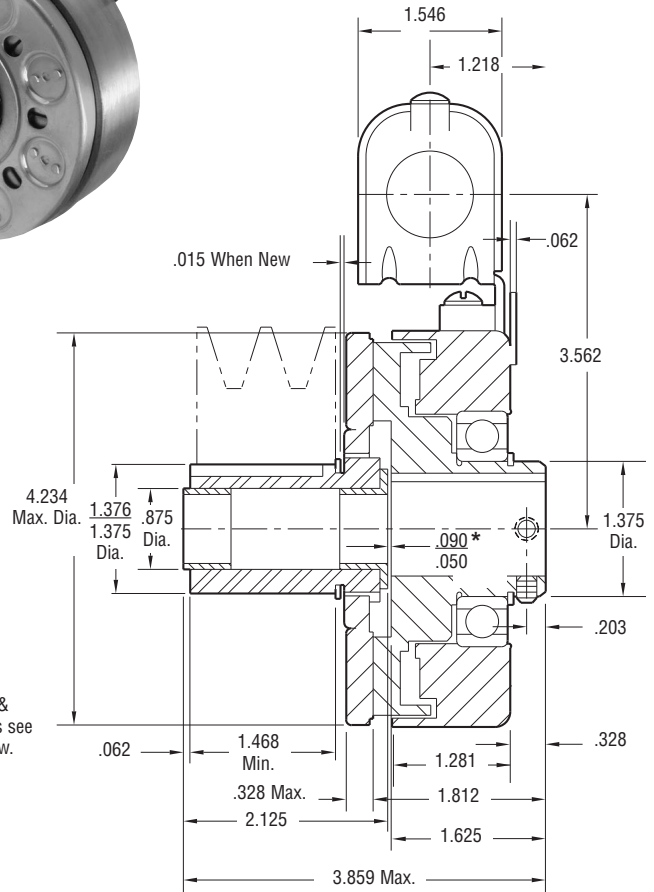


**ARMATURE VIEW**



**FIELD VIEW**

For Bore & Keyway sizes see chart below.



### Bore and Keyway Dimensions

Armature Bore Dia.	Keyway	Rotor Bore Dia.	Keyway
.5000/.4995	.312 x .156 x 1.25	.501/.500	.125 x .062
.6250/.6245		.626/.625	.187 x .093
.7500/.7495		.751/.750	
		.876/.875	
		1.001/1.000	

Static Torque	270 lb.in.
Maximum Speed	4,500 rpm
Standard Voltage	D.C. 6, 24, 90

All dimensions are nominal unless otherwise noted.

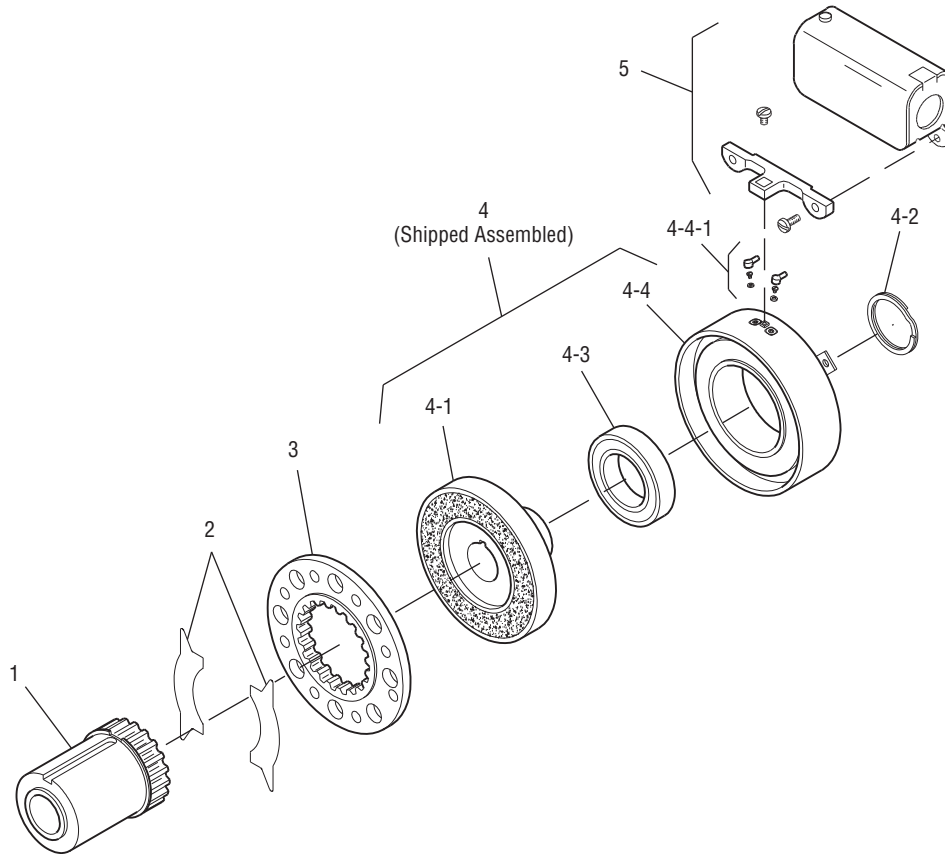
Information on inertia and weights begins on page 239. Coil data is on pages 250 and 251.

\*Customer shall maintain dimension as noted.



SF-400 Bearing Mounted

Drawing I-25696



Item	Description	Part Number	Qty.
1	Armature Hub		1
	1/2" Bore	5125-541-002	
	5/8" Bore	5125-541-003	
	3/4" Bore	5125-541-004	
2	Release Spring Optional	5104-101-003	1
3	Armature	5125-111-001	1
4	Field and Rotor Assembly		1
	6 Volt – 1/2" Bore	5104-452-052	
	24 Volt – 1/2" Bore	5104-452-053	
	90 Volt – 1/2" Bore	5104-452-054	
	6 Volt – 5/8" Bore	5104-452-055	
	24 Volt – 5/8" Bore	5104-452-056	
	90 Volt – 5/8" Bore	5104-452-057	
	6 Volt – 3/4" Bore	5104-452-058	
4-1	Rotor		1
	1/2" Bore	5104-751-043	
	5/8" Bore	5104-751-044	
	3/4" Bore	5104-751-045	
4-2	Retainer Ring	748-0018	1
4-3	Ball Bearing	166-0150	1

Item	Description	Part Number	Qty.
4-4	Field		1
	6 Volt	5104-451-038	
	24 Volt	5104-451-039	
	90 Volt	5104-451-040	
4-4-1	Terminal Accessory	5103-101-002	1
5	Conduit Box	5200-101-010	1

**How to Order:**

1. Specify Bore Size for Items 1 and 4.
2. Specify Voltage for Item 4.
3. See Controls Section.

**Example:**

SF-400 Clutch per I-25696 - 90 Volt  
 3/4" Armature Hub Bore  
 3/4" Rotor Bore

These units, when used in conjunction with the correct Warner Electric conduit box, meet standards set forth in UL508 and are listed under guide card #NMTR2, file #59164.

These units are CSA certified under file #LR11543

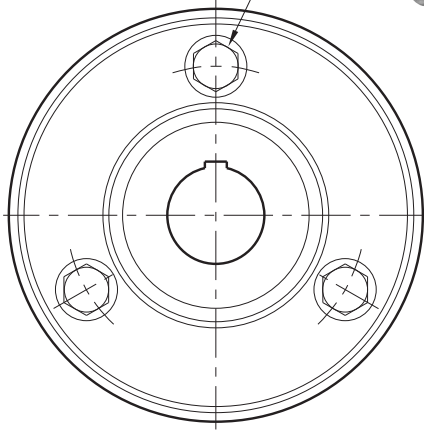
Service Manual P-200.



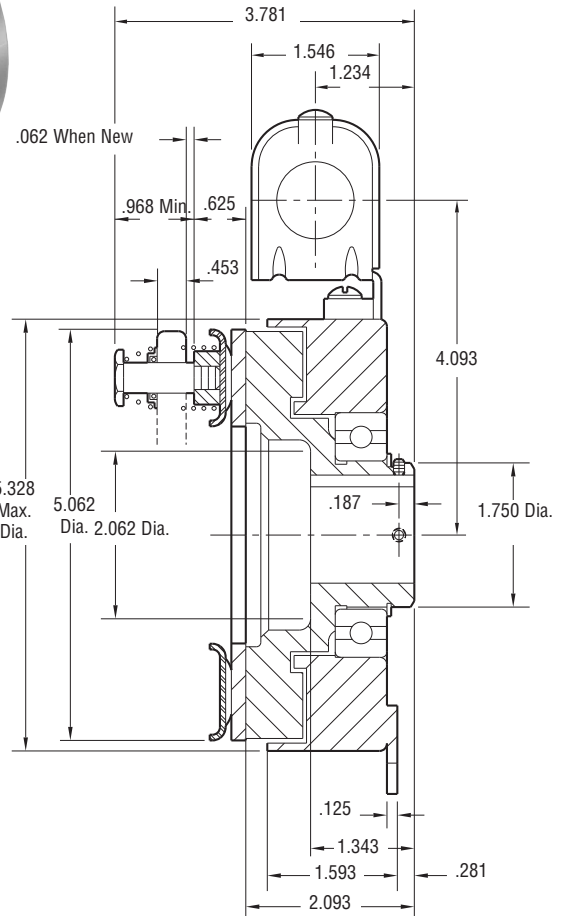
# Clutch

## SF-500 Bearing Mounted

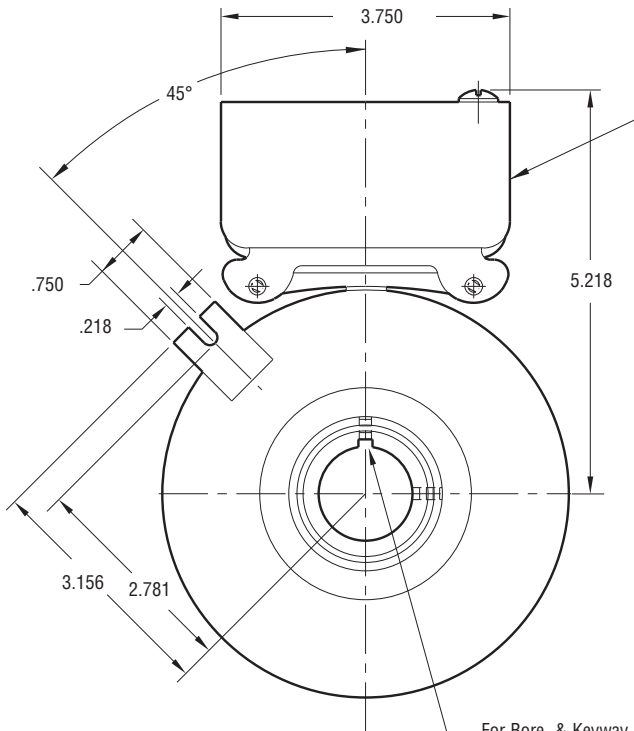
See page 230 for details on Drive Pin mountings.



**ARMATURE VIEW**



Removable plug in ends for 1/2" conduit.



**FIELD VIEW**

For Bore & Keyway sizes see chart below.

### Bore and Keyway Dimensions

Rotor Bore Dia.	Keyway
.751/.750 .876/.875	.187 x .093
.9385/.9375 1.001/1.000 1.126/1.125 1.251/1.250	.250 x .125

Static Torque	50 lb.ft.
Maximum Speed	4,000 rpm
Standard Voltage	D.C. 6, 24, 90

All dimensions are nominal unless otherwise noted.

Information on inertia and weights begins on page 239. Coil data is on pages 250 and 251.

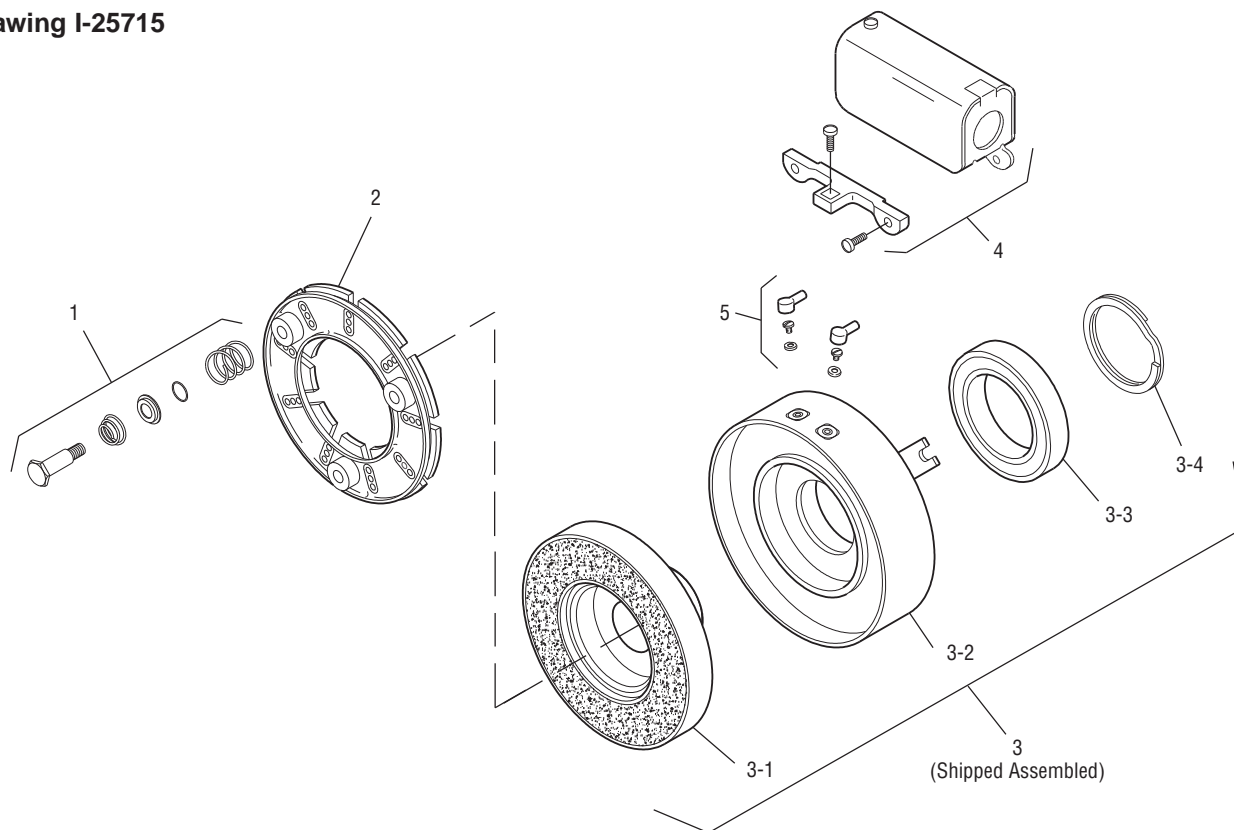
### Customer Shall Maintain:

1. Armature shafts to be concentric with rotor mounting shaft within .006 T.I.R.



SF-500 Bearing Mounted

Drawing I-25715



Item	Description	Part Number	Qty.
1	Autogap Accessory	5200-101-009	3
2	Armature	5300-111-002	1
3	Field and Rotor Assembly		1
	6 Volt – 3/4" Bore	5200-452-002	
	24 Volt – 3/4" Bore	5200-452-004	
	90 Volt – 3/4" Bore	5200-452-005	
	6 Volt – 7/8" Bore	5200-452-008	
	24 Volt – 7/8" Bore	5200-452-010	
	90 Volt – 7/8" Bore	5200-452-011	
	24 Volt – 15/16" Bore	5200-452-016	
	90 Volt – 15/16" Bore	5200-452-017	
	6 Volt – 1" Bore	5200-452-020	
	24 Volt – 1" Bore	5200-452-022	
	90 Volt – 1" Bore	5200-452-023	
	6 Volt – 1-1/8" Bore	5200-452-026	
	24 Volt – 1-1/8" Bore	5200-452-028	
	90 Volt – 1-1/8" Bore	5200-452-029	
	6 Volt – 1-1/4" Bore	5200-452-032	
	24 Volt – 1-1/4" Bore	5200-452-034	
	90 Volt – 1-1/4" Bore	5200-452-035	
3-1	Rotor		1
	3/4" Bore	5200-751-002	
	7/8" Bore	5200-751-003	
	15/16" Bore	5200-741-004	

Item	Description	Part Number	Qty.
	1" Bore	5200-751-005	
	1-1/8" Bore	5200-751-006	
	1-1/4" Bore	5200-751-007	
3-2	Field & Bearing Assembly		1
	6 Volt	5200-451-024	
	24 Volt	5200-451-026	
	90 Volt	5200-451-027	
3-3	Ball Bearing	166-0110	1
3-4	Retainer Ring	748-0002	1
4	Conduit Box	5200-101-010	1
5	Terminal Accessory	5311-101-001	1

**How to Order:**

1. Specify Bore Size for Item 3.
3. Specify Voltage for Item 3.
4. See Controls Section.

**Example:**

SF-500 Clutch per I-25715 - 90 Volt  
3/4" Bore

These units meet standards set forth in UL508 and are listed under guide card #NMTR2, file #59164.

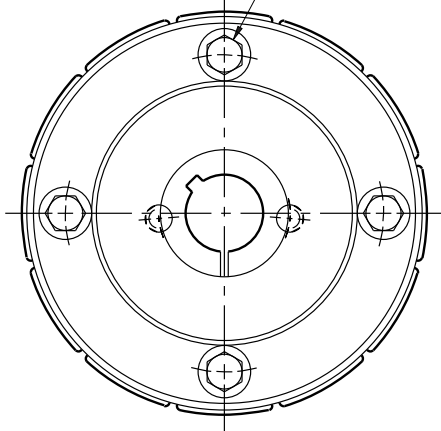
These units are CSA certified under file #LR11543.

Refer to Service Manual P-202.

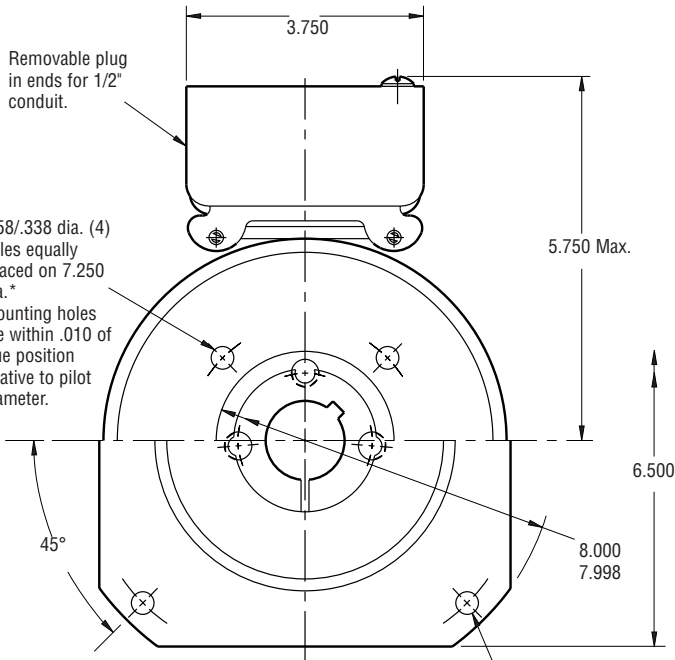
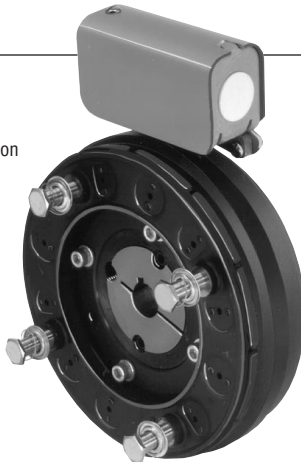
# Clutch

## SF-650 Flange Mounted

See page 230 for details on Drive Pin mountings.



**ARMATURE VIEW**

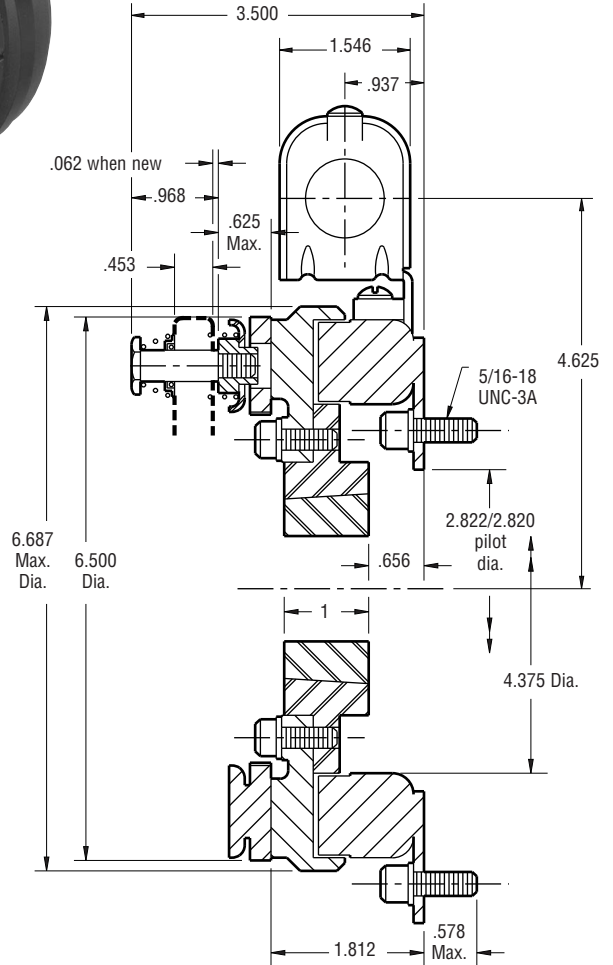


**FIELD VIEW**

(Inside & Outside Mounted)

### Customer Shall Maintain:

1. Concentricity of field mounting pilot diameter with rotor mounting shaft within .006 T.I.R.
2. Squareness of field mounting face with shaft within .006 T.I.R. measured at field mounting bolt circle.
3. Rotor mounting pilot diameter must be concentric with shaft within .006 T.I.R.

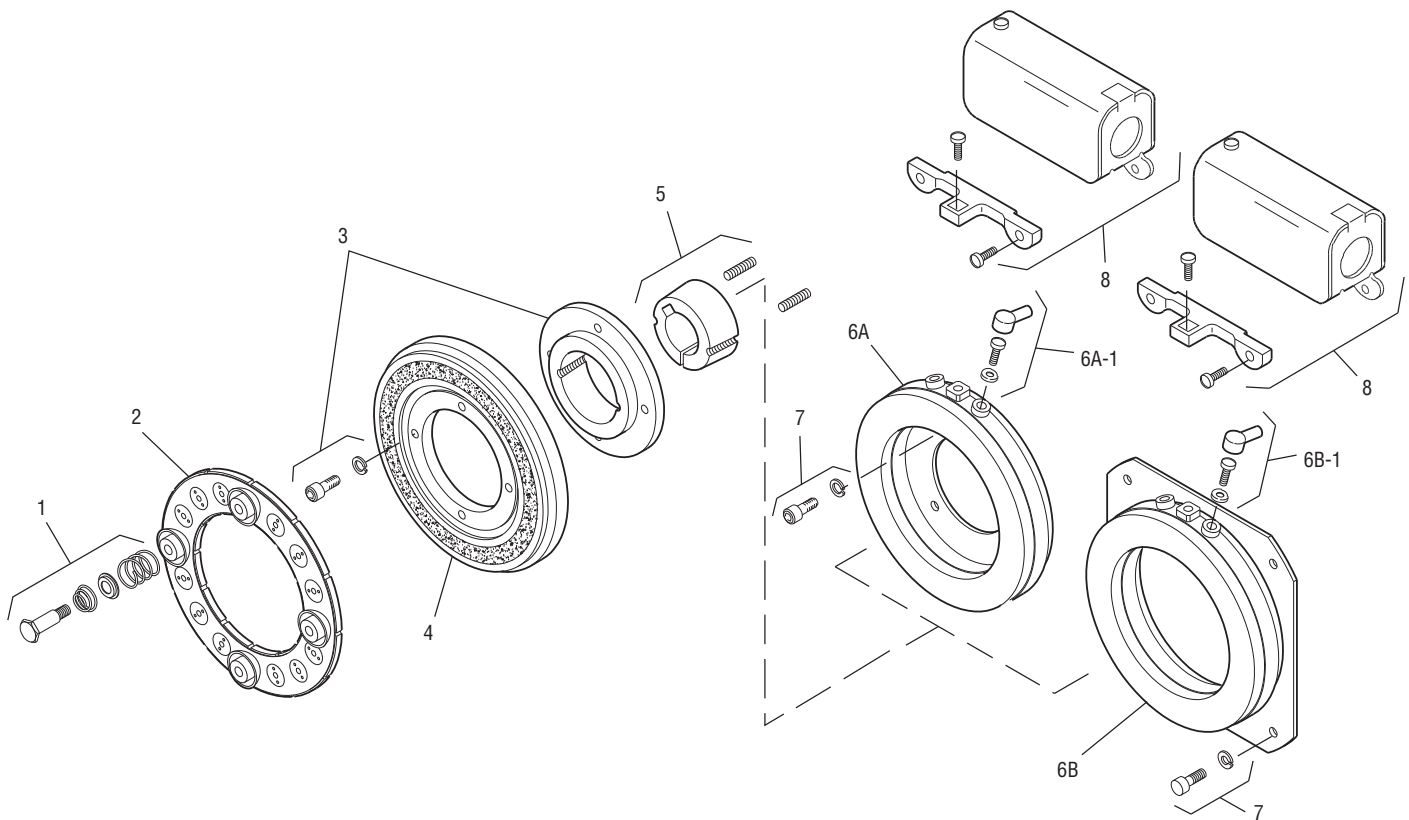


Shaft Size	.500 – 1.625
Static Torque	95 lb.ft.
Maximum Speed	3,600 rpm
Standard Voltage	D.C. 6, 24, 90

All dimensions are nominal unless otherwise noted.

Information on inertia and weights begins on page 239. Coil data is on pages 250 and 251.

Drawing I-25749



Item	Description	Part Number	Qty.
1	Armature Accessory	5181-101-010	4
2	Armature	5281-111-002	1
3	Rotor Hub & Mounting Acc.	5207-101-005	1
4	Rotor	5281-751-001	1
5	Bushing*		1
	1/2" to 1-5/8" Bore	180-0326 to 180-0344	
6A	Field - Inside Mounted		1
	6 Volt	5207-451-009	
	24 Volt	5207-451-012	
	90 Volt	5207-451-011	
6A-1	Terminal Accessory	5311-101-001	1
6B	Field - Outside Mounted		1
	6 Volt	5207-451-003	
	24 Volt	5207-451-006	
	90 Volt	5207-451-005	
6B-1	Terminal Accessory	5311-101-001	1
7	Mounting Accessory	5321-101-002	1
8	Conduit Box	5200-101-010	1

**How to Order:**

1. Specify Bore Size for Item 5.
2. Specify Voltage for Item 6.
3. Specify Inside or Outside Mounted for Item 6.
4. See Controls Section.

**Example:**

SF-650 Clutch per I-25749 - 90 Volt  
1" Bore

These units, when used in conjunction with the correct Warner Electric conduit box, meet the standards of UL508 and are listed under guide card #NMTR, file #59164.

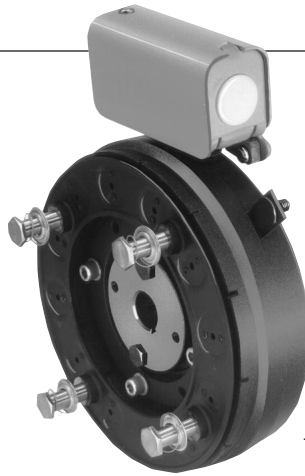
These units are CSA certified under file #LR11543

\*See page 252 for specific part numbers.

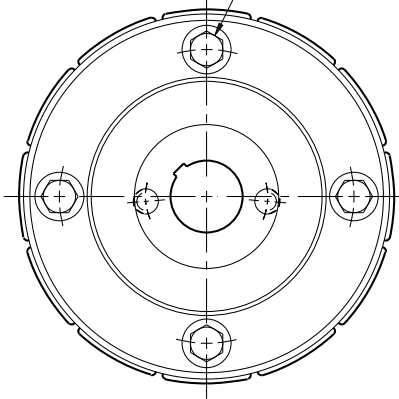
Refer to Service Manual P-202.

# Clutch

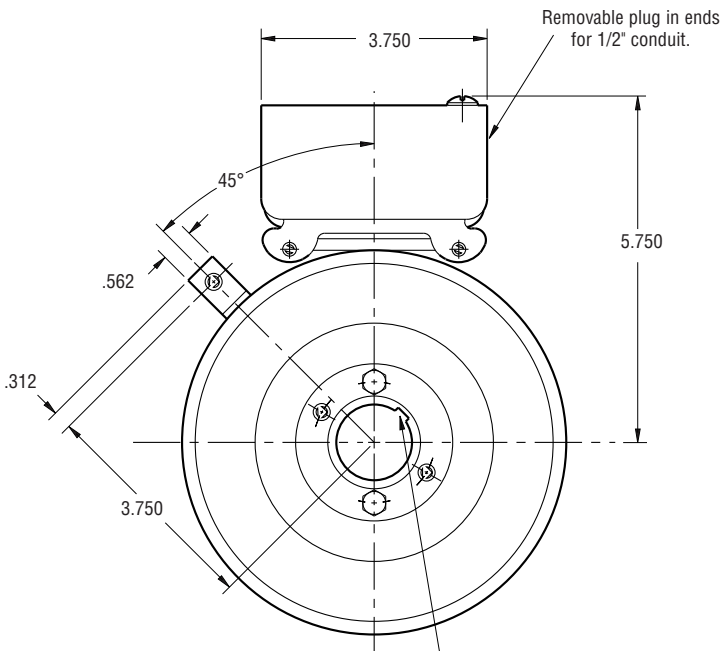
## SF-650 Bearing Mounted



See page 230 for details on Drive Pin mountings.

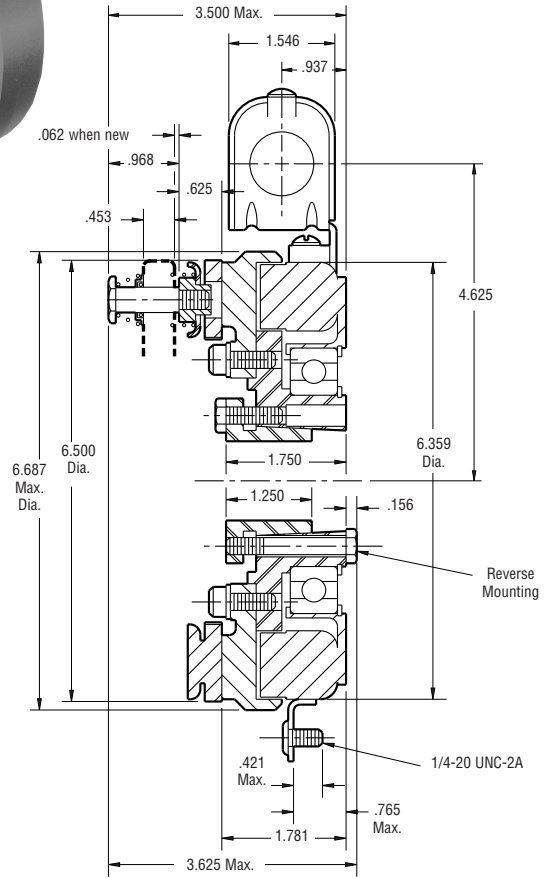


**ARMATURE VIEW**



See page 252 for details on Bushings.

**FIELD VIEW**



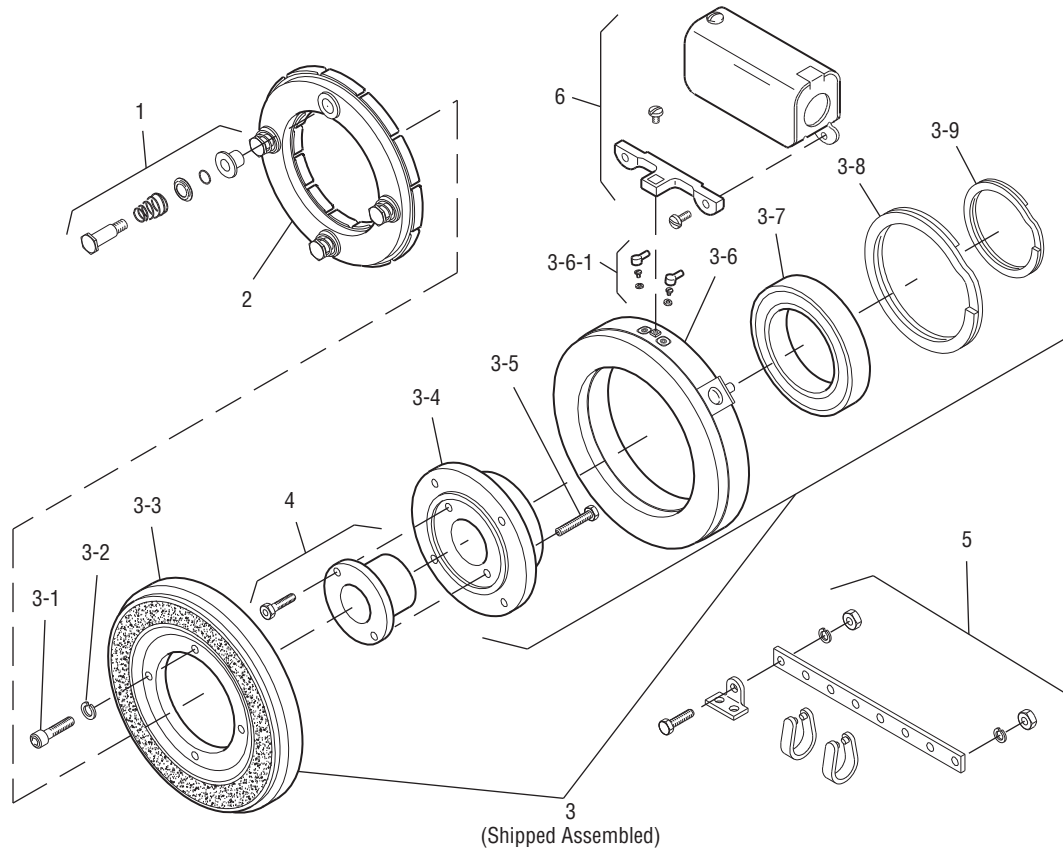
Shaft Size	.500 – 1.500
Static Torque	95 lb.ft.
Maximum Speed	3,600 rpm
Standard Voltage	D.C. 6, 24, 90

All dimensions are nominal unless otherwise noted.

Information on inertia and weights begins on page 239. Coil data is on pages 250 and 251.



Drawing I-25750



Item	Description	Part Number	Qty.
1	Autogap Accessory	5181-101-010	4
2	Armature	5281-111-002	1
3	Field and Rotor Assembly		1
	6 Volt	5207-452-002	
	24 Volt	5207-452-005	
	90 Volt	5207-452-004	
3-1	Capscrew	797-0083	4
3-2	Lockwasher	950-0355	4
3-3	Rotor Assembly	5281-751-001	1
3-4	Rotor Hub	540-0614	1
3-5	Reverse Mounting Accessory	5201-101-005	1
3-6	Field		1
	6 Volt	5281-451-002	
	24 Volt	5281-451-004	
	90 Volt	5281-451-005	
3-6-1	Terminal Accessory	5311-101-001	1
3-7	Ball Bearing	166-0104	1
3-8	Retainer Ring - External	748-0004	1
3-9	Retainer Ring -Internal	748-0104	1

Item	Description	Part Number	Qty.
4	Bushing*		1
	1/2" to 1-1/2" Bore	180-0002 to 180-0018	
†5	Torque Arm Accessory	5207-101-003	1
6	Conduit Box	5200-101-010	1

**How to Order:**

1. Specify Voltage for Item 3.
2. Specify Bore Size for Item 4.
3. See Controls Section.

**Example:**

SF-650 Clutch, bearing mounted per I-25750 - 90 Volt, 1" Bore

These units, when used in conjunction with the correct Warner Electric conduit box, meet the standards of UL508 and are listed under guide card #NMTR, file #59164.

These units are CSA certified under file #LR11543

\*See page 252 for specific part numbers.

Refer to Service Manual P-202.

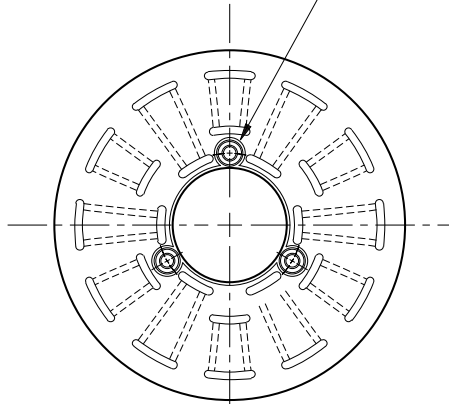
†Optional – not included in price.

# Clutch-Normal Duty

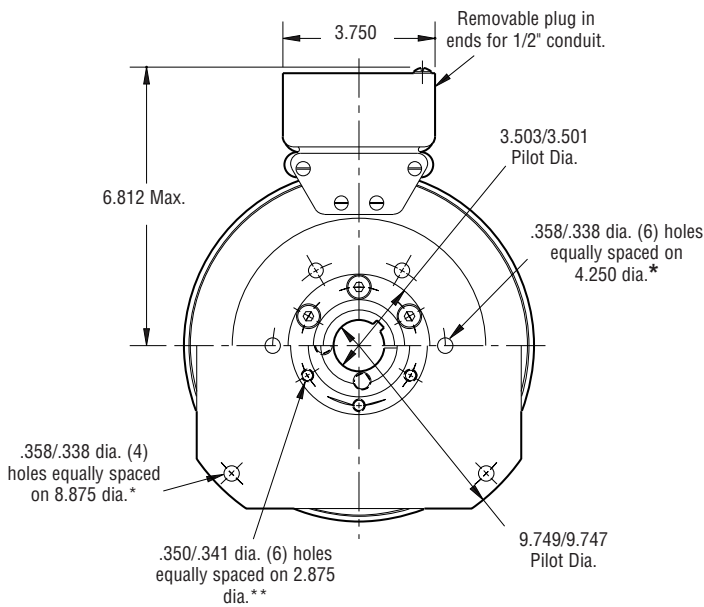
## SF-825 Flange Mounted



See page 230 for Drive Pin mountings.

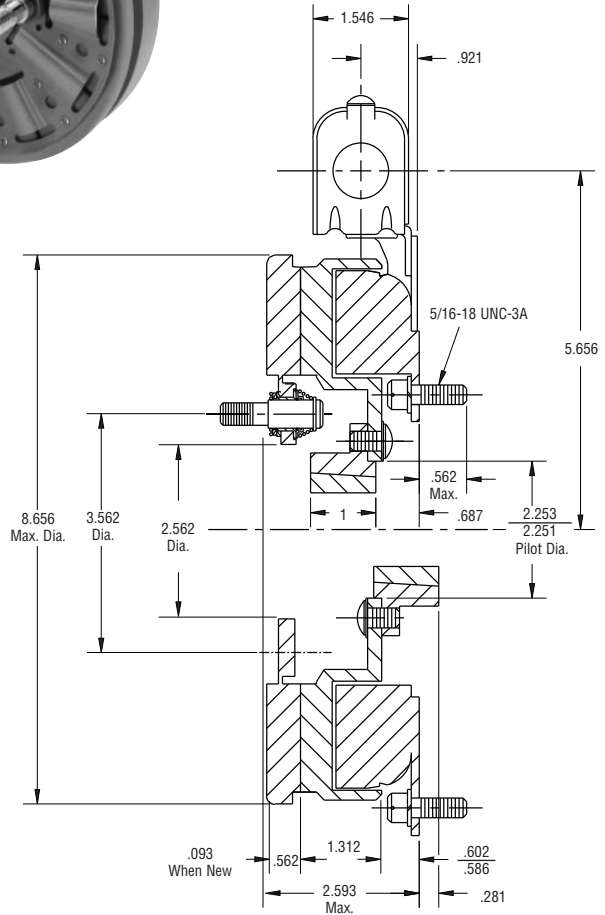


**ARMATURE VIEW**



**FIELD VIEW**

(Inside & Outside Mounted)



\* Mounting holes are within .010 of true position relative to pilot diameter.

\*\* Mounting holes are within .008 of true position relative to pilot diameter.

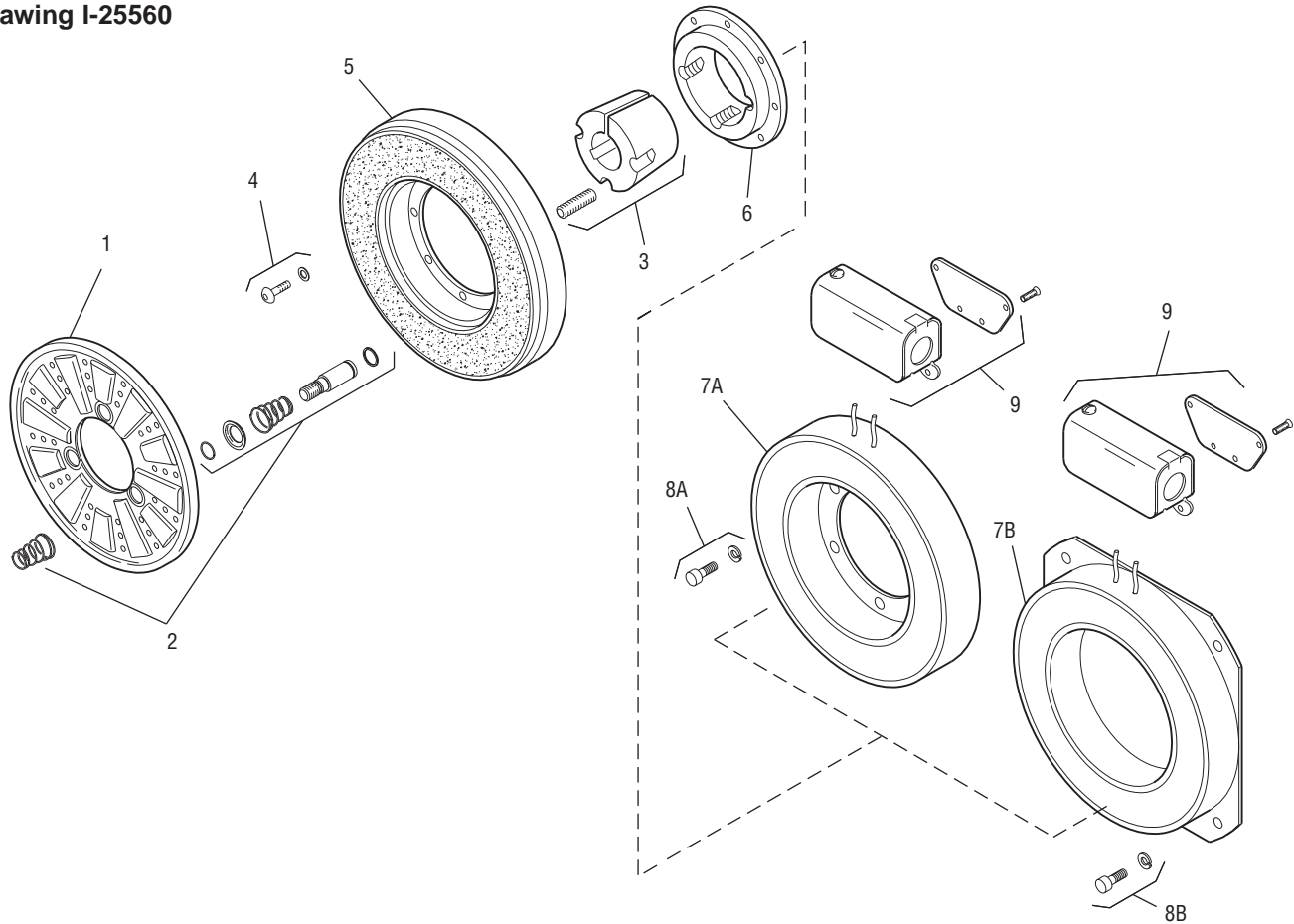
Shaft Size	.500 – 1.250
Static Torque	125 lb.ft.
Maximum Speed	4,000 rpm
Standard Voltage	D.C. 6, 24, 90

All dimensions are nominal unless otherwise noted.

Information on inertia and weights begins on page 239. Coil data is on pages 250 and 251.



Drawing I-25560



Item	Description	Part Number	Qty.
1	Armature	5301-111-018	1
2	Autogap Accessory	5201-101-008	3
3	Bushing*		1
	1/2" to 1-1/4" Bore	180-0101 to 180-0113	
4	Mounting Accessory	5201-101-007	1
5	Rotor		1
	Standard Friction Material	5201-751-003	
	†Optional LK Facing	5201-751-007	
6	Rotor Hub	540-0013	1
7A	Field - Inside Mounted		1
	6 Volt	5201-451-006	
	24 Volt	5201-451-008	
	90 Volt	5201-451-010	
7B	Field - Outside Mounted		1
	6 Volt	5201-451-014	
	24 Volt	5201-451-016	
	90 Volt	5201-451-018	
8A	Mounting Accessory - I.M.	5321-101-001	1
8B	Mounting Accessory - O.M.	5321-101-002	1
9	Conduit Box	5200-101-012	1

**How to Order:**

1. Specify Bore Size for Item 3.
2. Specify Voltage for Items 7A or 7B.
3. Specify Inside Mounted for Items 7A and 8A or Outside Mounted for Items 7B and 8B.
4. See Controls Section.

**Example:**

SF-825 Clutch per I-25560 -90 Volt, 1" Bore, Inside Mounted

These units, when used in conjunction with the correct Warner Electric conduit box, meet the standards of UL508 and are listed under guide card #NMTR, file #59164.

These units are CSA certified under file #LR11543.

\*See page 252 for specific part numbers.

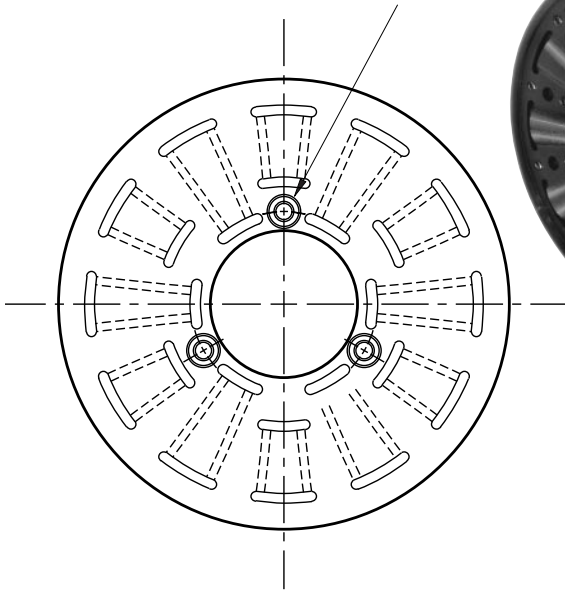
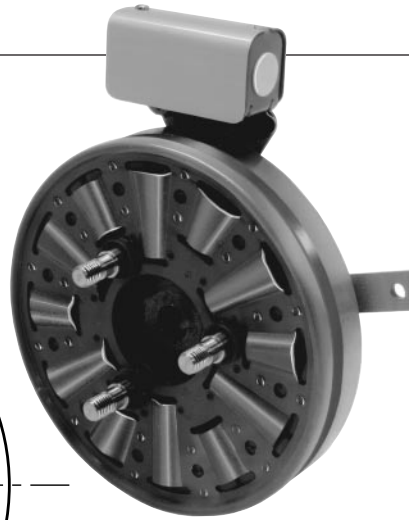
Refer to Service Manual P-222.

†Optional LK facing available. For more information, see page 232.

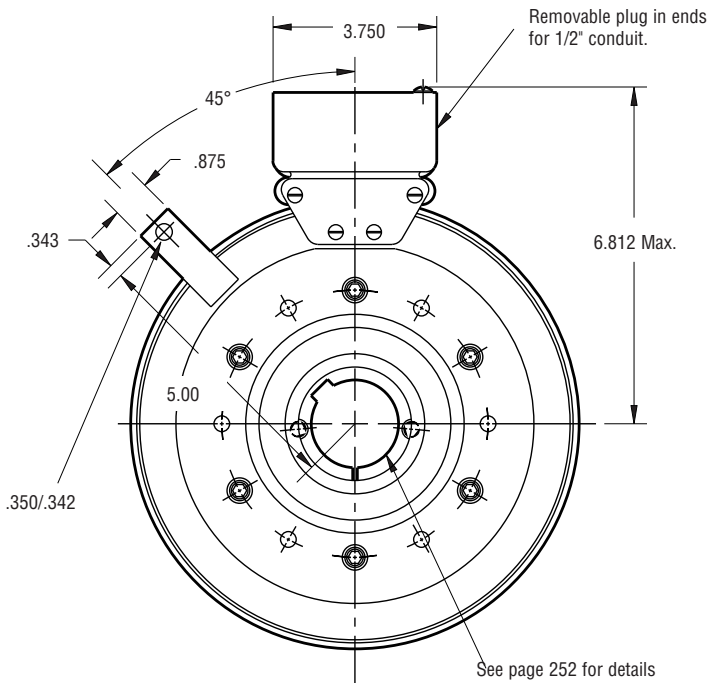
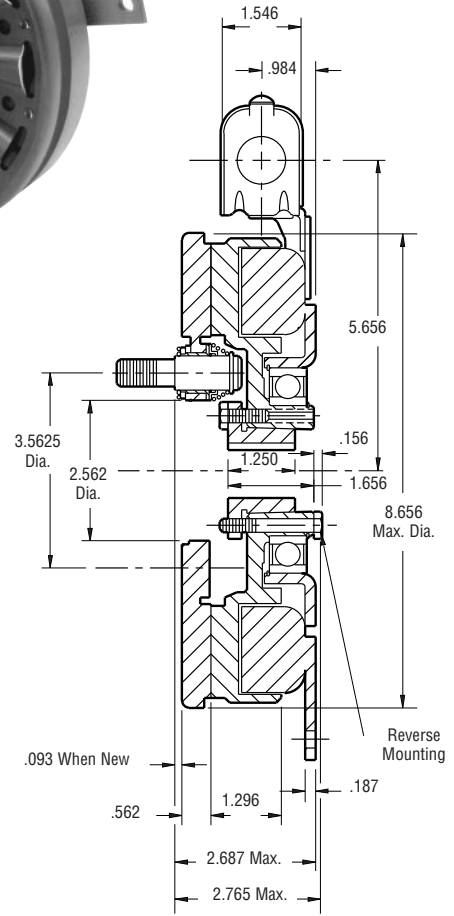


SF-825 Bearing Mounted

See page 230 for details on Drive Pin Mountings.



ARMATURE VIEW



FIELD VIEW

See page 252 for details on Bushings.

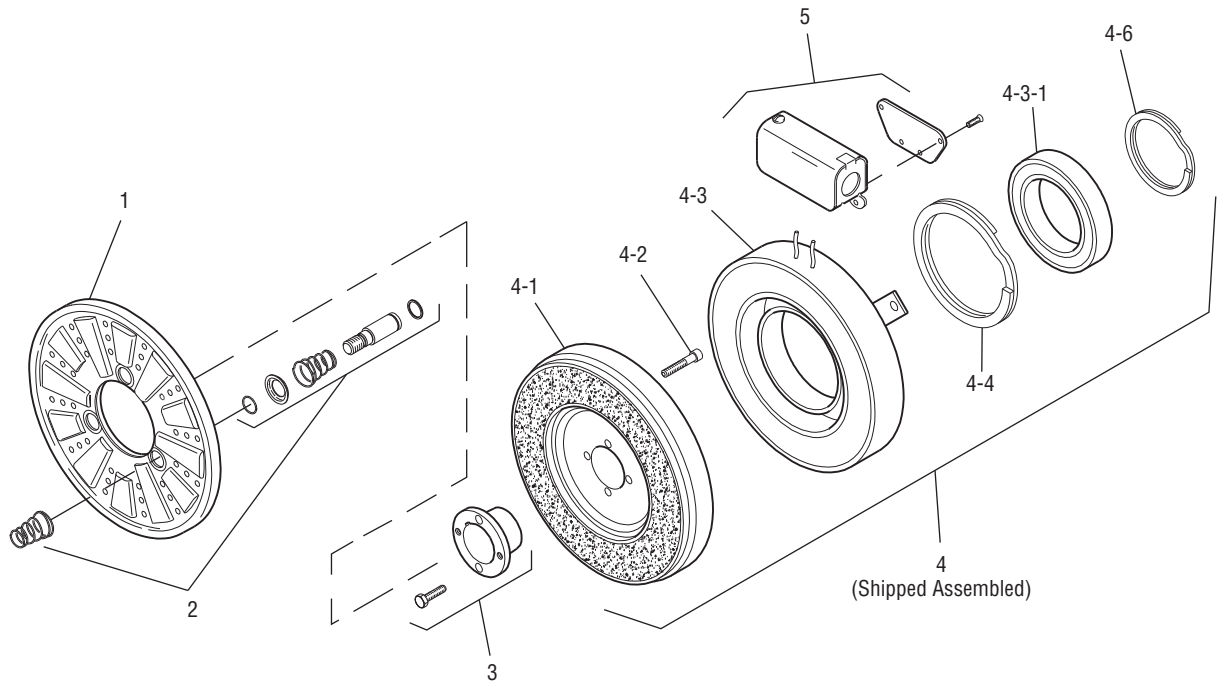
Shaft Size	.500 – 1.500
Static Torque	150 lb.ft.
Maximum Speed	3,600 rpm
Standard Voltage	D.C. 6, 24, 90

All dimensions are nominal unless otherwise noted.

Information on inertia and weights begins on page 239. Coil data is on pages 250 and 251.



Drawing I-25575



Item	Description	Part Number	Qty.
1	Armature	5301-111-018	1
2	Autogap Accessory	5201-101-008	3
3	Bushing*		1
	1/2" to 1-1/2" Bore	180-0002 to 180-0018	
4	Field & Rotor Assembly		1
	6 Volt	5201-452-002	
	24 Volt	5201-452-004	
	90 Volt	5201-452-006	
4-1	Rotor		1
	Standard Friction Material	5201-751-008	
4-2	Mounting Accessory	5201-101-005	1
4-3	Field & Bearing Assembly		1
	6 Volt	5201-451-054	
	24 Volt	5201-451-056	
	90 Volt	5201-451-057	
4-3-1	Ball Bearing	166-0142	1
4-4	Retainer Ring	748-0111	1
4-6	Retainer Ring	748-0016	1
5	Conduit Box	5200-101-012	1

**How to Order:**

1. Specify Bore Size for Item 3.
2. Specify Voltage for Item 4.
4. See Controls Section.

**Example:**

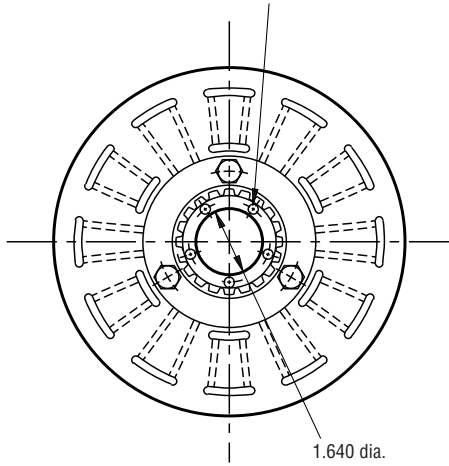
SF-825 Clutch per I-25575 - 90 Volt, 1" Bore

These units, when used in conjunction with the correct Warner Electric conduit box, meet the standards of UL508 and are listed under guide card #NMTR, file #59164. These units are CSA certified under file #LR11543.

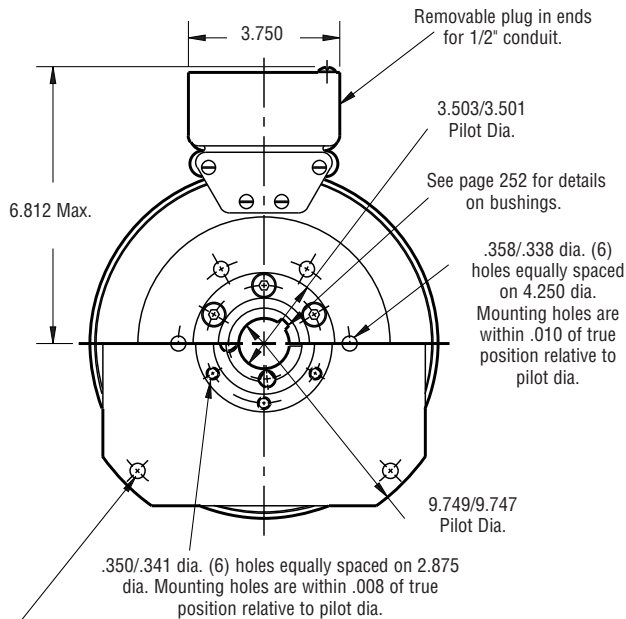
\*See page 252 for specific part numbers.  
Refer to Service Manual P-215.

## SF-825 Flange Mounted

.271/.263 dia. 5 holes (hub) equally spaced on 2.015 dia. Mounting holes are within .003 of true position relative to pilot dia.



### ARMATURE VIEW



.358/.338 dia. (4) holes equally spaced on 8.875 dia. are within .010 of true position relative to pilot dia.

### FIELD VIEW

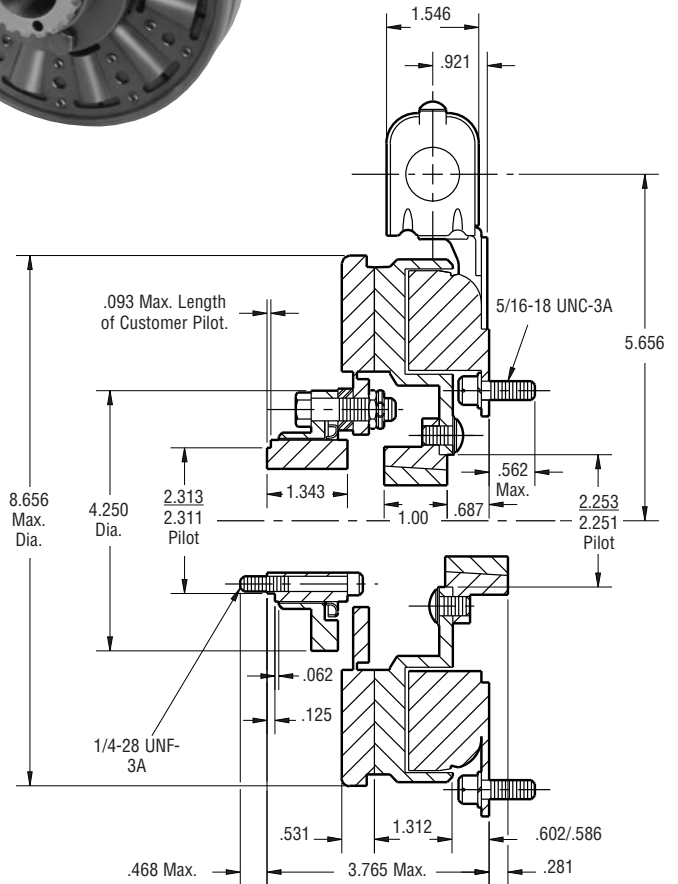
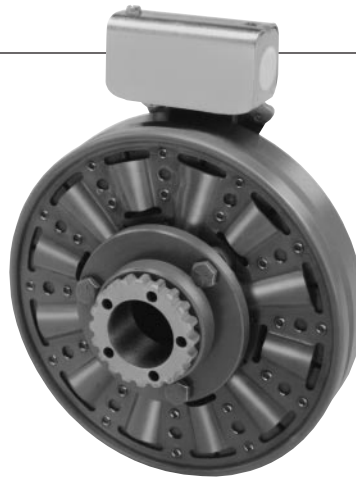
(Inside & Outside Mounted)

#### Customer Shall Maintain:

1. Concentricity of field mounting pilot diameter with rotor mounting shaft within .006 T.I.R.
2. Squareness of field mounting face with shaft within .006 T.I.R. measured at field mounting bolt circle.
3. Rotor mounting shaft concentric with armature hub pilot diameter within .010 T.I.R.

#### When Hub is Furnished by Customer:

Rotor mounting pilot diameter must be concentric with rotor mounting shaft within .006 T.I.R.



Shaft Size	.500 – 1.250
Static Torque	125 lb.ft.
Maximum Speed	4,000 rpm
Standard Voltage	D.C. 6, 24, 90

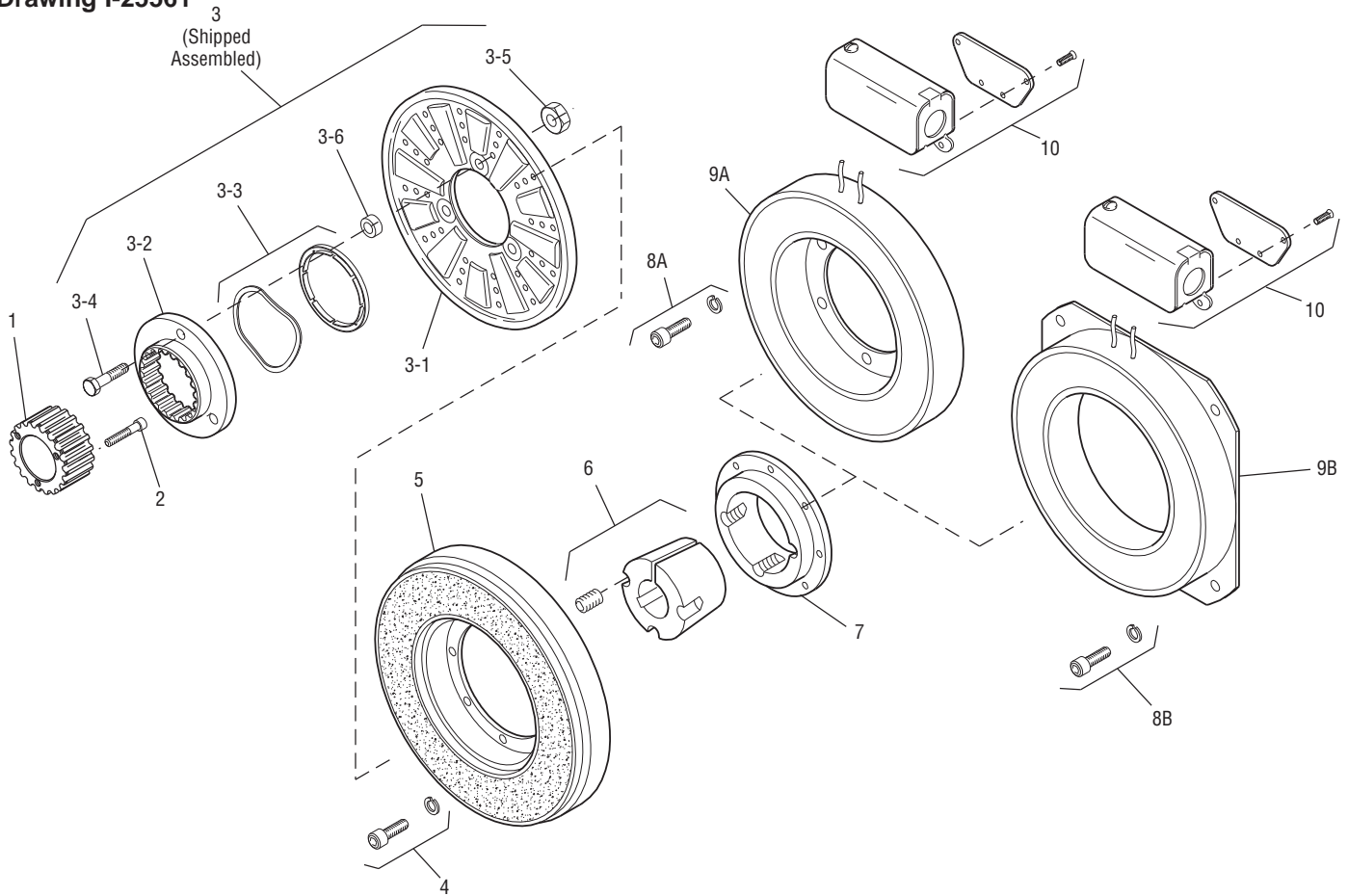
All dimensions are nominal unless otherwise noted.

Information on inertia and weights begins on page 239. Coil data is on pages 250 and 251.



## SF-825 Flange Mounted

Drawing I-25561



Item	Description	Part #	Qty.
1	Splined Hub	540-0146	1
2	Mounting Accessory	5201-101-001	1
3	Armature & Splined Adapter	5201-111-001	1
3-1	Armature	5321-111-022	1
3-2	Splined Adapter	104-0008	1
3-3	Autogap Accessory	5321-101-006	1
3-4	Screw	797-0341	3
3-5	Locknut	661-0004	3
3-6	Spacer	748-0333	3
4	Mounting Accessory	5201-101-007	1
5	Rotor		1
	Standard Friction Material	5201-751-003	
	†Optional LK Facing	5201-751-007	
6	Bushing, Taperlock*	180-0101 to 180-0113	1
7	Rotor Hub	540-0013	1
8A	Mounting Accessory, I.M.	5321-101-001	1
8B	Mounting Accessory, O.M.	5321-101-002	1
9A	Field, Inside Mounted		1
	6 Volt	5201-451-006	
	24 Volt	5201-451-008	
	90 Volt	5201-451-010	

Item	Description	Part #	Qty.
9B	Field, Outside Mounted		1
	6 Volt	5201-451-014	
	24 Volt	5201-451-016	
	90 Volt	5201-451-018	
10	Conduit Box	5200-101-012	1

### How to Order:

1. Specify Bore Size for Item 6.
2. Specify Voltage for Item 9A or 9B.
3. Specify Inside Mounted for Items 8A and 9A or Outside Mounted for Items 8B and 9B.
4. See Controls Section.

### Example:

SF-825 Clutch Coupling, Heavy Duty, per I-25561 - 90 Volt, Inside Mounted, 1" Bore (Item 6)

These units, when used in conjunction with the correct Warner Electric conduit box, meet the standards of UL508 and are listed under guide card #NMTR, file #59164. These units are CSA certified under file #LR11543

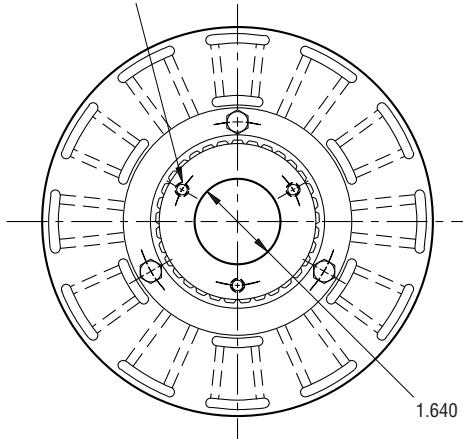
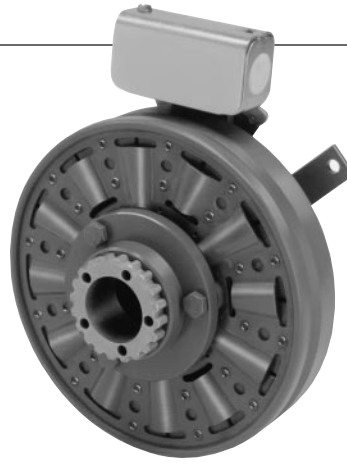
\*See page 252 for specific part numbers.

Refer to Service Manual P-215.

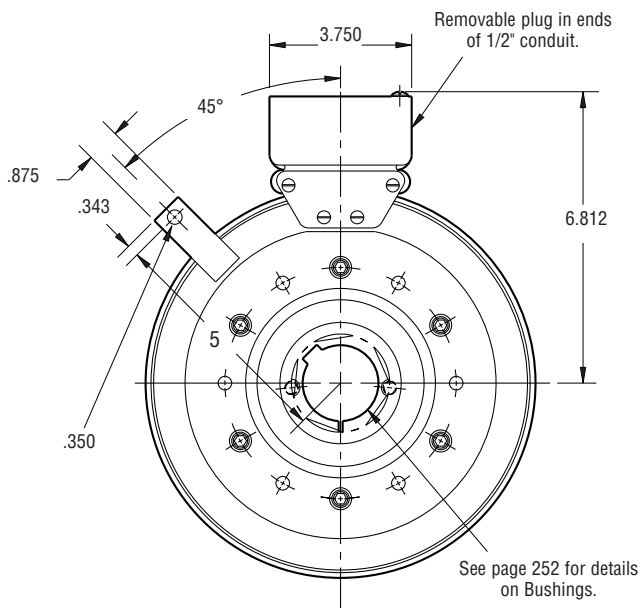
†Optional LK facing available. For more information, see page 232.

## SF-825 Bearing Mounted

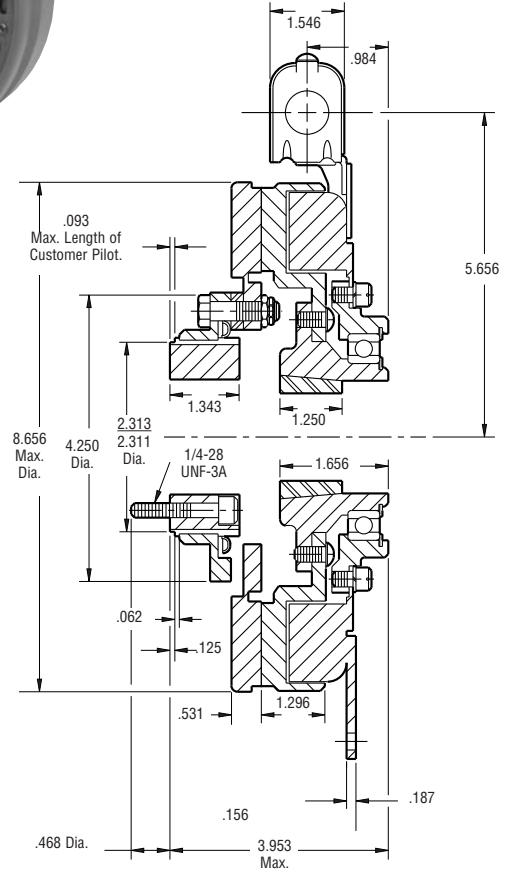
.271/.263 dia. 5 holes (hub) equally spaced on 2.015 dia. and within .003 of true position relation to 2.313/2.311 pilot dia.



**ARMATURE VIEW**



**FIELD VIEW**



Shaft Size	.500 – 1.500
Static Torque	150 lb.ft.
Maximum Speed	3,600 rpm
Standard Voltage	D.C. 6, 24, 90

All dimensions are nominal unless otherwise noted.

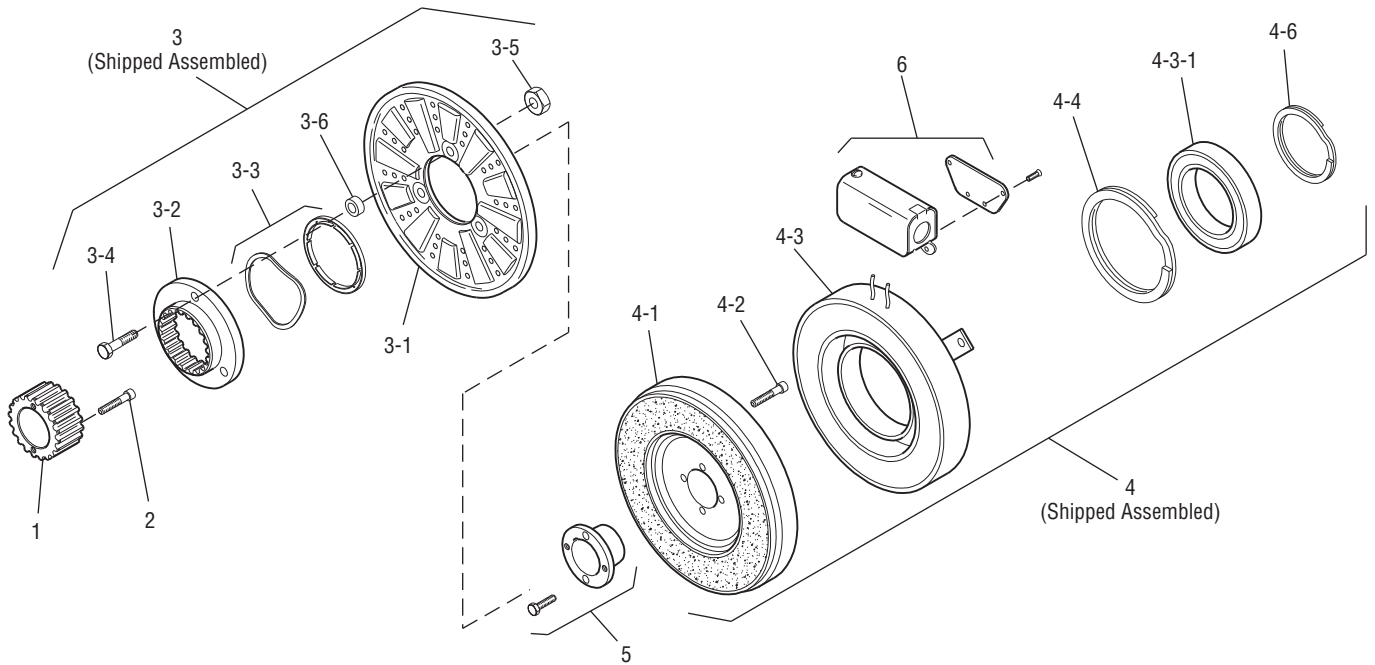
Information on inertia and weights begins on page 239. Coil data is on pages 250 and 251.

**Customer Shall Maintain:**

1. Armature hub pilot diameter to be concentric with field and rotor mounting shaft within .010 T.I.R.



Drawing I-25573



Item	Description	Part Number	Qty.
1	Splined Hub	540-0146	1
2	Accessory, Mounting	5201-101-001	1
3	Armature & Adapter Assembly	5201-111-001	1
3-1	Armature	5321-111-022	1
3-2	Splined Adapter	104-0008	1
3-3	Autogap Accessory	5321-101-006	1
3-4	Screw	797-0341	3
3-5	Locknut	661-0004	3
3-6	Spacer	748-0333	3
4	Field & Rotor Assembly		1
	6 Volt	5201-452-002	
	24 Volt	5201-452-004	
	90 Volt	5201-452-006	
4-1	Rotor	5201-751-008	1
4-2	Mounting Accessory	5201-101-005	1
4-3	Field & Bearing Assembly		1
	6 Volt	5201-451-054	
	24 Volt	5201-451-056	
	90 Volt	5201-451-057	

Item	Description	Part Number	Qty.
4-3-1	Ball Bearing	166-0142	1
4-4	Retainer Ring	748-0111	1
4-6	Retainer Ring	748-0016	1
5	Bushing*	180-0002 to 180-0018	1
6	Conduit Box	5200-101-012	1

**How to Order:**

1. Specify Bore Size for Item 5.
2. Specify Voltage for Item 4.
4. See Controls Section.

**Example:**

SF-825 Clutch per I-25573 - 90 Volt, 1" Bore

These units, when used in conjunction with the correct Warner Electric conduit box, meet the standards of UL508 and are listed under guide card #NMTR, file #59164. These units are CSA certified under file #LR11543.

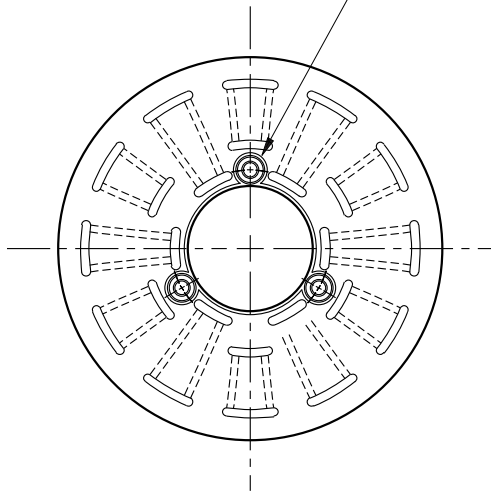
\*See page 252 for specific part numbers.

Refer to Service Manual P-215.

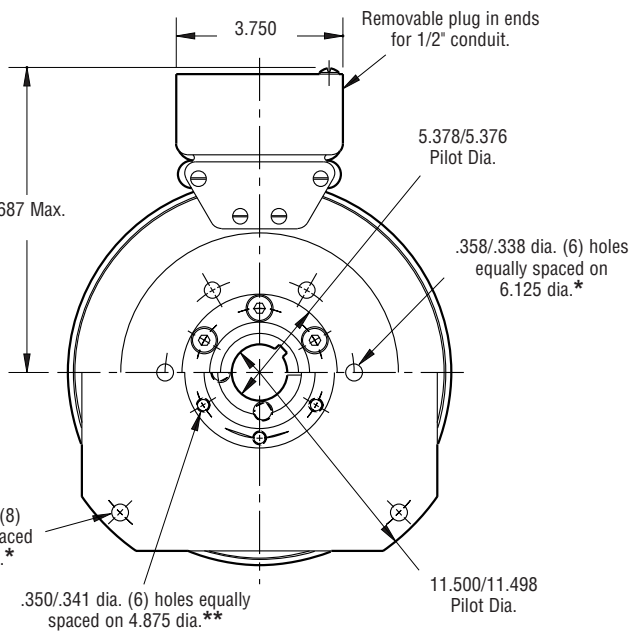
SF-1000 Flange Mounted



See page 230 for Drive Pin mountings.

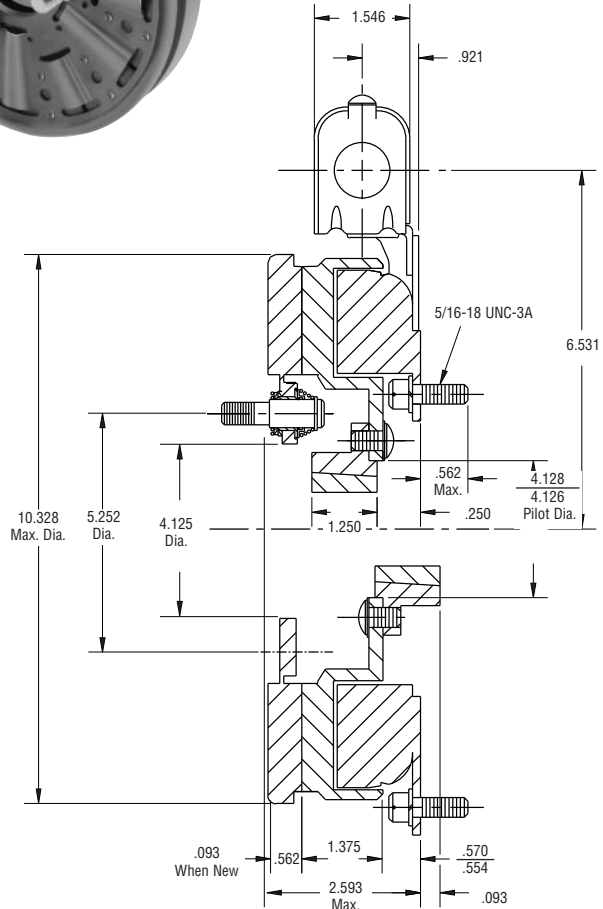


ARMATURE VIEW



FIELD VIEW

(Inside & Outside Mounted)



\* Mounting holes are within .010 of true position relative to pilot diameter.

\*\* Mounting holes are within .008 of true position relative to pilot diameter.

Shaft Size	.500 – 2.000
Static Torque	240 lb.ft.
Maximum Speed	3,600 rpm
Standard Voltage	D.C. 6, 24, 90

All dimensions are nominal unless otherwise noted.

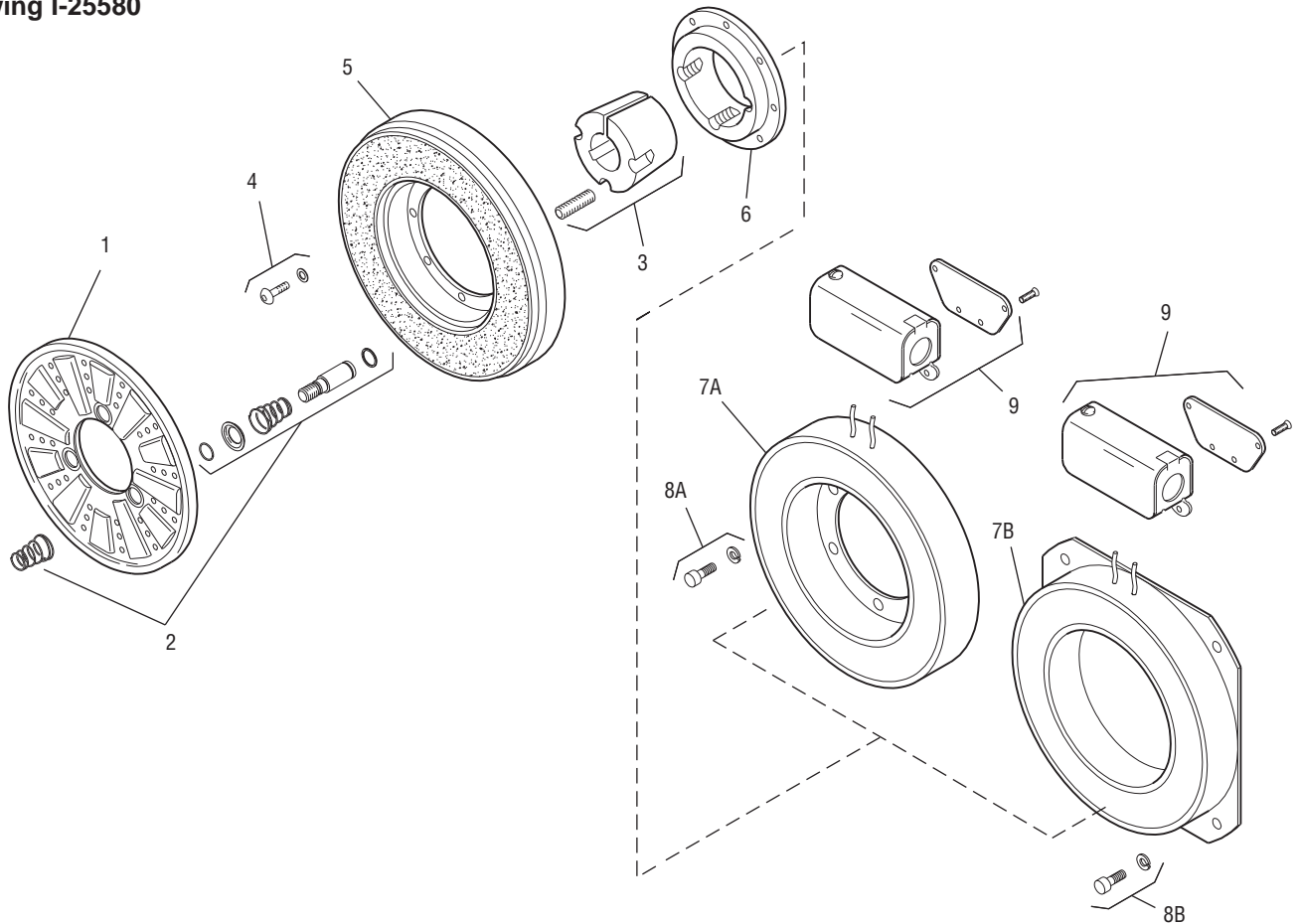
Information on inertia and weights begins on page 239. Coil data is on pages 250 and 251.

Customer Shall Maintain:

1. Concentricity of field mounting pilot diameter with rotor mounting shaft within .006 T.I.R.
2. Squareness of field mounting face with shaft within .006 T.I.R. measured at field mounting bolt circle.



Drawing I-25580



Item	Description	Part Number	Qty.
1	Armature	5302-111-013	1
2	Autogap Accessory	5201-101-008	3
3	Bushing*		1
	1/2" to 2" Bore	180-0155 to 180-0179	
4	Mounting Accessory	5201-101-007	1
5	Rotor		1
	Standard Friction Material	5202-751-003	
	†Optional LK Facing	5202-751-007	
6	Rotor Hub	540-0315	1
7A	Field - Inside Mounted		1
	6 Volt	5202-451-004	
	24 Volt	5202-451-006	
	90 Volt	5202-451-007	
7B	Field - Outside Mounted		1
	6 Volt	5202-451-011	
	24 Volt	5202-451-013	
	90 Volt	5202-451-014	
8A	Mounting Accessory - I.M.	5321-101-001	1
8B	Mounting Accessory - O.M.	5321-101-002	2
9	Conduit Box	5200-101-012	1

**How to Order:**

1. Specify Bore Size for Item 3.
2. Specify Voltage for Items 8A or 8B.
3. Specify Inside Mounted for Items 7A and 8A or Outside Mounted for Items 7B and 8B.
4. See Controls Section.

**Example:**

SF-1000 Clutch per I-25580 -90 Volt, 1" Bore, Inside Mounted

These units, when used in conjunction with the correct Warner Electric conduit box, meet the standards of UL508 and are listed under guide card #NMTR, file #59164.

These units are CSA certified under file #LR11543.

\*See page 252 for specific part numbers.

Refer to Service Manual P-222.

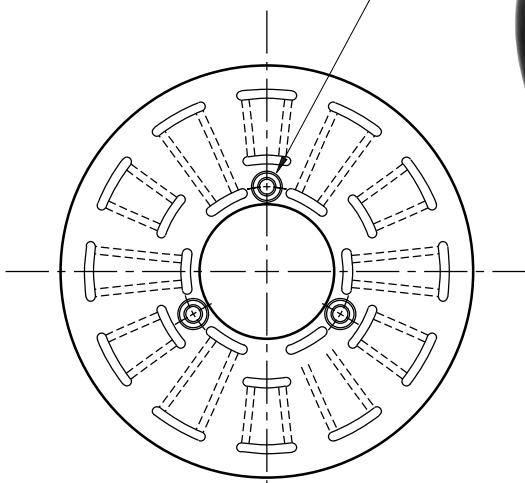
†Optional LK facing available. For more information, see page 232.



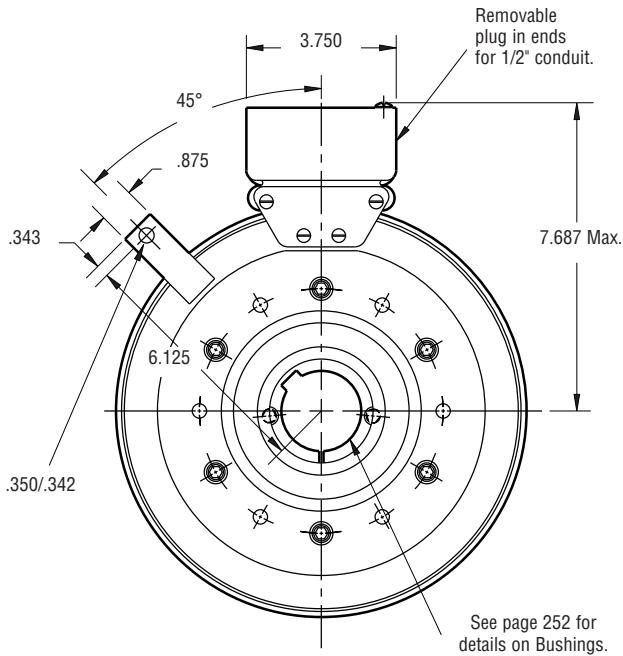
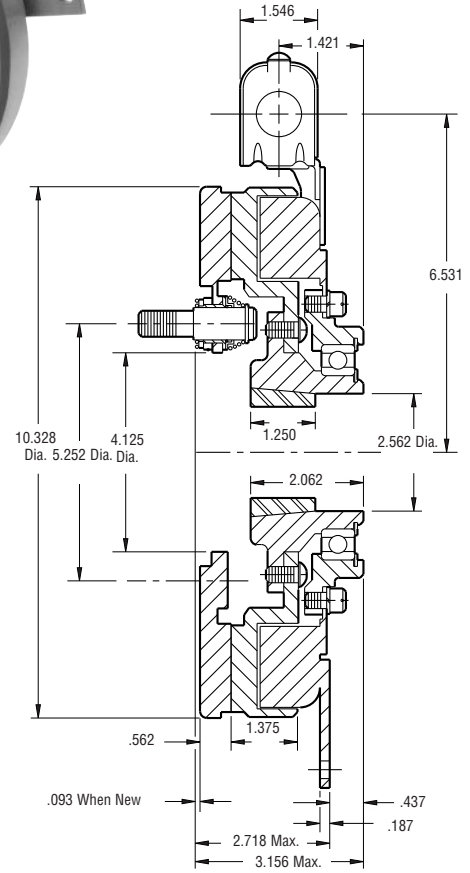
**SF-1000 Bearing Mounted**



See page 252 for details on Bushings.



**ARMATURE VIEW**



**FIELD VIEW**

See page 252 for details on Bushings.

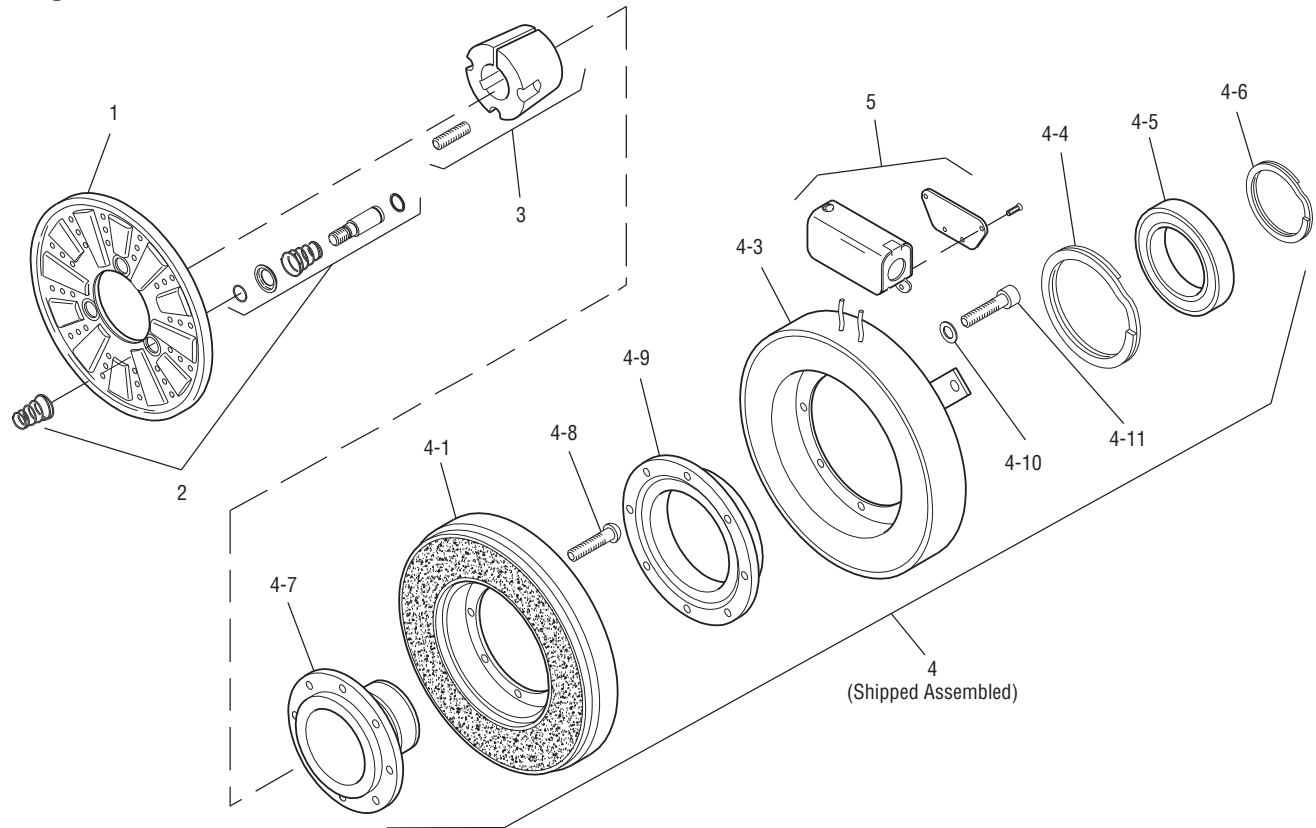
Shaft Size	.500 – 2.000
Static Torque	240 lb.ft.
Maximum Speed	2,500 rpm
Standard Voltage	D.C. 6, 24, 90

All dimensions are nominal unless otherwise noted.

Information on inertia and weights begins on page 239. Coil data is on pages 250 and 251.



Drawing I-25596



Item	Description	Part Number	Qty.
1	Armature	5302-111-013	1
2	Autogap Accessory	5201-101-008	3
3	Bushing*		1
	1/2" to 2" Bore	180-0155 to 180-0179	
4	Field & Rotor Assembly		1
	6 Volt	5202-452-012	
	24 Volt	5202-452-014	
	90 Volt	5202-452-015	
4-1	Rotor		1
	Standard Friction Material	5202-751-003	
	†Optional LK Facing	5202-751-007	
4-3	Field & Bearing Assembly		1
	6 Volt	5202-451-040	
	24 Volt	5202-451-042	
	90 Volt	5202-451-043	
4-4	Retainer Ring	748-0116	1
4-5	Ball Bearing	166-1046	1
4-6	Retainer Ring	748-0582	1
4-7	Rotor Hub	540-1300	1

Item	Description	Part Number	Qty.
4-8	Buttonhead Capscrew	797-1261	6
4-9	Ring Adapter	748-1047	1
4-10	Lockwasher	950-0359	6
4-11	Socket Head Capscrew	797-0424	6
5	Conduit Box	5200-101-012	1

**How to Order:**

1. Specify Bore Size for Item 3.
2. Specify Voltage for Item 4.
3. See Controls Section.

**Example:**

SF-1000 Clutch per I-25596 - 90 Volt, 1" Bore

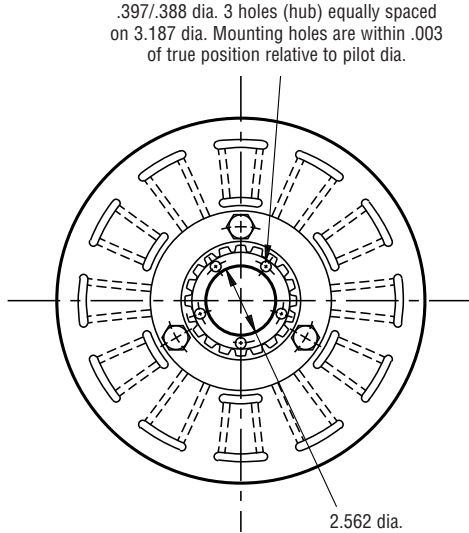
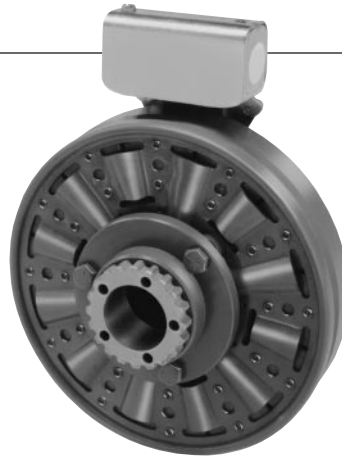
These units, when used in conjunction with the correct Warner Electric conduit box, meet the standards of UL508 and are listed under guide card #NMTR, file #59164. These units are CSA certified under file #LR11543.

\*See page 252 for specific part numbers.

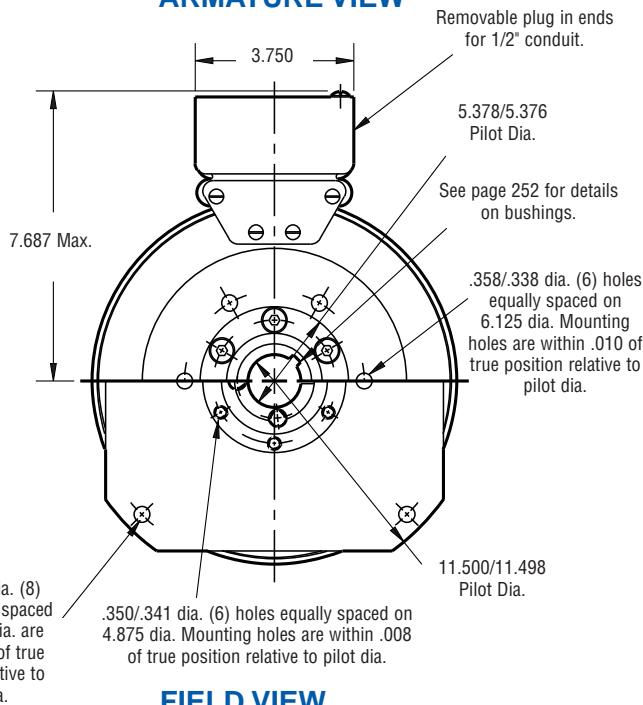
Refer to Service Manual P-215.

†Optional LK facing available. For more information, see page 232.

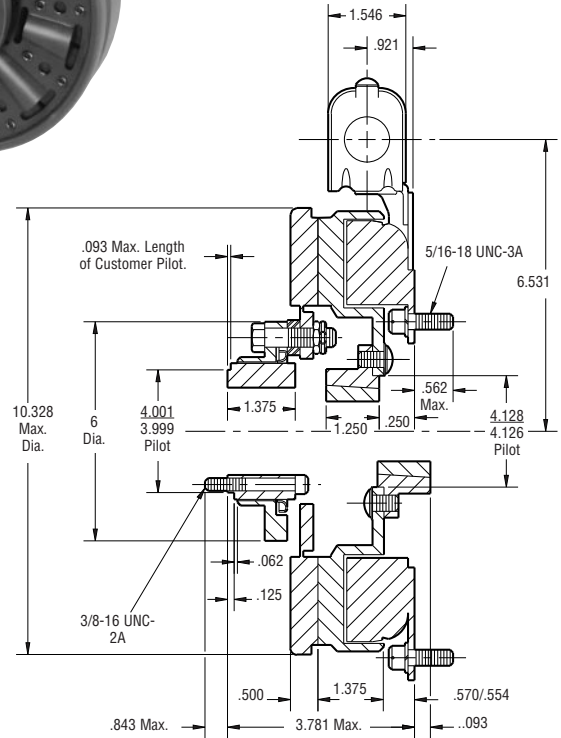
SF-1000 Flange Mounted



ARMATURE VIEW



FIELD VIEW  
(Inside & Outside Mounted)



Shaft Size	.500 – 2.000
Static Torque	240 lb.ft.
Maximum Speed	3,600 rpm
Standard Voltage	D.C. 6, 24, 90

Customer Shall Maintain:

1. Concentricity of field mounting pilot diameter with rotor mounting shaft within .006 T.I.R.
2. Squareness of field mounting face with shaft within .006 T.I.R. measured at field mounting bolt circle.
3. Rotor mounting shaft concentric with armature hub pilot diameter within .010 T.I.R.

When Hub is Furnished by Customer:

Rotor mounting pilot diameter must be concentric with rotor mounting shaft within .006 T.I.R.

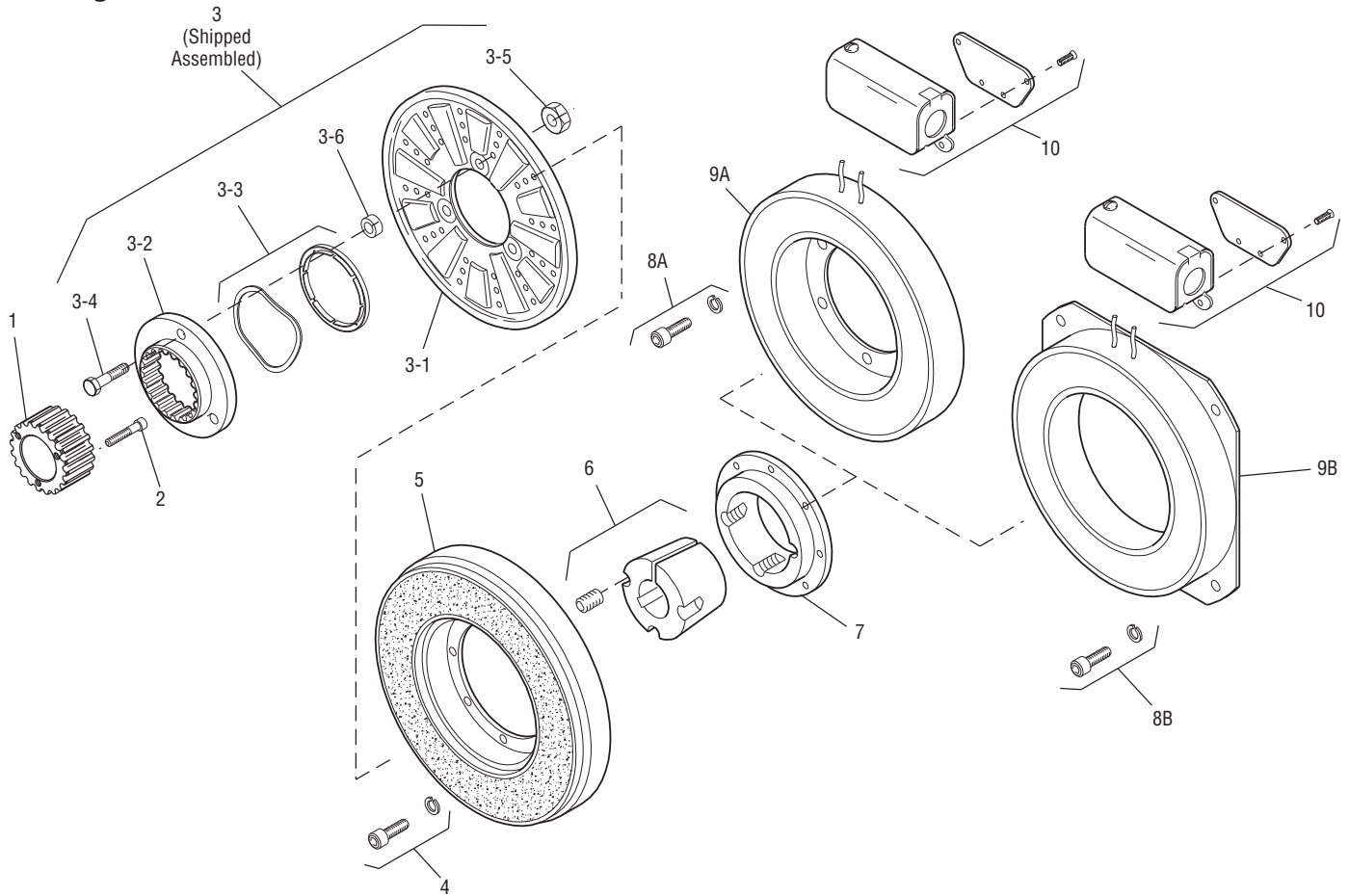
All dimensions are nominal unless otherwise noted.

Information on inertia and weights begins on page 239. Coil data is on pages 250 and 251.



SF-1000 Flange Mounted

Drawing I-25581



Item	Description	Part Number	Qty.
1	Splined Hub	540-0147	1
2	Mounting Accessory	5202-101-001	1
3	Armature & Splined Adapter	5202-111-001	1
3-1	Armature	5322-111-036	1
3-2	Splined Adapter	104-0009	1
3-3	Autogap Accessory	5322-101-004	1
3-4	Screw	797-0341	3
3-5	Locknut	661-0004	3
3-6	Spacer	748-0333	3
4	Mounting Accessory	5201-101-007	1
5	Rotor		1
	Standard Friction Material	5202-751-003	
	†Optional LK Facing	5202-751-007	
6	Bushing, Taperlock*	180-0155 to 180-0179	1
7	Rotor Hub	540-0315	1
8A	Mounting Accessory, I.M.	5321-101-001	1
8B	Mounting Accessory, O.M.	5321-101-002	2
9A	Field, Inside Mounted		1
	6 Volt	5202-451-004	
	24 Volt	5202-451-006	
	90 Volt	5202-451-007	

Item	Description	Part Number	Qty.
9B	Field, Outside Mounted		1
	6 Volt	5202-451-011	
	24 Volt	5202-451-013	
	90 Volt	5202-451-014	
10	Conduit Box	5200-101-012	1

**How to Order:**

1. Specify Bore Size for Item 6.
2. Specify Voltage for Item 9A or 9B.
3. Specify Inside Mounted for Items 8A and 9A or Outside Mounted for Items 8B and 9B.
4. See Controls Section.

**Example:**

SF-1000 Clutch Coupling, Heavy Duty per I-25581 - 90 Volt, Inside Mounted, 1-1/4" Bore (Item 6)

These units, when used in conjunction with the correct Warner Electric conduit box, meet the standards of UL508 and are listed under guide card #NMTR, file #59164. These units are CSA certified under file #LR11543

\*See page 252 for specific part numbers.

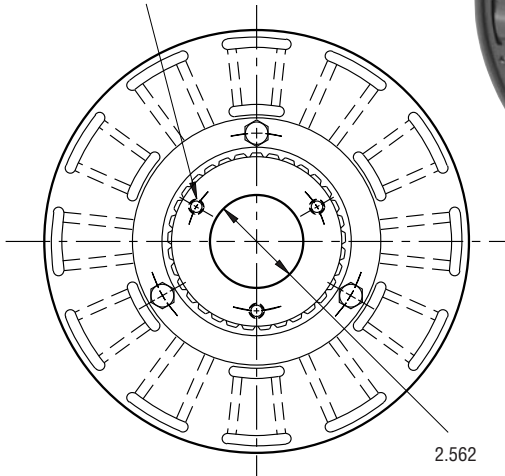
Refer to Service Manual P-215.

†Optional LK facing available. For more information, see page 232.

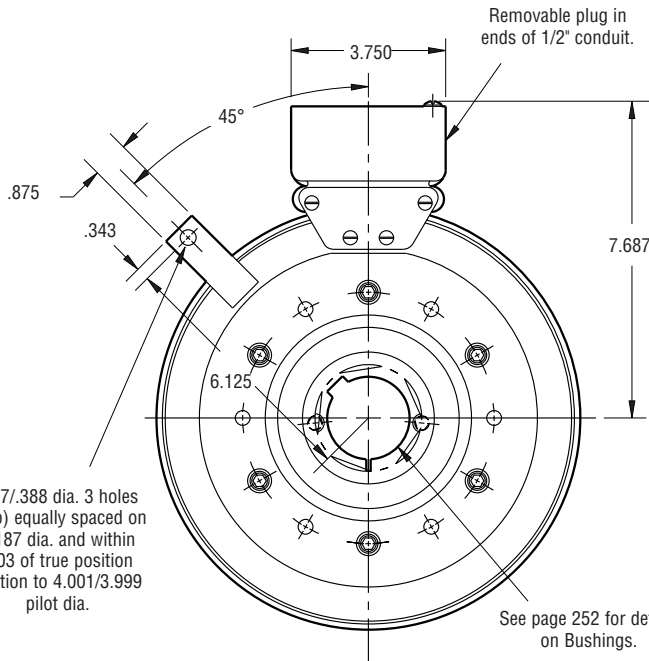
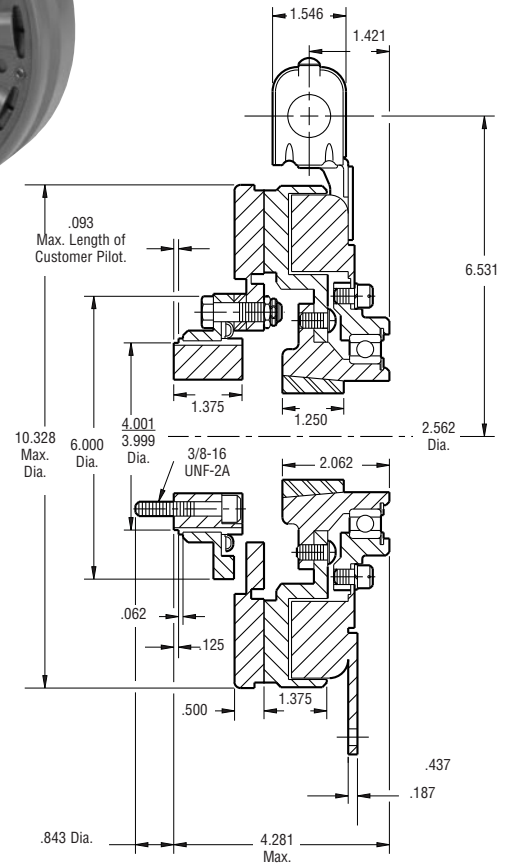
**SF-1000 Bearing Mounted**



.397/.388 dia. 3 holes (hub) equally spaced on 3.187 dia. and within .003 of true position relation to 4.001/3.999 pilot dia.



**ARMATURE VIEW**



**FIELD VIEW**

.397/.388 dia. 3 holes (hub) equally spaced on 3.187 dia. and within .003 of true position relation to 4.001/3.999 pilot dia.

See page 252 for details on Bushings.

Shaft Size	.500 – 2.000
Static Torque	240 lb.ft.
Maximum Speed	2,500 rpm
Standard Voltage	D.C. 6, 24, 90

All dimensions are nominal unless otherwise noted.

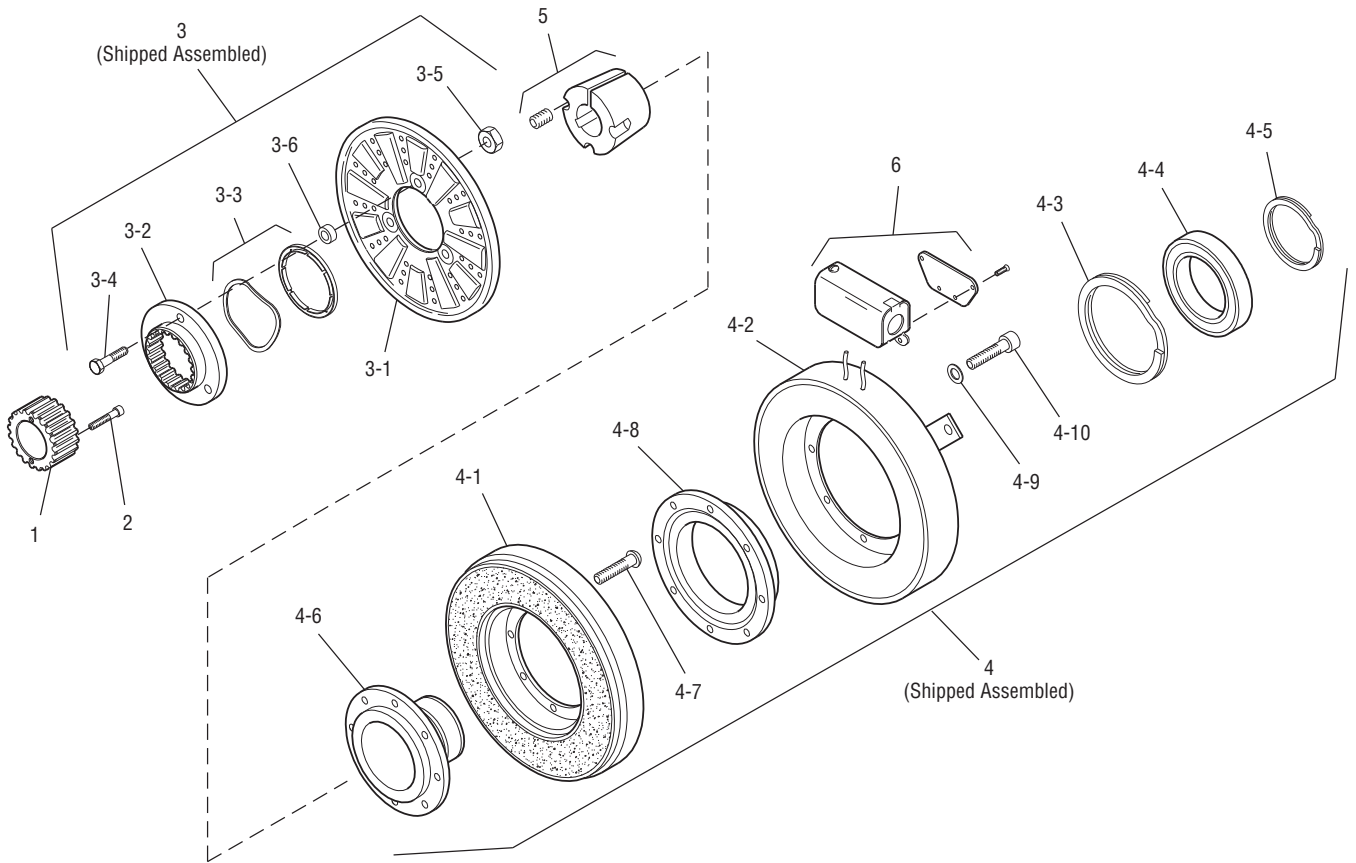
Information on inertia and weights begins on page 239. Coil data is on pages 250 and 251.

**Customer Shall Maintain:**

1. Armature hub pilot diameter to be concentric with field and rotor mounting shaft within .010 T.I.R.



Drawing I-25597



Item	Description	Part Number	Qty.
1	Splined Hub	540-0147	1
2	Accessory, Mounting	5202-101-001	1
3	Armature & Adapter Assembly	5202-111-001	1
3-1	Armature	5322-111-036	1
3-2	Splined Adapter	104-0009	1
3-3	Autogap Accessory	5322-101-004	1
3-4	Screw	797-0341	3
3-5	Locknut	661-0004	3
3-6	Spacer	748-0333	3
4	Field & Rotor Assembly		1
	6 Volt	5202-452-012	
	24 Volt	5202-452-014	
	90 Volt	5202-452-015	
4-1	Rotor		1
	Standard Friction Material	5202-751-003	
	†Optional LK Facing	5202-751-007	
4-2	Field & Bearing Assembly		1
	6 Volt	5202-451-040	
	24 Volt	5202-451-042	
	90 Volt	5202-451-043	
4-3	Retainer Ring	748-0116	1

Item	Description	Part Number	Qty.
4-4	Ball Bearing	166-1046	1
4-5	Retainer Ring	748-0582	1
4-6	Rotor Hub	540-1300	1
4-7	Buttonhead Capscrew	797-1261	6
4-8	Ring Adapter	748-1047	1
4-9	Lockwasher	950-0359	6
4-10	Socket Head Capscrew	797-0422	6
5	Bushing*	180-0155 to 180-0179	1
6	Conduit Box	5200-101-012	1

**How to Order:**

1. Specify Bore Size for Item 5.
2. Specify Voltage for Item 4.
3. See Controls Section.

**Example:**

SF-1000 Clutch per I-25597 - 90 Volt, 1" Bore

These units, when used in conjunction with the correct Warner Electric conduit box, meet the standards of UL508 and are listed under guide card #NMTR, file #59164. These units are CSA certified under file #LR11543.

\*See page 252 for specific part numbers.

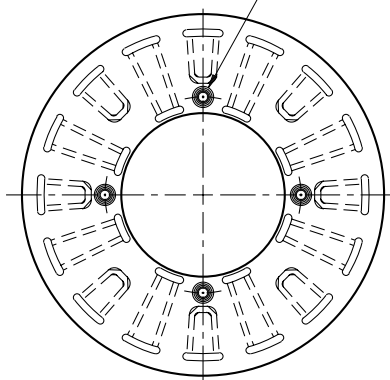
Refer to Service Manual P-215.

†Optional LK facing available. For more information, see page 232.

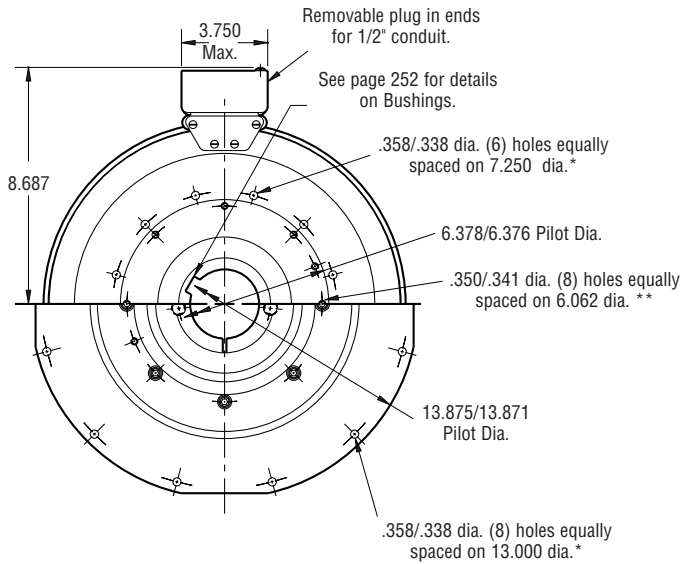
**SF-1225 Flange Mounted**



See page 230 for details on Drive Pin mountings.



**ARMATURE VIEW**



**FIELD VIEW**

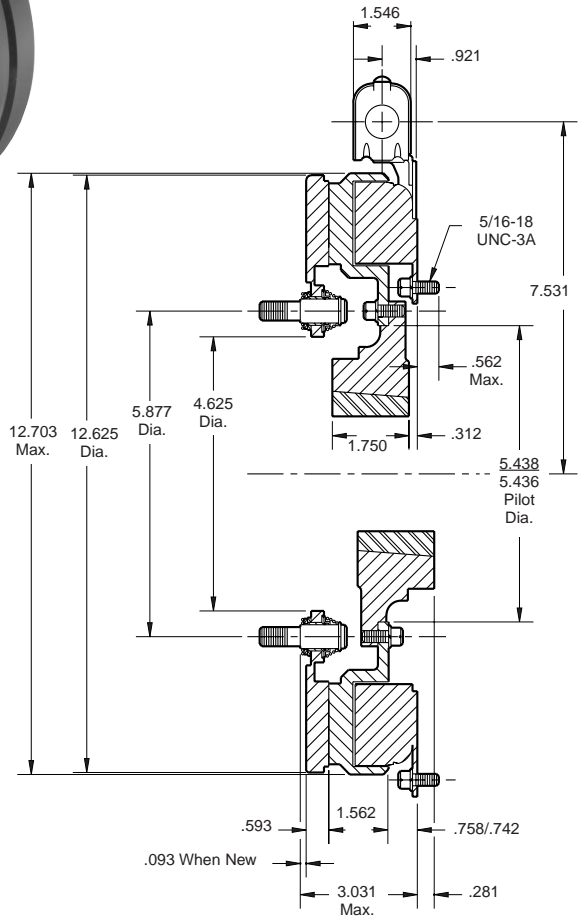
**(Inside & Outside Mounted)**

**Customer Shall Maintain:**

1. Concentricity of field mounting pilot diameter with rotor mounting shaft within .006 T.I.R.
2. Squareness of field mounting face with rotor mounting shaft within .006 T.I.R. measured at field mounting bolt circle.
3. Rotor mounting shaft concentric with armature center of rotation within .006 T.I.R.
4. Armature hub pilot diameter to be concentric with armature center of rotation within .010 T.I.R.

**When Hub is Furnished by customer:**

Rotor mounting pilot diameter must be concentric with rotor mounting shaft within .006 T.I.R.



\* Mounting holes are within .010 of true position relative to pilot diameter.

\*\* Mounting holes are within .008 of true position relative to pilot diameter.

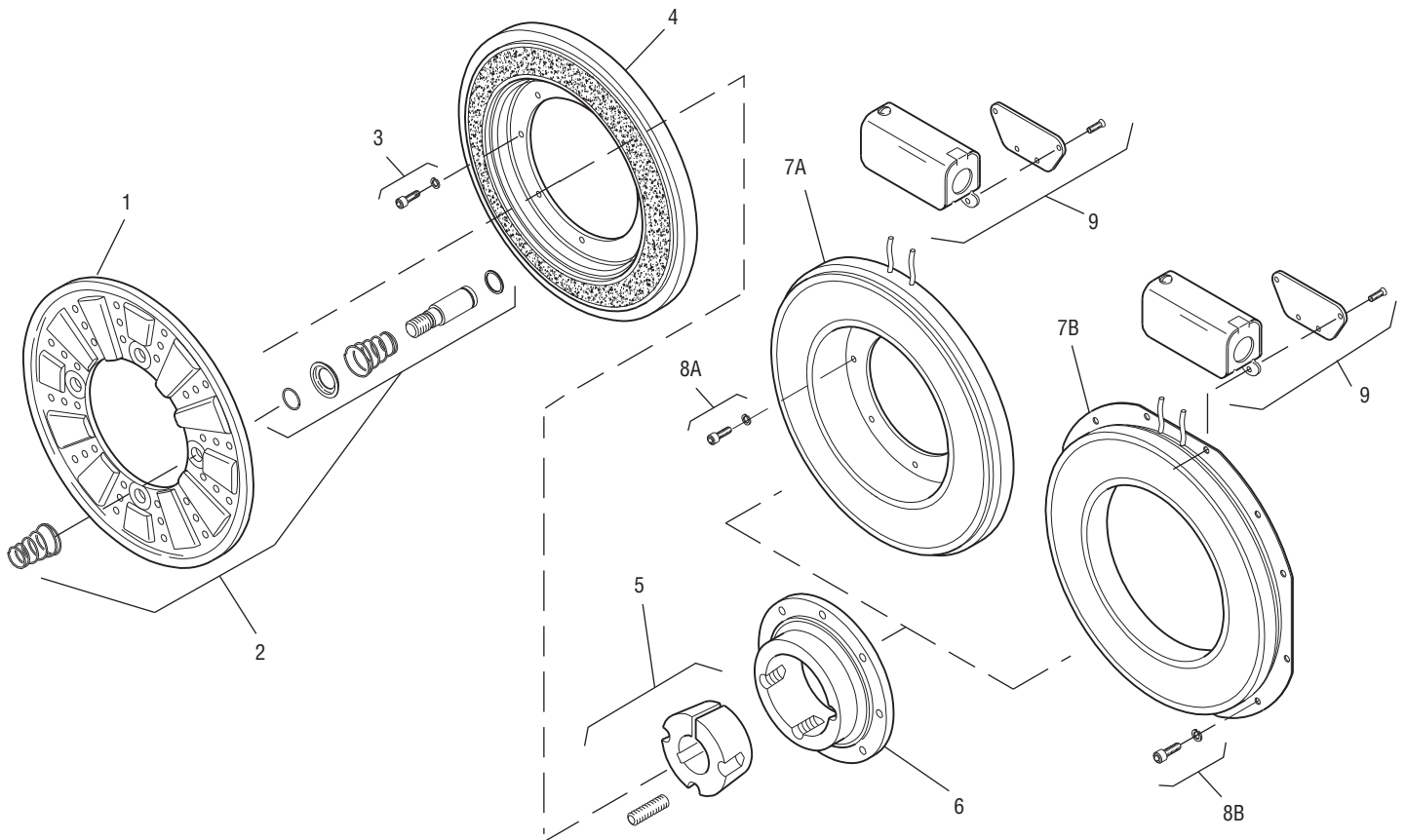
Shaft Size	.500 – 2.500
Static Torque	465lb.ft.
Maximum Speed	3,000 rpm
Standard Voltage	D.C. 6, 24, 90

All dimensions are nominal unless otherwise noted.

Information on inertia and weights begins on page 239. Coil data is on pages 250 and 251.



Drawing I-25600



Item	Description	Part Number	Qty.
1	Armature	5303-111-009	1
2	Autgap Accessory	5201-101-008	4
3	Mounting Accessory	5321-101-002	2
4	Rotor		1
	Standard Friction Material	5203-751-001	
	†Optional LK Facing	5203-751-004	
5	Bushing*		1
	1/2" to 2-1/2" Bore	180-0185 to 180-0217	
6	Rotor Hub	540-0318	1
7A	Field - Inside Mounted		1
	6 Volt	5203-451-002	
	24 Volt	5203-451-006	
	90 Volt	5203-451-005	
7B	Field - Outside Mounted		1
	6 Volt	5203-451-010	
	24 Volt	5203-451-013	
	90 Volt	5203-451-011	

Item	Description	Part Number	Qty.
8A	Mounting Accessory - I.M.	5321-101-001	1
8B	Mounting Accessory - O.M.	5321-101-002	2
9	Conduit Box	5200-101-012	1

### How to Order:

1. Specify Bore Size for Item 5.
2. Specify Voltage for Item 7A or 7B.
3. Specify Inside Mounted for Items 7A and 8A or Outside Mounted for Items 7B and 8B.
4. See Controls Section.

### Example:

SF-1225 Clutch per I-25600 -  
90 Volt, 1-1/2" Bore, Inside Mounted.

These units, when used in conjunction with the correct Warner Electric conduit box, meet the standards of UL508 and are listed under guide card #NMTR, file #59164. These units are CSA certified under file #LR11543.

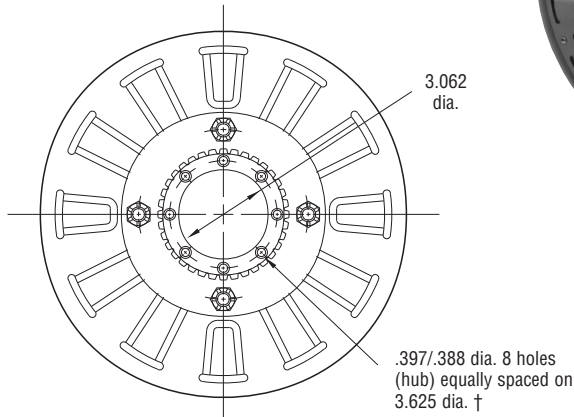
\*See page 252 for specific part numbers.

Refer to Service Manual P-215.

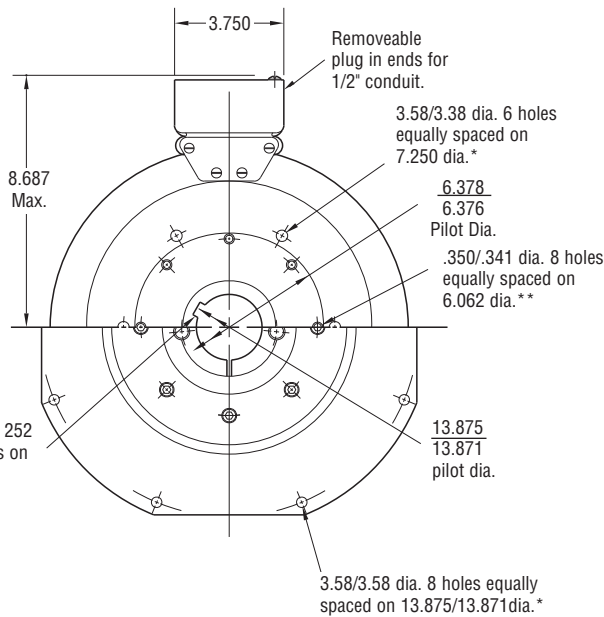
†Optional LK facing available. For more information, see page 232.



SF-1225 Flange Mounted



ARMATURE VIEW



FIELD VIEW

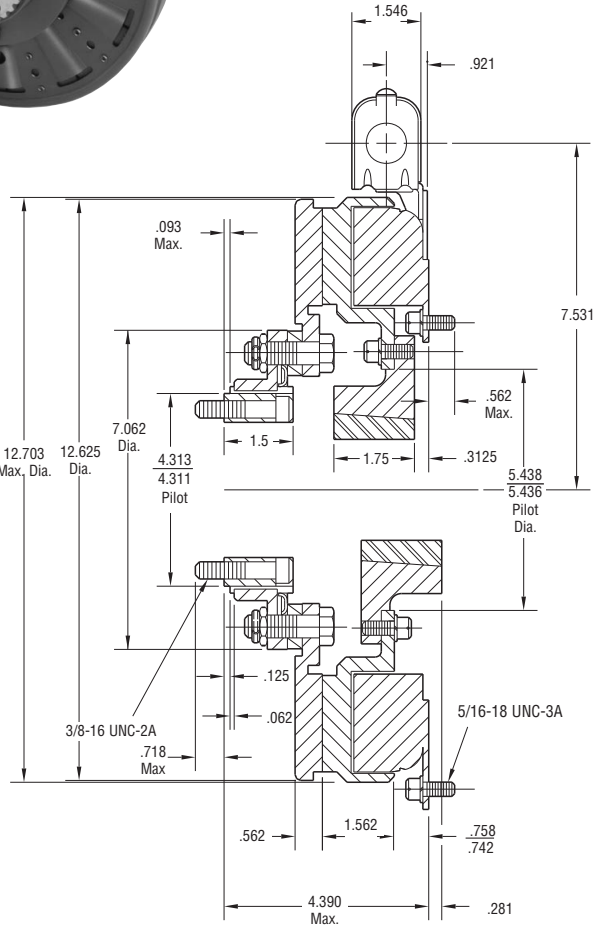
(Inside & Outside Mounted)

Customer Shall Maintain:

1. Concentricity of field mounting pilot diameter with rotor mounting shaft within .006 T.I.R.
2. Squareness of field mounting face with shaft within .006 T.I.R. measured at field mounting bolt circle.
3. Armature hub pilot diameter to be concentric with rotor mounting shaft within .010 T.I.R.

When Hub is Furnished by customer:

Rotor mounting pilot diameter must be concentric with rotor mounting shaft within .006 T.I.R.



\* Mounting holes are within .010 of true position relative to pilot diameter.

\*\* Mounting holes are within .008 of true position relative to pilot diameter.

† Mounting holes are within .003 of true position relative to pilot diameter.

Shaft Size	.500 – 2.500
Static Torque	465 lb.ft.
Maximum Speed	3,000 rpm
Standard Voltage	D.C. 6, 24, 90

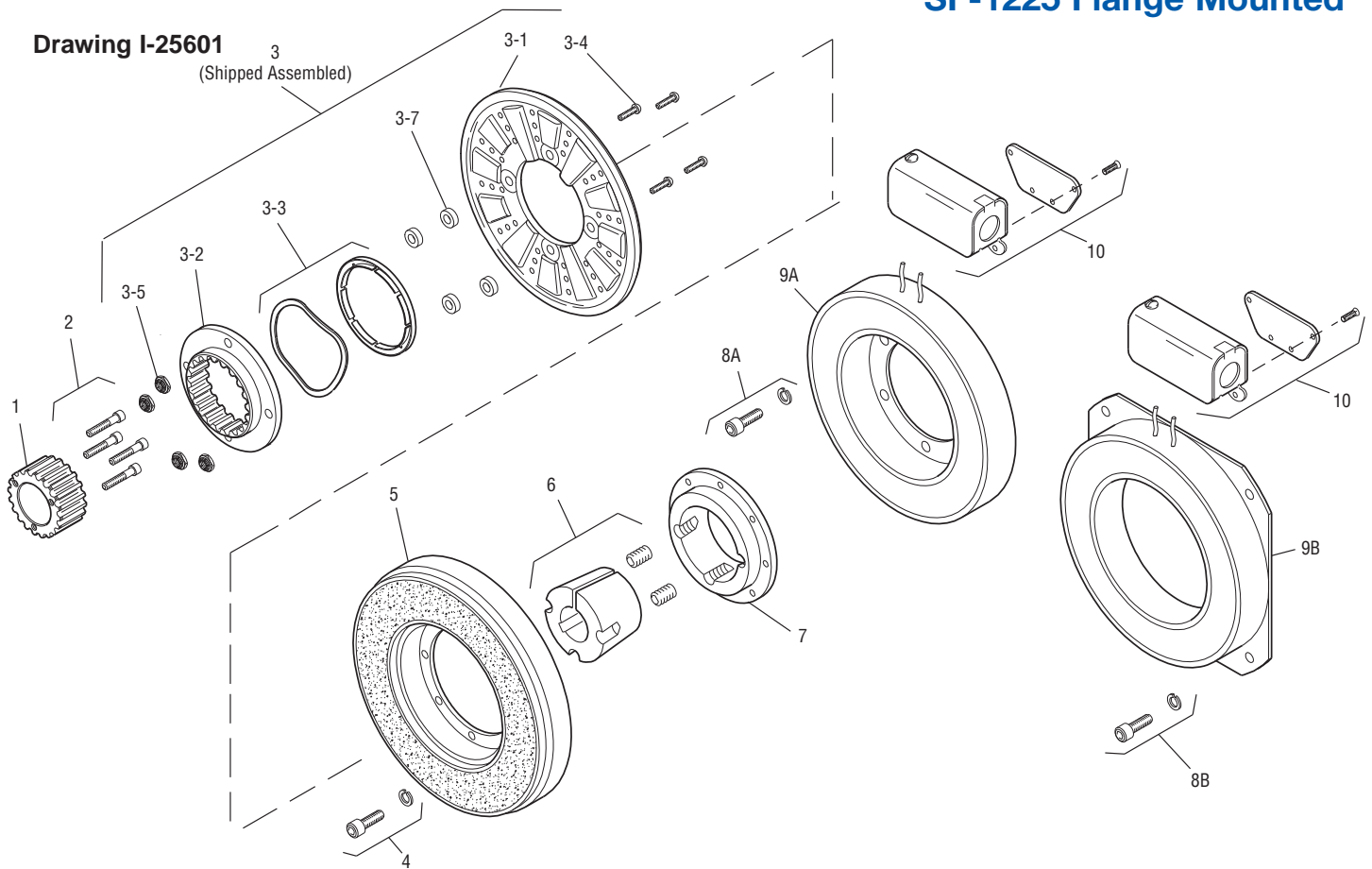
All dimensions are nominal unless otherwise noted.

Information on inertia and weights begins on page 239. Coil data is on pages 250 and 251.



## SF-1225 Flange Mounted

**Drawing I-25601**



Item	Description	Part Number	Qty.
1	Splined Hub	540-0148	1
2	Mounting Accessory	5202-101-001	1
3	Armature and Splined Adapter	5203-111-001	1
3-1	Armature	5323-111-034	1
3-2	Splined Adapter	104-0010	1
3-3	Autogap Accessory	5323-101-002	1
3-4	Screw	797-0356	4
3-5	Locknut	661-0005	4
3-7	Spacer	266-0004	4
4	Mounting Accessory	5321-101-002	2
5	Rotor		1
	Standard Friction Material	5203-751-001	
	†Optional LK Facing	5203-751-004	
6	Bushing, Taperlock*	180-0185 to 180-0217	1
7	Rotor Hub	540-0318	1
8A	Mounting Accessory, I.M.	5321-101-001	1
8B	Mounting Accessory, O.M.	5321-101-002	2
9A	Field, Inside Mtd.		1
	6 Volt	5203-451-002	
	24 Volt	5203-451-006	
	90 Volt	5203-451-005	

Item	Description	Part Number	Qty.
9B	Field, Outside Mtd.		1
	6 Volts	5203-451-010	
	24 Volts	5203-451-013	
	90 Volts	5203-451-011	
10	Conduit Box	5200-101-012	1

### How to Order:

1. Specify Bore Size for Item 6.
2. Specify Voltage for Item 9A or 9B.
3. Specify Inside Mounted for Items 8A and 9A or Outside Mounted for Items 8B and 9B.
4. See Controls Section.

### Example:

SF-1225 Clutch per I-25601 -  
90 Volt, 1-1/2" Bore, Inside Mounted.

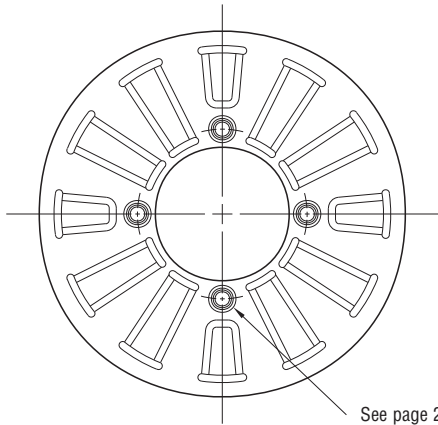
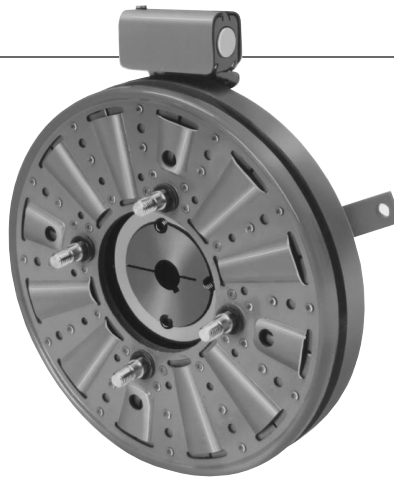
These units, when used in conjunction with the correct Warner Electric conduit box, meet the standards of UL508 and are listed under guide card #NMTR, file #59164. These units are CSA certified under file #LR11543.

\*See page 252 for specific part numbers.

Refer to Service Manual P-215.

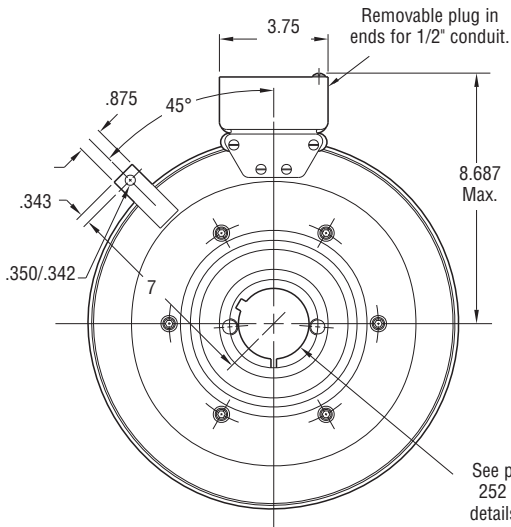
†Optional LK facing available. For more information, see page 232.

**SF-1225 Bearing Mounted**



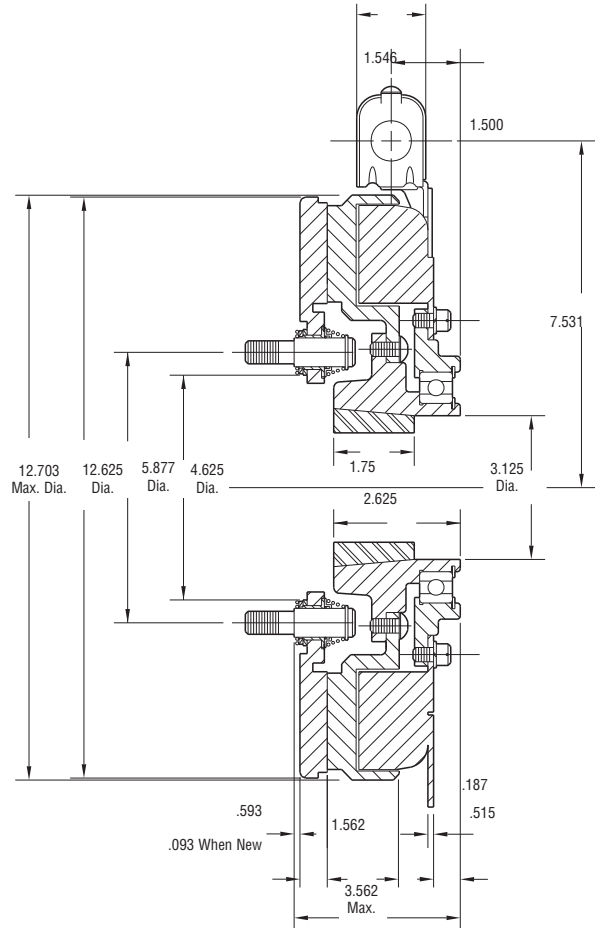
See page 230 for details on Drive Pin mountings.

**ARMATURE VIEW**



See page 252 for details on Bushings.

**FIELD VIEW**



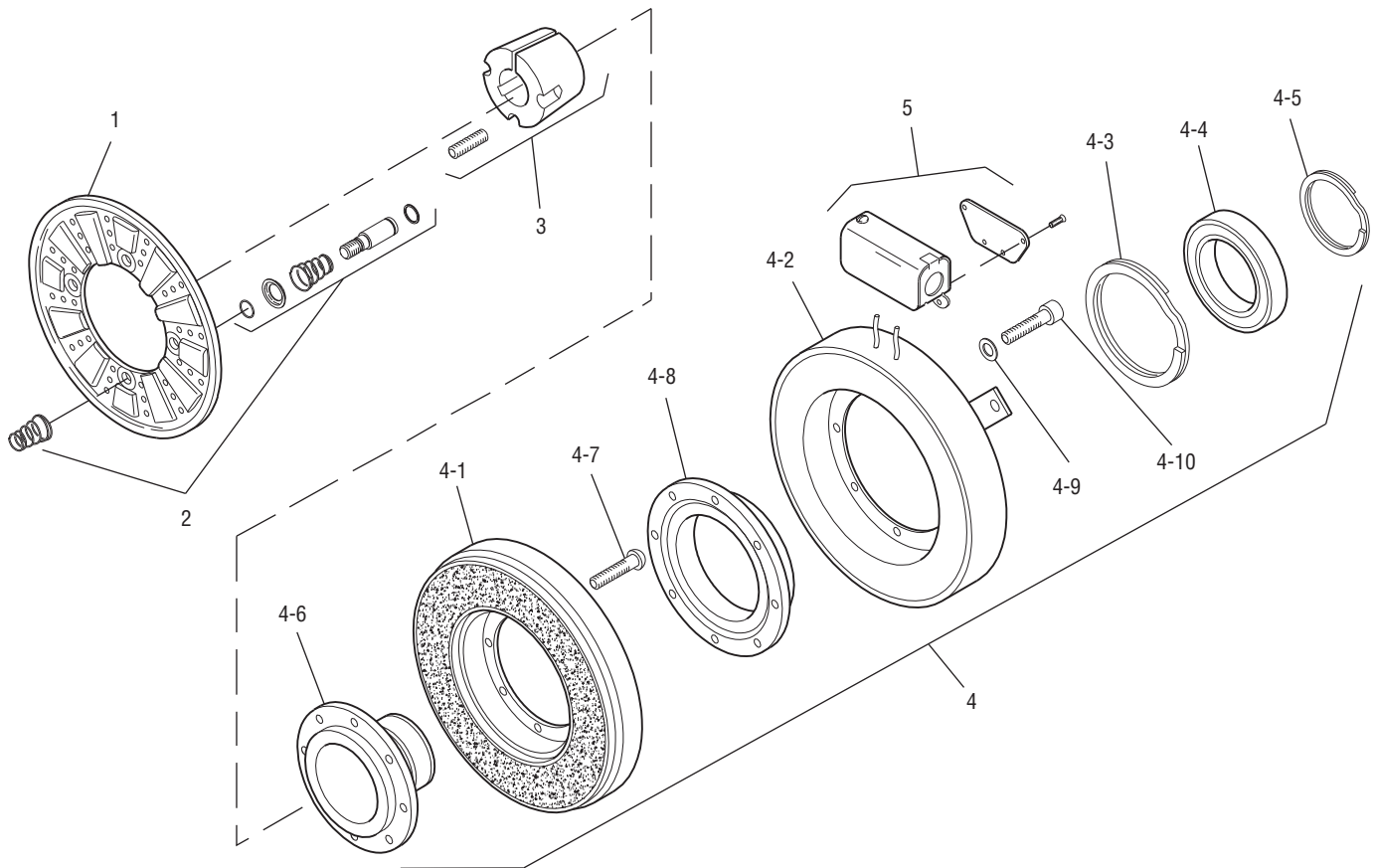
Shaft Size	.500 – 2.500
Static Torque	465 lb.ft.
Maximum Speed	2,200 rpm
Standard Voltage	D.C. 6, 24, 90

All dimensions are nominal unless otherwise noted.

Information on inertia and weights begins on page 239. Coil data is on pages 250 and 251.



Drawing I-25621



Item	Description	Part Number	Qty.
1	Armature	5303-111-009	1
2	Autogap Accessory	5201-101-008	4
3	Bushing*		1
	1/2" to 2-1/2" Bore	180-0185 to 180-0217	
4	Field and Rotor Assembly		1
	6 Volt	5203-452-009	
	24 Volt	5203-452-011	
	90 Volt	5203-452-012	
4-1	Rotor		1
	Standard Friction Material	5203-751-001	
	†Optional LK Facing	5203-751-004	
4-2	Field		1
	6 Volt	5203-451-034	
	24 Volt	5203-451-036	
	90 Volt	5203-451-037	
4-3	Retainer Ring	748-0119	1
4-4	Ball Bearing	166-1047	1
4-5	Retainer Ring	748-0011	1
4-6	Rotor Hub	540-1304	1

Item	Description	Part Number	Qty.
4-7	Buttonhead Capscrew	797-1261	8
4-8	Ring Adapter	748-0591	1
4-9	Lockwasher	950-0359	6
4-10	Sockethead Capscrew	797-0424	6
5	Conduit Box	5200-101-012	1

### How to Order:

1. Specify Bore Size for Item 3.
2. Specify Voltage for Item 4.
3. See Controls Section.

### Example:

SF-1225 Clutch per I-25621 -  
90 Volt, 1" Bore.

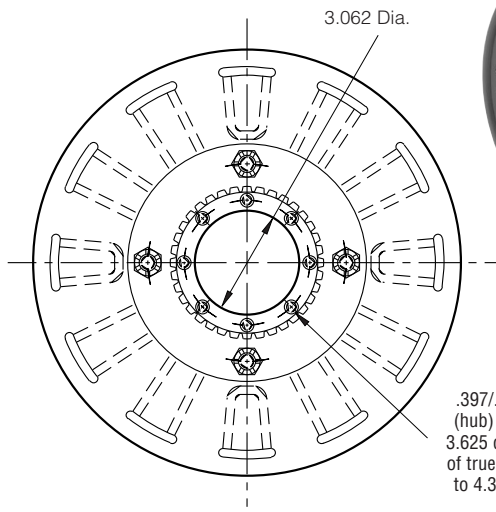
These units, when used in conjunction with the correct Warner Electric conduit box, meet the standards of UL508 and are listed under guide card #NMTR, file #59164. These units are CSA certified under file #LR11543.

\*See page 252 for specific part numbers.

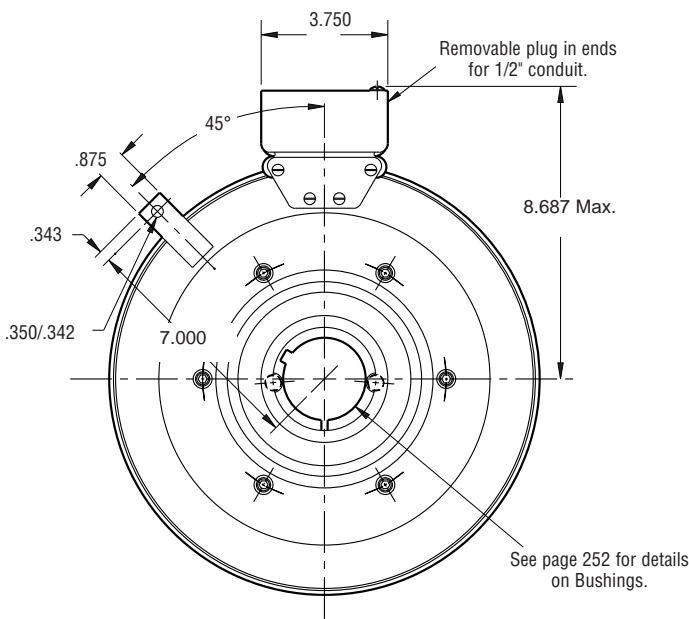
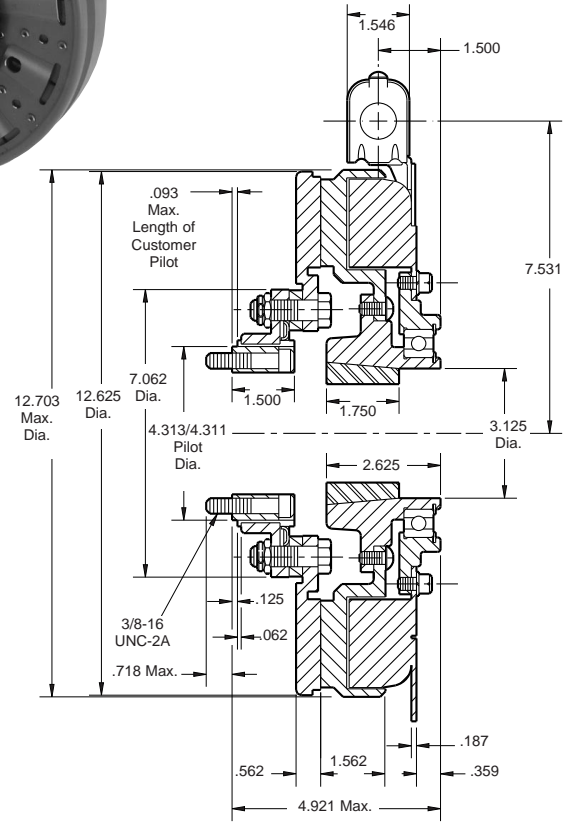
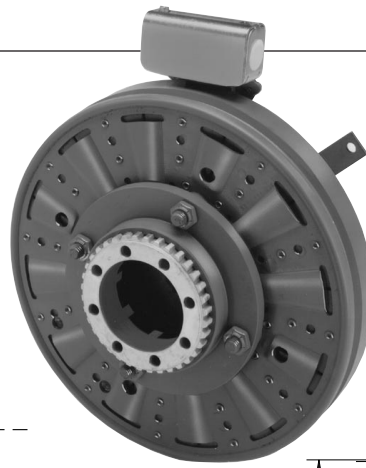
Refer to Service Manual P-215.

†Optional LK facing available. For more information, see page 232.

SF-1225 Bearing Mounted



ARMATURE VIEW



FIELD VIEW

Customer Shall Maintain:

1. Armature hub pilot diameter to be concentric with field and rotor mounting shaft within .010 T.I.R.

Shaft Size	.500 – 2.500
Static Torque	465 lb.ft.
Maximum Speed	2,200 rpm
Standard Voltage	D.C. 6, 24, 90

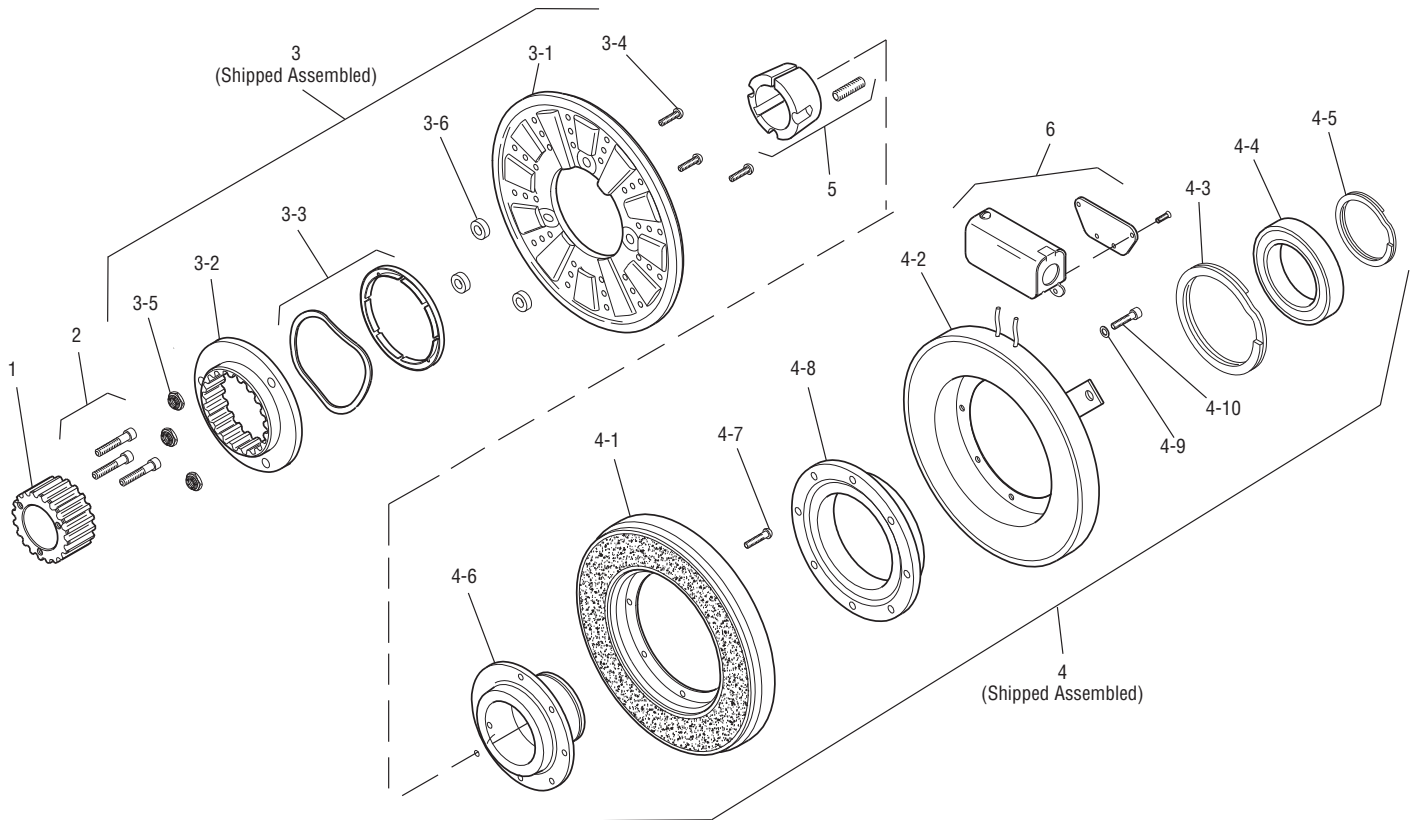
All dimensions are nominal unless otherwise noted.

Information on inertia and weights begins on page 239. Coil data is on pages 250 and 251.



## SF-1225 Bearing Mounted

Drawing I-25622



Item	Description	Part Number	Qty.
1	Splined Hub	540-0148	1
2	Accessory Mounting	5202-101-001	1
3	Armature & Adapter Assembly	5203-111-001	1
3-1	Armature	5323-111-034	1
3-2	Splined Adapter	104-0010	1
3-3	Autogap Accessory	5323-101-002	1
3-4	Screw	797-0356	4
3-5	Locknut	661-0005	4
3-6	Spacer	266-0004	4
4	Field & Rotor Assembly		1
	6 Volt	5203-452-009	
	24 Volt	5203-452-011	
	90 Volt	5203-452-012	1
4-1	Rotor		1
	Standard Friction Material	5203-751-001	
	†Optional LK Facing	5203-751-004	
4-2	Field		1
	6 Volt	5203-451-034	
	24 Volt	5203-451-036	
	90 Volt	5203-451-037	
4-3	Retainer Ring	748-0119	1
4-4	Ball Bearing	166-1047	1

Item	Description	Part Number	Qty.
4-5	Retainer Ring	748-0011	1
4-6	Rotor Hub	540-1304	1
4-7	Buttonhead Screw	797-1261	8
4-8	Ring Adapter	748-0591	1
4-9	Lockwasher	950-0359	6
4-10	Sockethead Screw	797-0424	6
5	Bushing*	180-0185 to 180-0217	1
6	Conduit Box	5200-101-012	1

### How to Order:

1. Specify Bore Size for Item 5.
2. Specify Voltage for Item 4.
3. See Controls Section.

### Example:

SF-1225 Clutch per I-25622 - 90 Volt, 1" Bore

These units, when used in conjunction with the correct Warner Electric conduit box, meet the standards of UL508 and are listed under guide card #NMTR, file #59164. These units are CSA certified under file #LR11543.

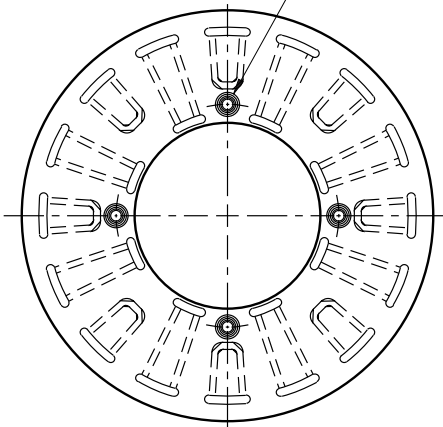
\*See page 252 for specific part numbers.

Refer to Service Manual P-215.

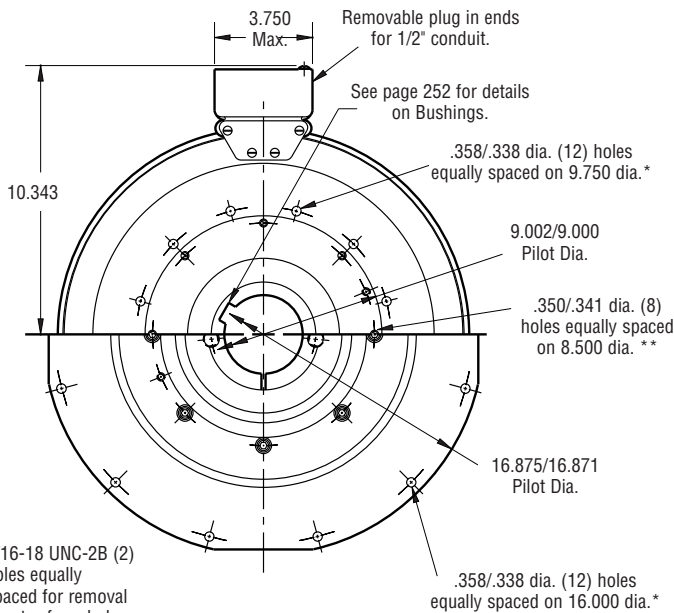
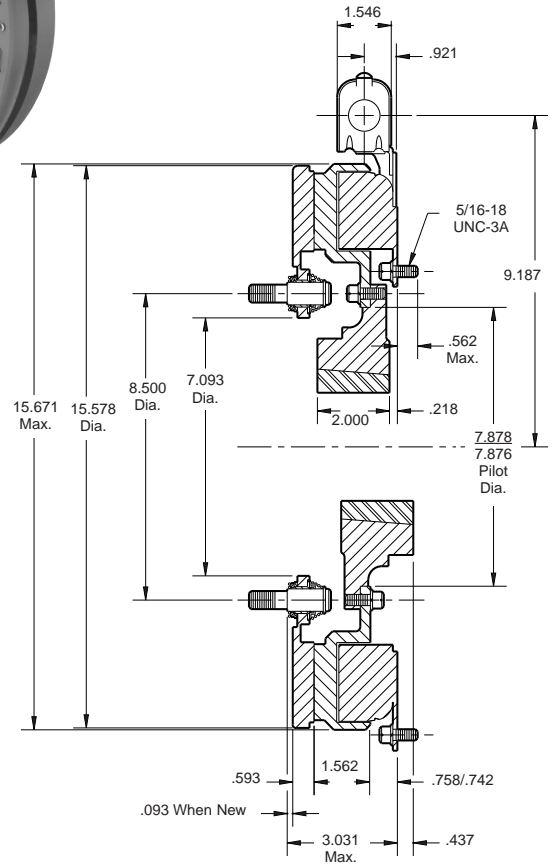
†Optional LK facing available. For more information, see page 232.

SF-1525 Flange Mounted

See page 230 for details on Drive Pin mountings.



ARMATURE VIEW



FIELD VIEW

(Inside & Outside Mounted)

Customer Shall Maintain:

1. Concentricity of field mounting pilot diameter with rotor mounting shaft within .006 T.I.R.
2. Squareness of field mounting face with rotor mounting shaft within .006 T.I.R. measured at field mounting bolt circle.
3. Rotor mounting shaft concentric with armature center of rotation within .006 T.I.R.
4. Armature hub pilot diameter to be concentric with armature center of rotation within .010 T.I.R.

When Hub is Furnished by customer:

Rotor mounting pilot diameter must be concentric with rotor mounting shaft within .006 T.I.R.

\* Mounting holes are within .010 of true position relative to pilot diameter.  
 \*\* Mounting holes are within .008 of true position relative to pilot diameter.

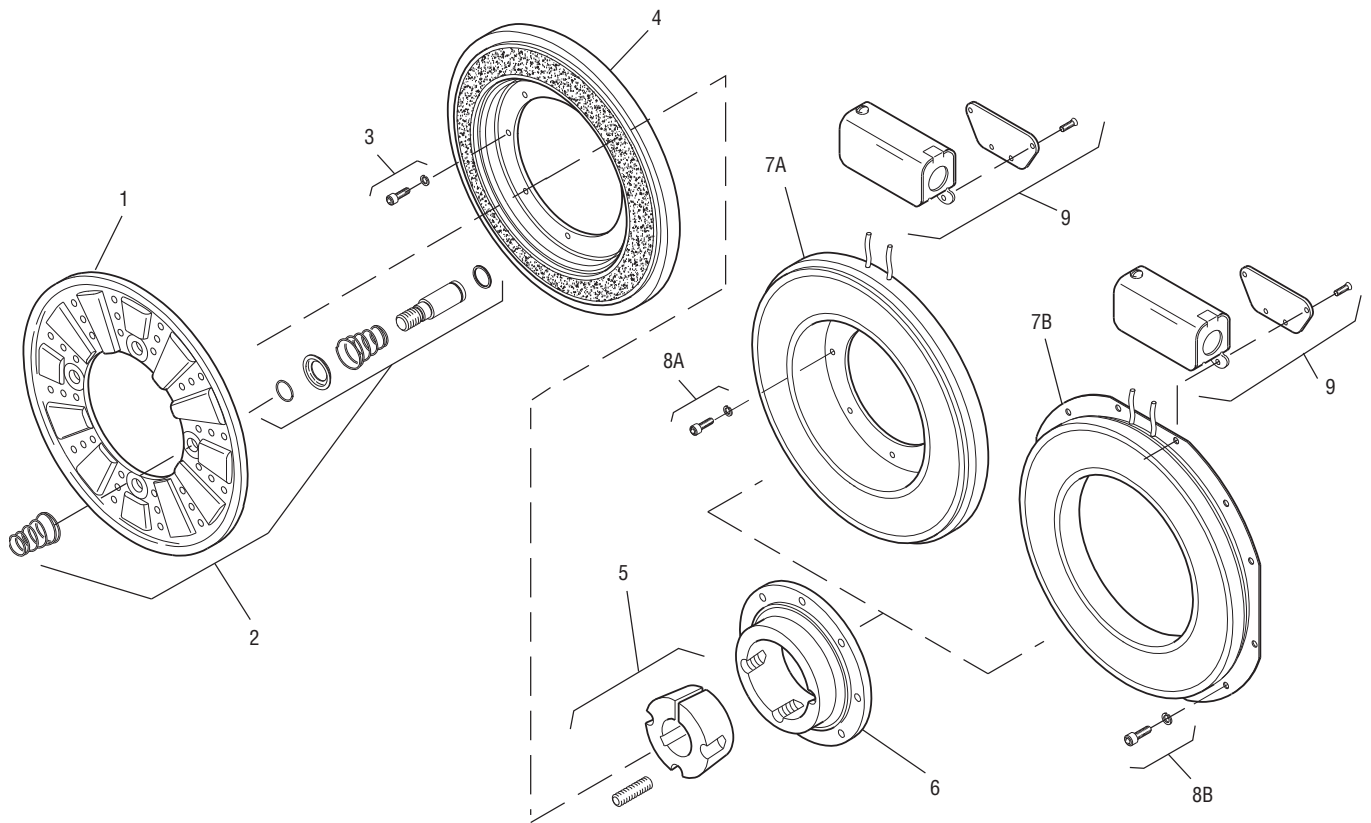
Shaft Size	.937 – 3.000
Static Torque	700 lb.ft.
Maximum Speed	2,000 rpm
Standard Voltage	D.C. 6, 24, 90

All dimensions are nominal unless otherwise noted.

Information on inertia and weights begins on page 239. Coil data is on pages 250 and 251.



Drawing I-25625



Item	Description	Part Number	Qty.
1	Armature	5304-111-004	1
2	Autogap Accessory	5201-101-008	4
3	Mounting Accessory	5321-101-002	2
4	Rotor		1
	Standard Friction Material	5204-751-002	
	†Optional LK Facing	5204-751-004	
5	Bushing*		1
	15/16" to 3" Bore	180-0223 to 180-0256	
6	Rotor Hub	540-0004	1
7A	Field - Inside Mounted		1
	6 Volt	5204-451-013	
	24 Volt	5204-451-015	
	90 Volt	5204-451-016	
7B	Field - Outside Mounted		1
	6 Volt	5204-451-055	
	24 Volt	5204-451-056	
	90 Volt	5204-451-057	
8A	Mounting Accessory - I.M.	5321-101-001	2

Item	Description	Part Number	Qty.
8B	Mounting Accessory - O.M.	5321-101-001	2
9	Conduit Box	5200-101-012	1

**How to Order:**

1. Specify Bore Size for Item 5.
2. Specify Voltage for Item 7A or 7B.
3. Specify Inside Mounted for Items 7A and 8A or Outside Mounted for Items 7B and 8B.
4. See Controls Section.

**Example:**

SF-1525 Clutch per I-25625 - 90 Volt, 2" Bore, Inside Mounted.

These units, when used in conjunction with the correct Warner Electric conduit box, meet the standards of UL508 and are listed under guide card #NMTR, file #59164. These units are CSA certified under file #LR11543.

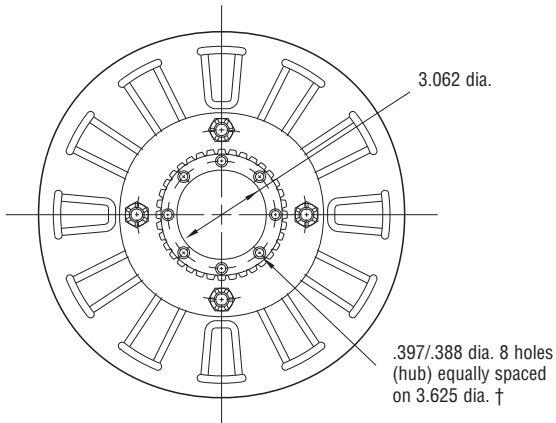
\*See page 252 for specific part numbers.

Refer to Service Manual P-215.

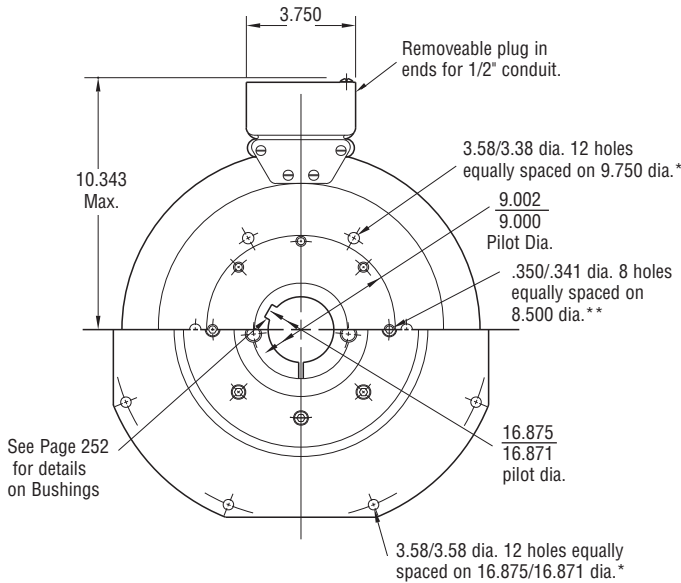
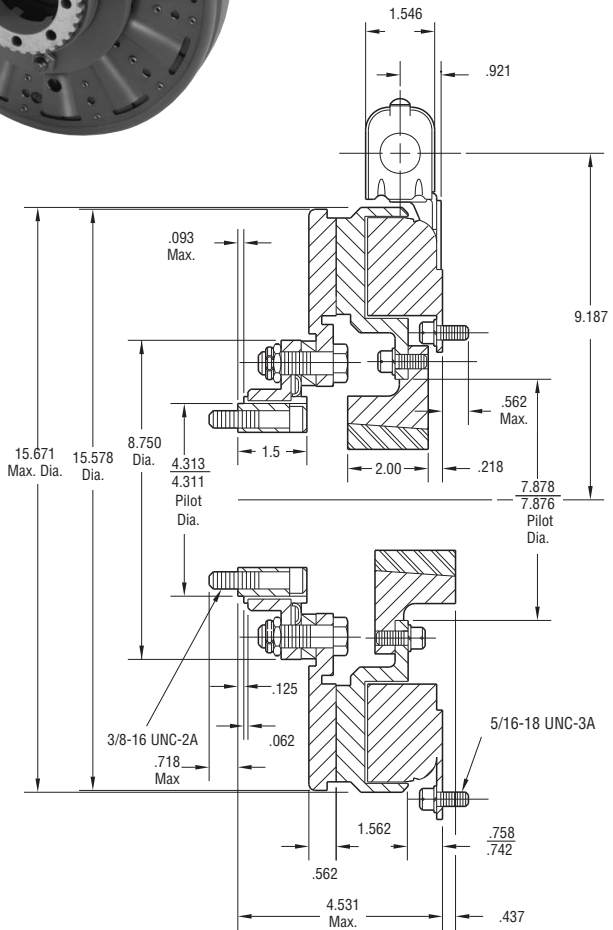
†Optional LK facing available. For more information, see page 232.



## SF-1525 Flange Mounted



**ARMATURE VIEW**



**FIELD VIEW**

(Inside & Outside Mounted)

**Customer Shall Maintain:**

1. Concentricity of field mounting pilot diameter with rotor mounting shaft within .006 T.I.R.
2. Squareness of field mounting face with rotor mounting shaft within .006 T.I.R. measured at field mounting bolt circle.
3. Armature hub pilot diameter to be concentric with armature center of rotation within .010 T.I.R.

**When Hub is Furnished by customer:**

Rotor mounting pilot diameter must be concentric with rotor mounting shaft within .006 T.I.R.

\* Mounting holes are within .010 of true position relative to pilot diameter.

\*\* Mounting holes are within .008 of true position relative to pilot diameter.

† Mounting holes are within .003 of true position relative to pilot diameter.

Shaft Size	.937 – 3.000
Static Torque	700 lb.ft.
Maximum Speed	2,000 rpm
Standard Voltage	D.C. 6, 24, 90

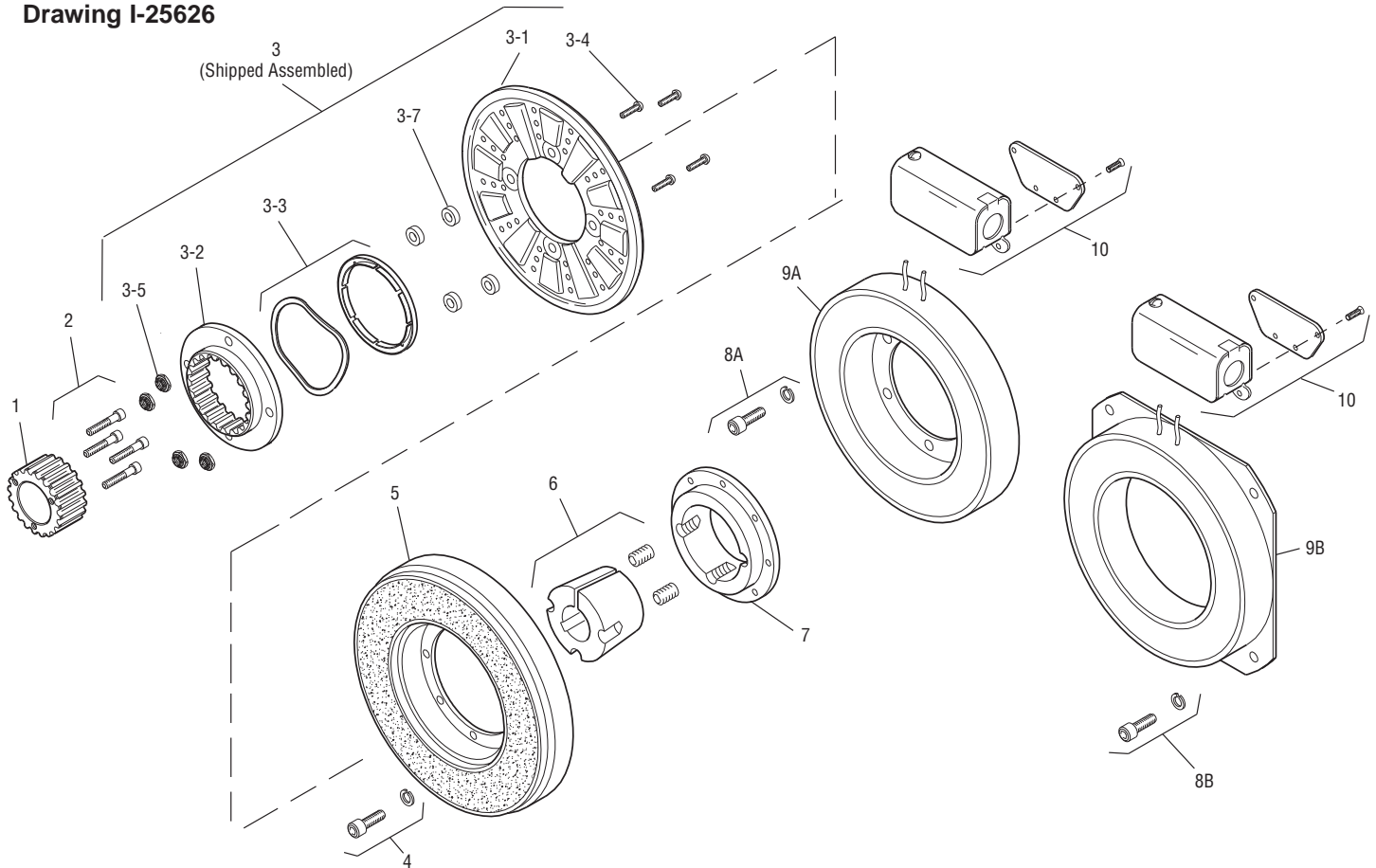
All dimensions are nominal unless otherwise noted.

Information on inertia and weights begins on page 239. Coil data is on pages 250 and 251.



SF-1525 Flange Mounted

Drawing I-25626



Item	Description	Part Number	Qty.
1	Splined Hub	540-0148	1
2	Mounting Accessory	5202-101-001	1
3	Armature and Splined Adapter	5204-111-004	1
3-1	Armature	5324-111-034	1
3-2	Splined Adapter	104-0011	1
3-3	Autogap Accessory	5323-101-002	1
3-4	Screw	797-0342	8
3-5	Locknut	661-0004	8
3-6	Retainer Plate	686-0003	1
3-7	Spacer	748-0333	8
4	Mounting Accessory	5321-101-002	2
5	Rotor		1
	Standard Friction Material	5204-751-002	
	†Optional LK Facing	5204-751-004	
6	Bushing, Taperlock*	180-0223 to 180-0256	1
7	Rotor Hub	540-0004	1
8A	Mounting Accessory, I.M.	5321-101-001	2
8B	Mounting Accessory, O.M.	5321-101-002	2
9A	Field, Inside Mtd.		1
	6 Volt	5204-451-013	
	24 Volt	5204-451-015	
	90 Volt	5204-451-016	

Item	Description	Part Number	Qty.
9B	Field, Outside Mtd.		1
	6 Volt	5204-451-055	
	24 Volt	5204-451-056	
	90 Volt	5204-451-057	
10	Conduit Box	5200-101-012	1

**How to Order:**

1. Specify Bore Size for Item 6.
2. Specify Voltage for Item 9A or 9B.
3. Specify Inside Mounted for Items 8A and 9A or Outside Mounted for Items 8B and 9B.
4. See Controls Section.

**Example:**

SF-1525 Clutch per I-25626 - 90 Volt, 2" Bore, Inside Mounted.

These units, when used in conjunction with the correct Warner Electric conduit box, meet the standards of UL508 and are listed under guide card #NMTR, file #59164. These units are CSA certified under file #LR11543.

\*See page 252 for specific part numbers.

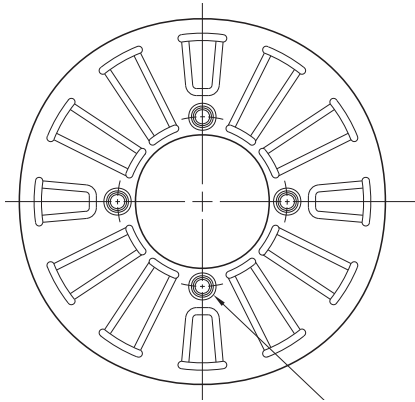
Refer to Service Manual P-215.

†Optional LK facing available. For more information, see page 232.

# Clutch

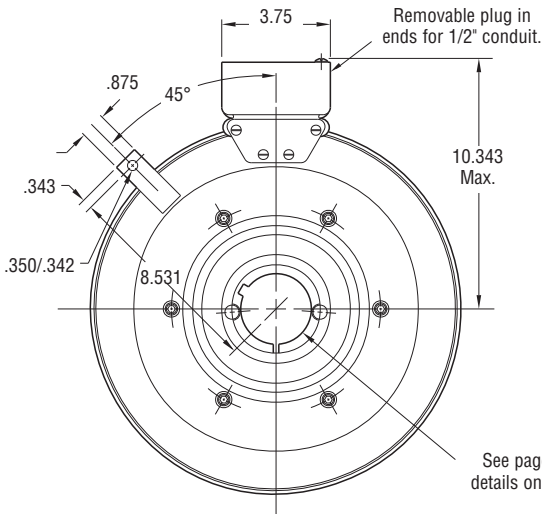
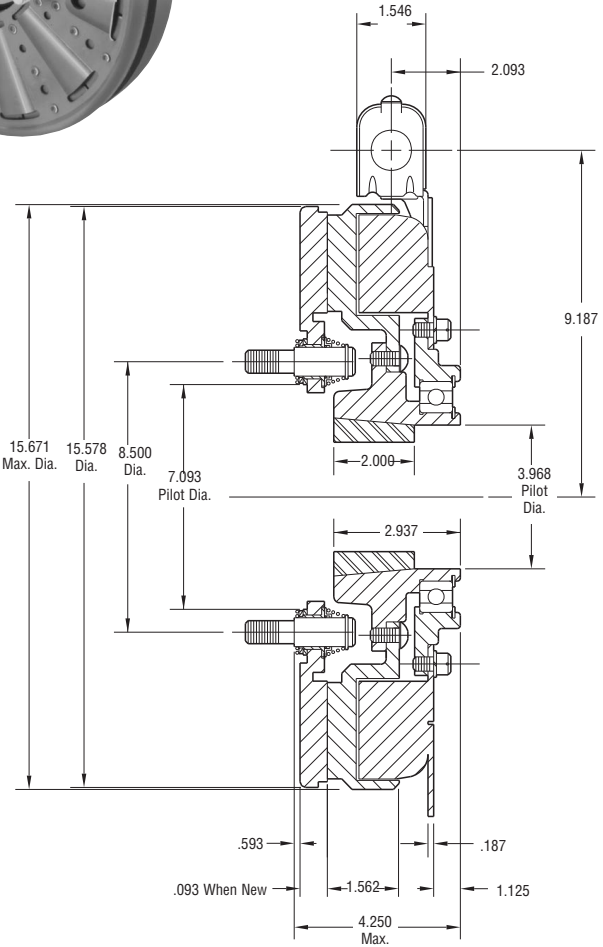
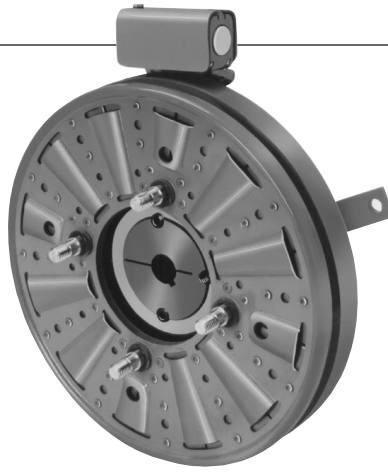
# Normal Duty

## SF-1525 Bearing Mounted



See page 230 for details on Drive Pin mountings.

**ARMATURE VIEW**



See page 252 for details on Bushings.

**FIELD VIEW**

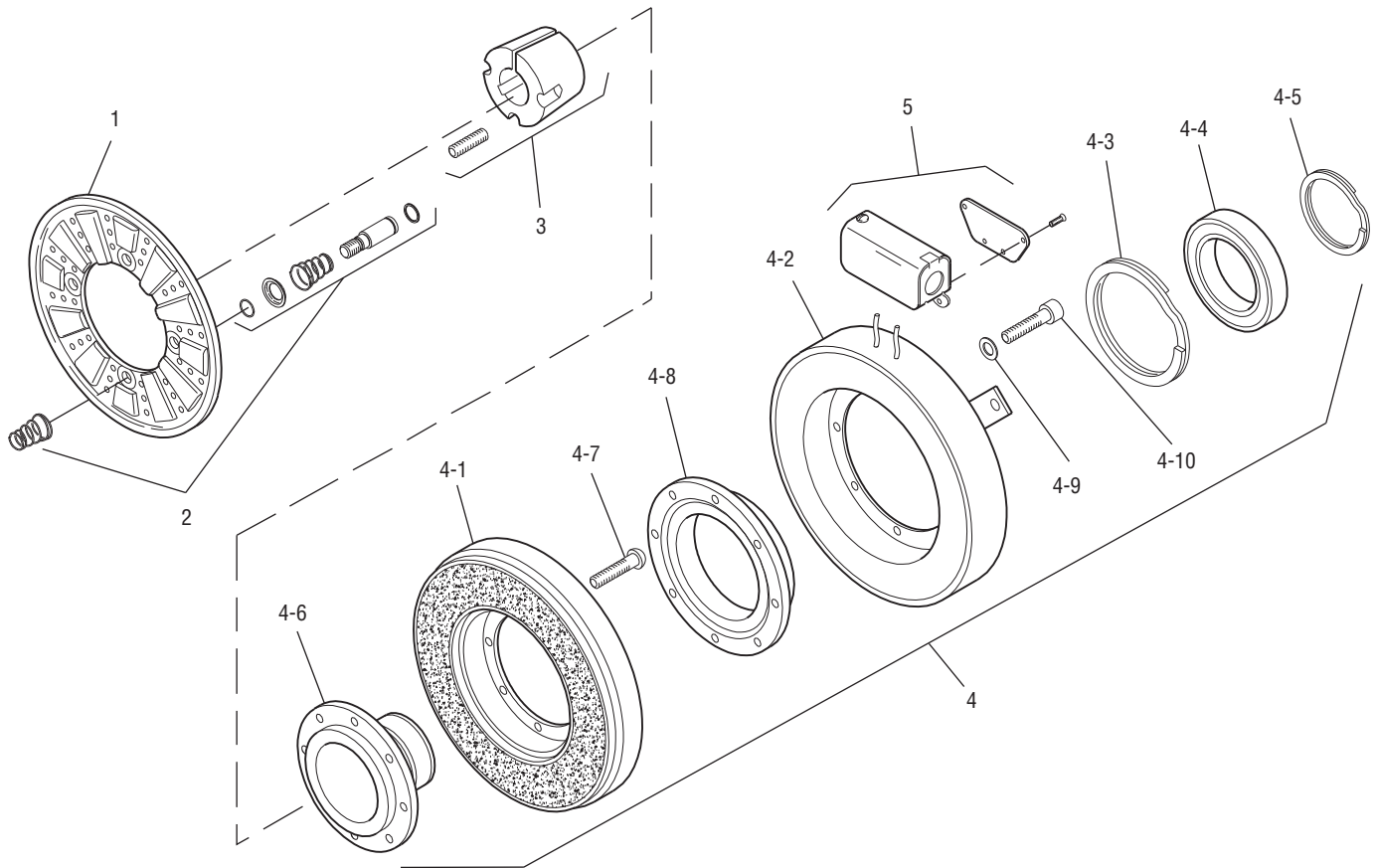
Shaft Size	.937 – 3.000
Static Torque	700 lb.ft.
Maximum Speed	1,800 rpm
Standard Voltage	D.C. 6, 24, 90

All dimensions are nominal unless otherwise noted.

Information on inertia and weights begins on page 239. Coil data is on pages 250 and 251.



Drawing I-25639



Item	Description	Part Number	Qty.
1	Armature	5304-111-004	1
2	Autogap Accessory	5201-101-008	4
3	Bushing*		1
	15/16" to 3" Bore	180-0223 to 180-0256	
4	Field and Rotor Assembly		1
	6 Volt	5204-452-009	
	24 Volt	5204-452-011	
	90 Volt	5204-452-012	
4-1	Rotor		1
	Standard Friction Material	5204-751-002	
	†Optional LK Facing	5204-751-004	
4-2	Field		1
	6 Volt	5204-451-084	
	24 Volt	5204-451-086	
	90 Volt	5204-451-087	
4-3	Retainer Ring	748-0114	1
4-4	Ball Bearing	166-0163	1
4-5	Retainer Ring	748-0583	1
4-6	Rotor Hub	540-1306	1

Item	Description	Part Number	Qty.
4-7	Buttonhead Capscrew	797-1261	8
4-8	Ring Adapter	748-1048	1
4-9	Lockwasher	950-0359	6
4-10	Sockethead Capscrew	797-0424	6
5	Conduit Box	5200-101-012	1

**How to Order:**

1. Specify Bore Size for Item 3.
2. Specify Voltage for Item 4.
3. See Controls Section.

**Example:**

SF-1525 Clutch per I-25639 - 90 Volt, 1" Bore.

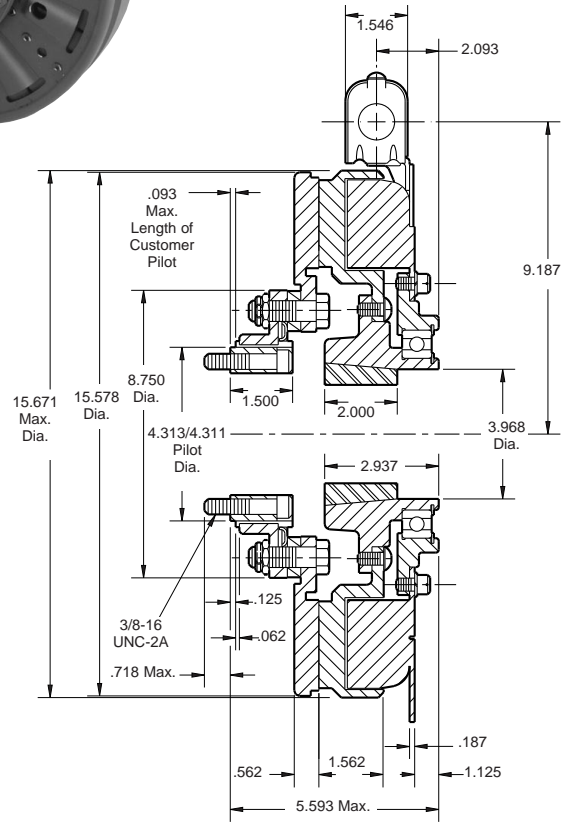
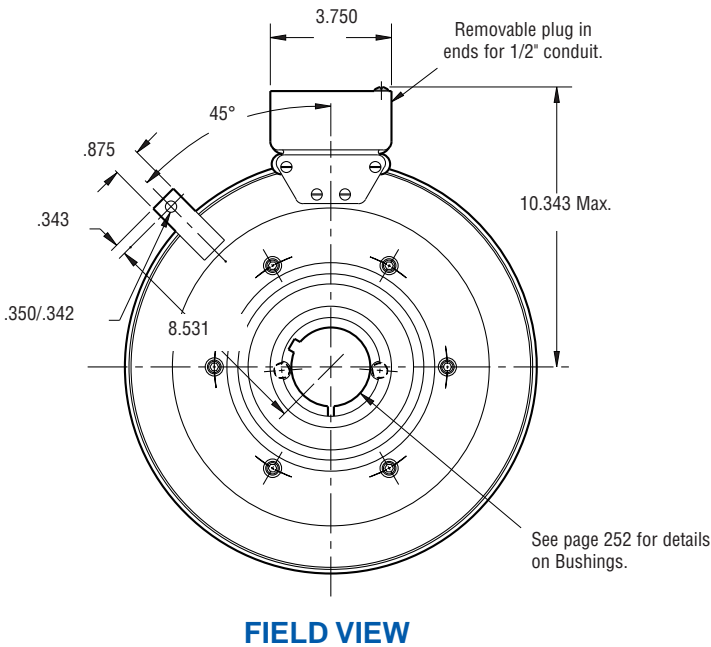
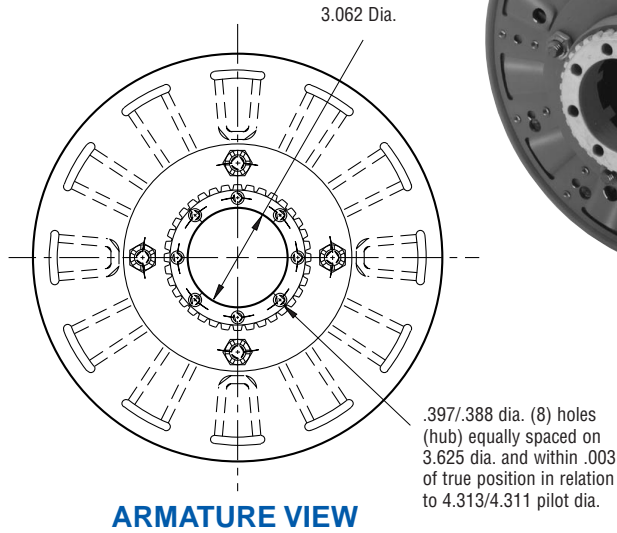
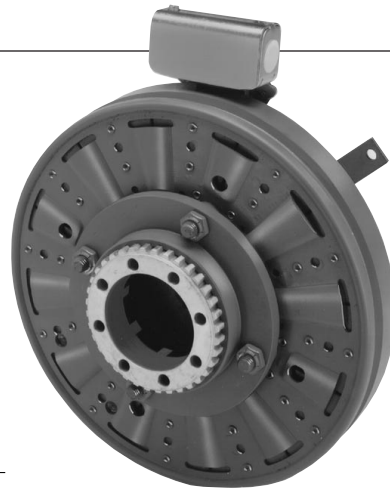
These units, when used in conjunction with the correct Warner Electric conduit box, meet the standards of UL508 and are listed under guide card #NMTR, file #59164. These units are CSA certified under file #LR11543.

\*See page 252 for specific part numbers.

Refer to Service Manual P-215.

†Optional LK facing available. For more information, see page 232.

SF-1525 Bearing Mounted



Shaft Size	.937 – 3.000
Static Torque	700 lb.ft.
Maximum Speed	1,800 rpm
Standard Voltage	D.C. 6, 24, 90

All dimensions are nominal unless otherwise noted.

Information on inertia and weights begins on page 239. Coil data is on pages 250 and 251.

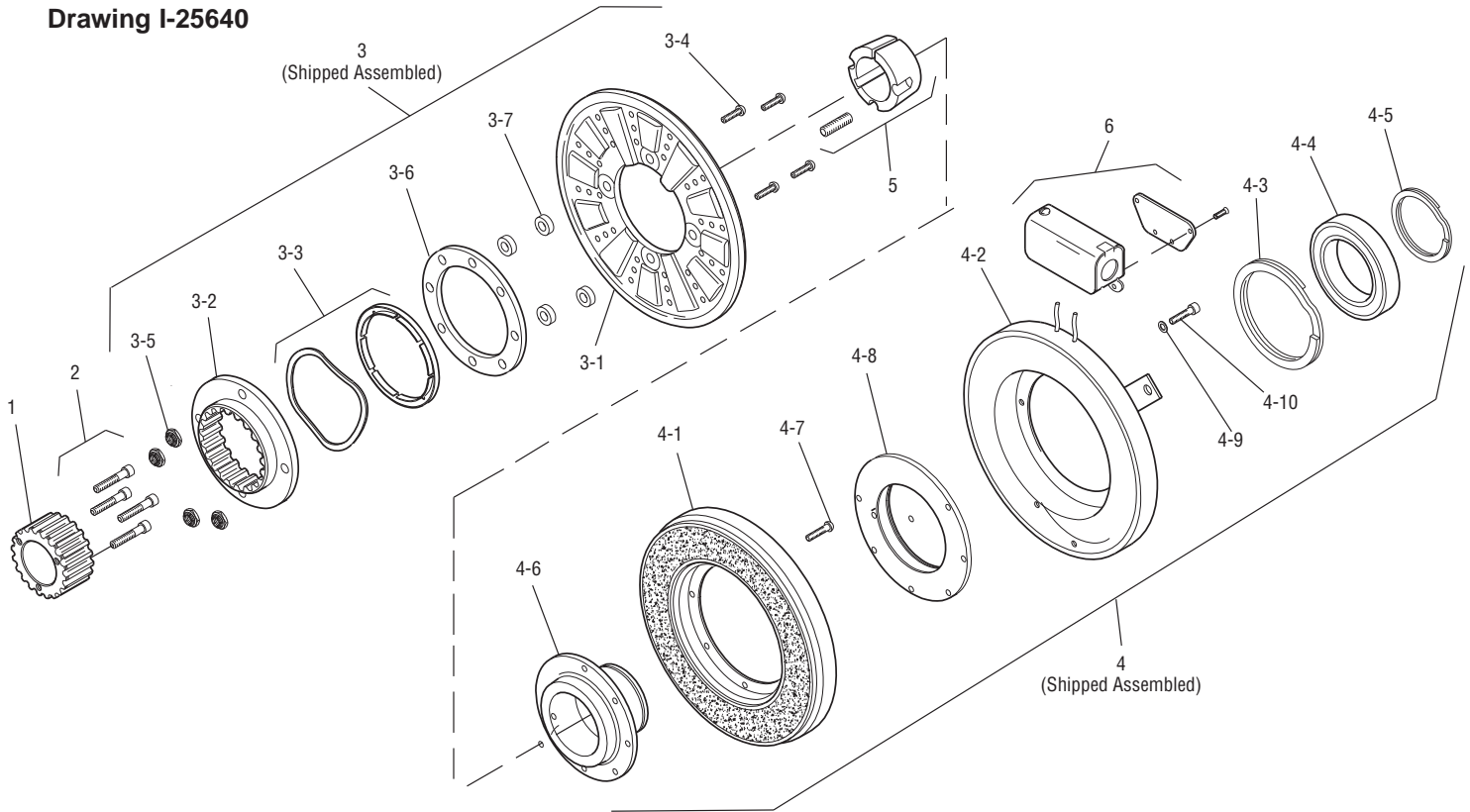
**Customer Shall Maintain:**

1. Armature hub pilot diameter to be concentric with field and rotor mounting shaft within .010 T.I.R.



## SF-1525 Bearing Mounted

Drawing I-25640



Item	Description	Part Number	Qty.
1	Splined Hub	540-0148	1
2	Accessory Mounting	5202-101-001	1
3	Armature & Adapter Assembly	5204-111-004	1
3-1	Armature	5324-111-034	1
3-2	Splined Adapter	104-0011	1
3-3	Autogap Accessory	5323-101-002	1
3-4	Screw	797-0342	8
3-5	Locknut	661-0004	8
3-6	Retainer Plate	686-0003	1
3-7	Spacer	748-0333	8
4	Field & Rotor Assembly		1
	6 Volt	5204-452-009	
	24 Volt	5204-452-011	
	90 Volt	5204-452-012	
4-1	Rotor		1
	Standard Friction Material	5204-751-002	
	†Optional LK Facing	5204-751-004	
4-2	Field		1
	6 Volt	5204-451-084	
	24 Volt	5204-451-086	
	90 Volt	5204-451-087	
4-3	Retainer Ring	748-0114	1

Item	Description	Part Number	Qty.
4-4	Ball Bearing	166-0163	1
4-5	Retainer Ring	748-0583	1
4-6	Rotor Hub	540-1306	1
4-7	Buttonhead Screw	797-1261	8
4-8	Ring Adapter	748-1048	1
4-9	Lockwasher	950-0359	6
4-10	Sockethead Screw	797-0424	6
5	Bushing*	180-0223 to 180-0256	1
6	Conduit Box	5200-101-012	1

### How to Order:

1. Specify Bore Size for Item 5.
2. Specify Voltage for Item 4.
3. See Controls Section.

### Example:

SF-1525 Clutch per I-25640 - 90 Volt, 1" Bore

These units, when used in conjunction with the correct Warner Electric conduit box, meet the standards of UL508 and are listed under guide card #NMTR, file #59164. These units are CSA certified under file #LR11543.

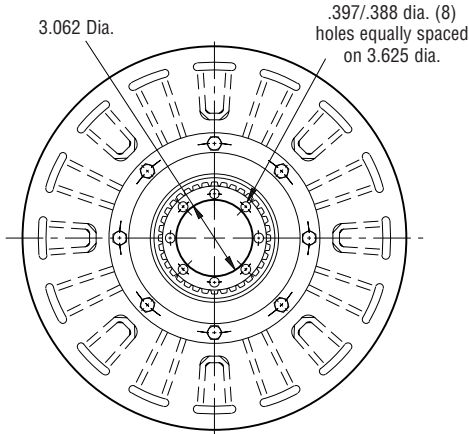
\*See page 252 for specific part numbers.

Refer to Service Manual P-215.

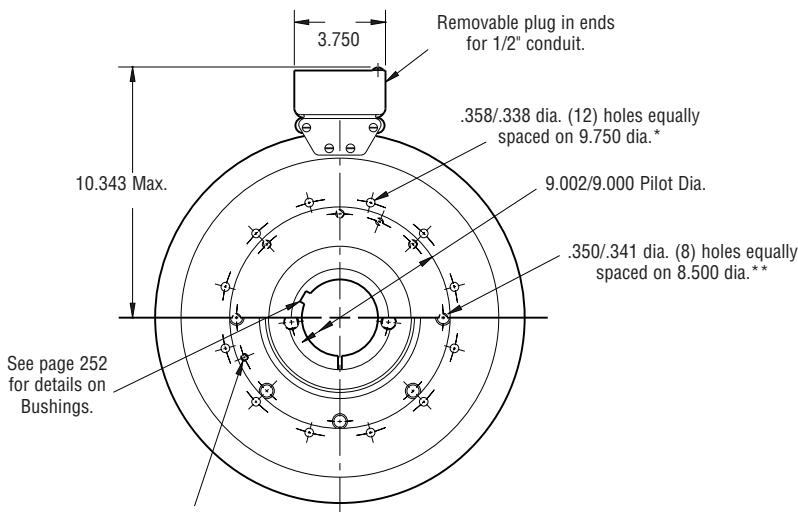
†Optional LK facing available. For more information, see page 232.

# Clutch, Hi-Torque

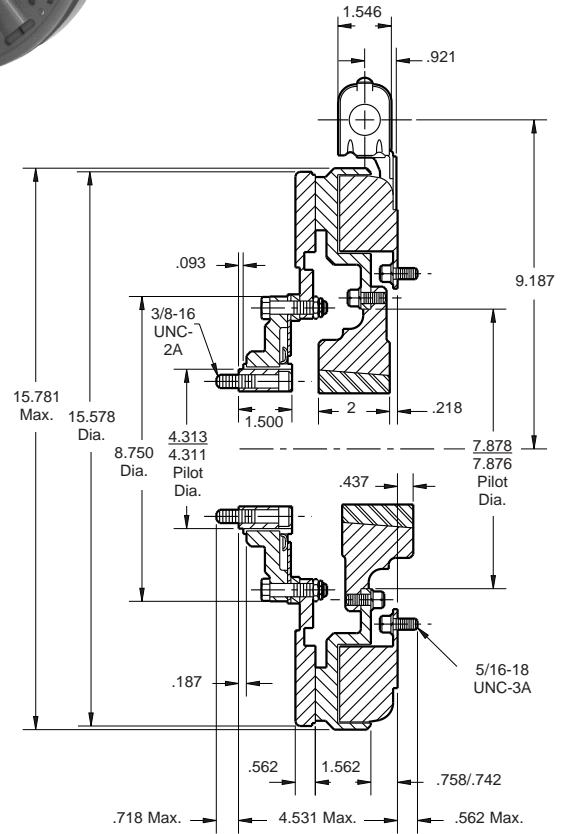
## SF-1525 H.T. Flange Mounted



**ARMATURE VIEW**



**FIELD VIEW**



**Customer Shall Maintain:**

1. Concentricity of field mounting pilot diameter with rotor mounting shaft within .006 T.I.R.
2. Squareness of field mounting face with rotor mounting shaft within .006 T.I.R. measured at field mounting bolt circle.
3. Rotor mounting shaft concentric with armature center of rotation within .006 T.I.R.
4. Armature hub pilot diameter to be concentric with armature center of rotation within .010 T.I.R.

**When Hub is Furnished by Customer:**

Rotor mounting pilot diameter must be concentric with rotor mounting shaft within .006 T.I.R.

\* Mounting holes are within .010 of true position relative to pilot diameter.

\*\* Mounting holes are within .008 of true position relative to pilot diameter.

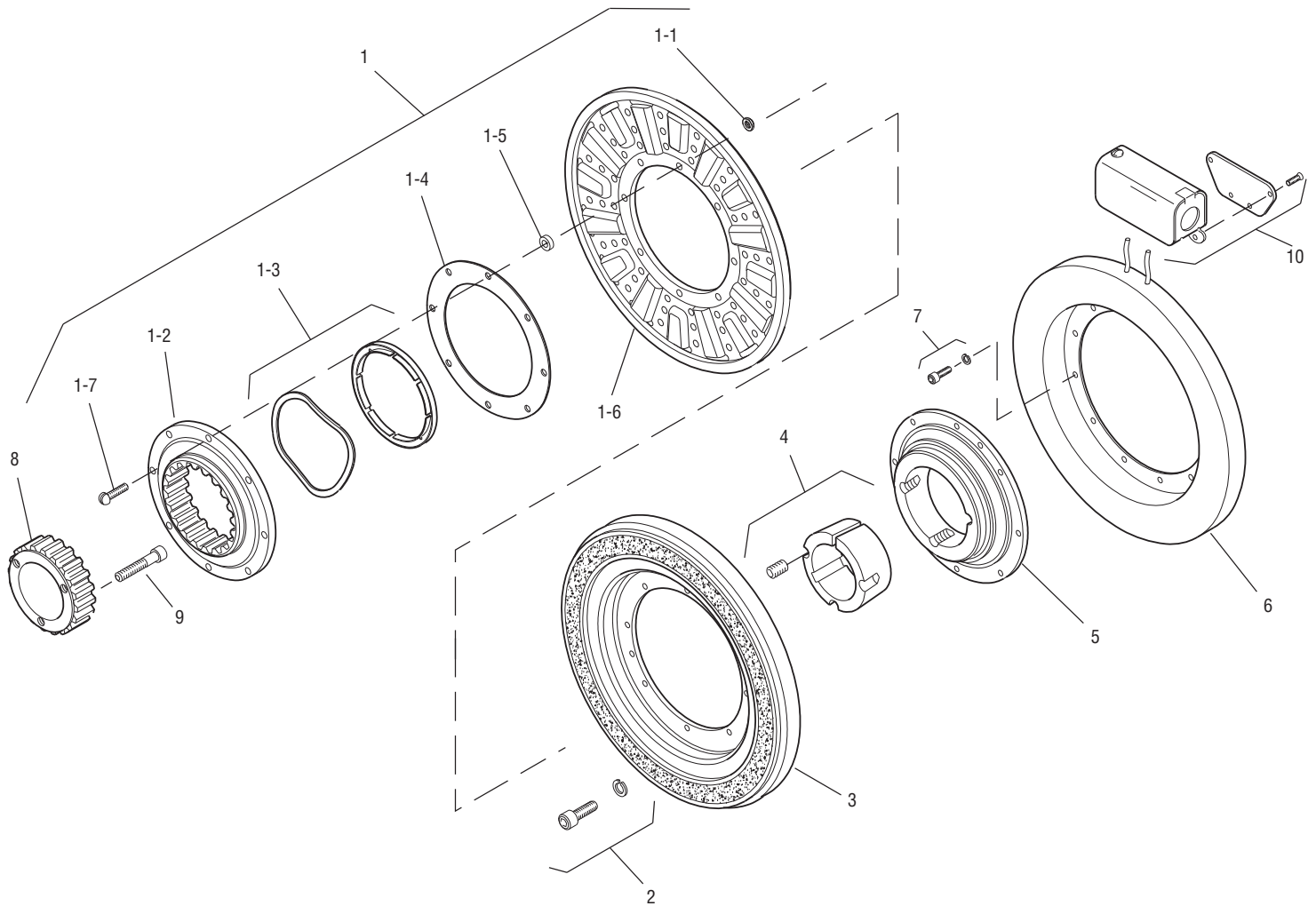
Shaft Size	.937– 3.000
Static Torque	1,350 lb.ft.
Maximum Speed	2,000 rpm
Standard Voltage	D.C. 6, 90

All dimensions are nominal unless otherwise noted.

Information on inertia and weights begins on page 239. Coil data is on pages 250 and 251.



Drawing I-25627



Item	Description	Part Number	Qty.
1	Armature Assembly	5204-111-004	1
1-1	Locknut	661-0004	8
1-2	Splined Adapter	104-0011	1
1-3	Autogap Accessory	5323-101-002	1
1-4	Retainer Plate	686-0003	1
1-5	Spacer	748-0333	8
1-6	Armature	5324-111-034	1
1-7	Screw	797-0342	8
2	Mounting Accessory	5321-101-002	2
3	Rotor	5204-751-001	1
4	Bushing*		
	15/16" to 3" Bore	180-0223 to 180-0256	1
5	Rotor Hub	540-0004	1
6	Field - Inside Mounted		1
	6 Volt	5204-451-005	
	90 Volt	5204-451-006	

Item	Description	Part Number	Qty.
7	Mounting Accessory - I.M.	5321-101-001	2
8	Splined Hub	540-0148	1
9	Mounting Accessory	5202-101-001	1
10	Conduit Box	5200-101-012	1

**How to Order:**

1. Specify Bore Size of Item 4.
2. See Controls Section.

**Example:**

SF-1525 Clutch, Hi-Torque, per I-25627 - 90 Volt, 2" Bore  
 These units, when used in conjunction with the correct Warner Electric conduit box, meet the standards of UL508 and are listed under guide card #NMTR, file #59164. These units are CSA certified under file #LR11543.

\*See page 252 for specific part numbers.

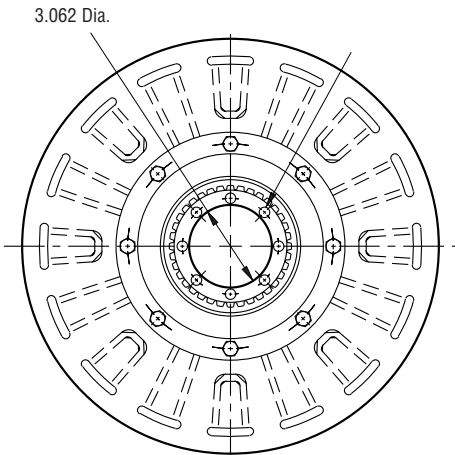
Refer to Service Manual P-215.



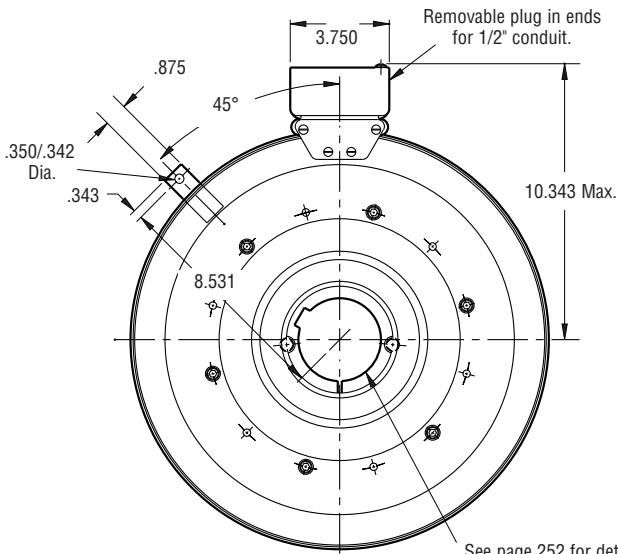
# Clutch, Hi-Torque

## SF-1525 H.T. Bearing Mounted

.397/.388 dia. (8) holes (hub) equally spaced on 3.625 dia. and within .003 of true position relative to 4.313/4.311 pilot diameter.



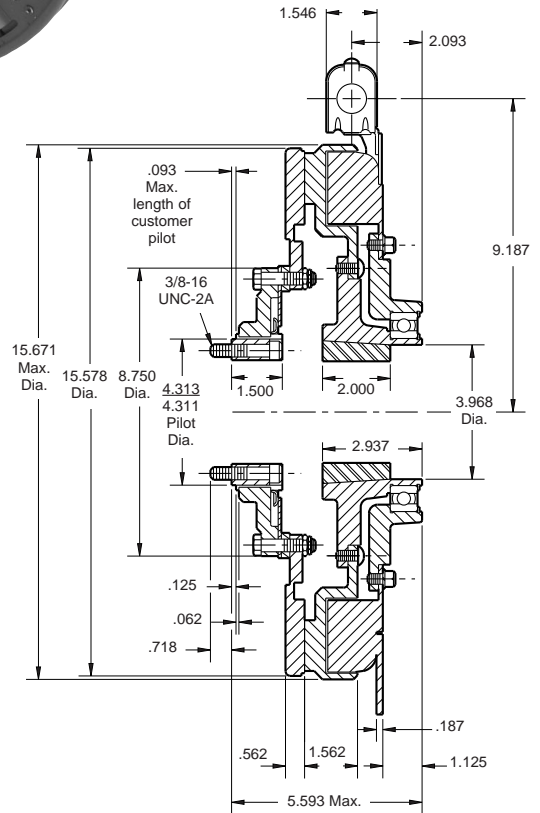
**ARMATURE VIEW**



**FIELD VIEW**

**Customer Shall Maintain:**

1. Armature hub pilot diameter to be concentric with field and rotor mounting shaft within .010 T.I.R.



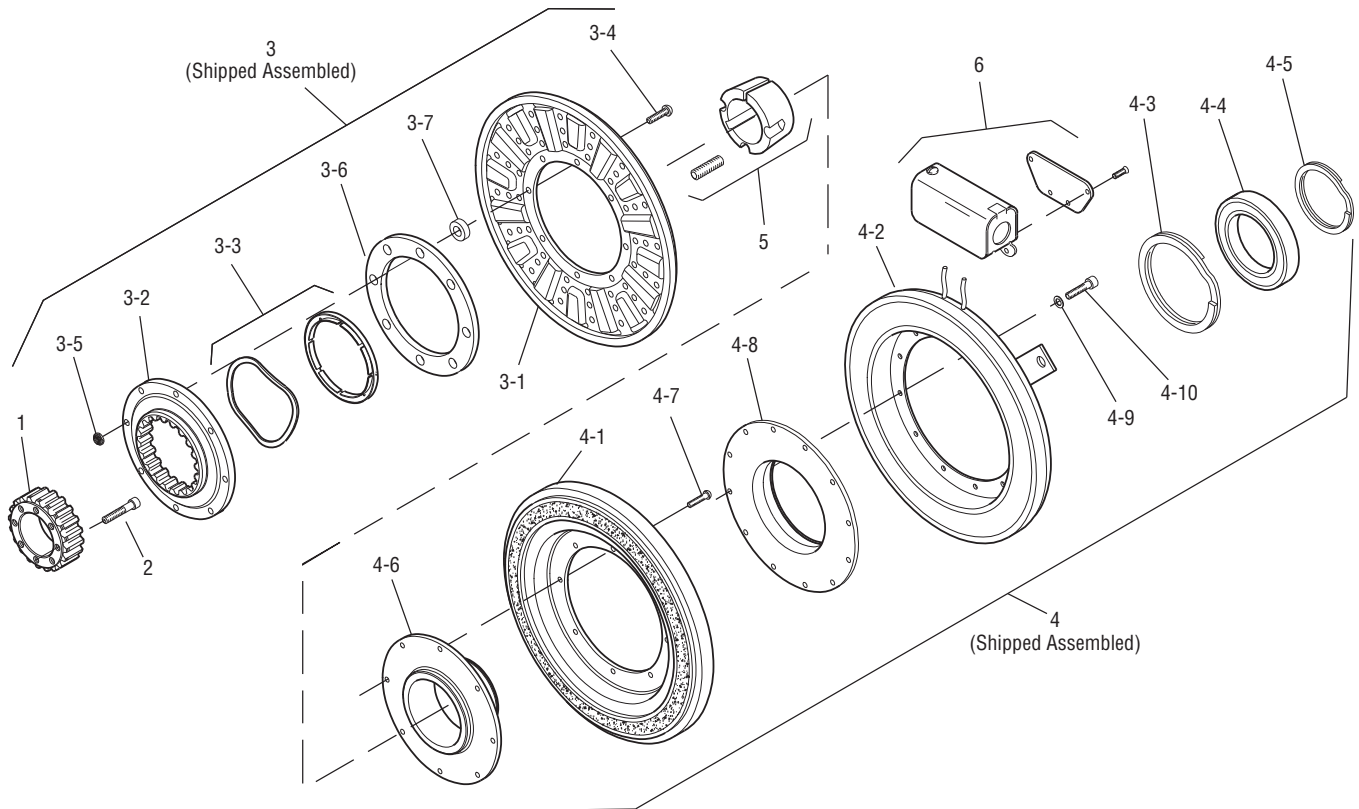
Shaft Size	.937– 3.000
Static Torque	1,350 lb.ft.
Maximum Speed	1,800 rpm
Standard Voltage	D.C. 90

All dimensions are nominal unless otherwise noted.

Information on inertia and weights begins on page 239. Coil data is on pages 250 and 251.



Drawing I-25643



Item	Description	Part Number	Qty.
1	Splined Hub	540-0148	1
2	Accessory, Mounting	5202-101-001	1
3	Armature & Adapter Assembly	5204-111-004	1
3-1	Armature	5324-111-034	1
3-2	Splined Adapter	104-0011	1
3-3	Autogap Accessory	5323-101-002	1
3-4	Screw	797-0342	8
3-5	Locknut	661-0004	8
3-6	Retainer Plate	686-0003	1
3-7	Spacer	748-0333	8
4	Field & Rotor Assembly		1
	90 Volt	5204-452-015	
4-1	Rotor	5204-751-001	1
4-2	Field		1
	90 Volt	5204-451-090	
4-3	Retainer Ring	748-0114	1
4-4	Ball Bearing	166-0163	1
4-5	Retainer Ring	748-0583	1
4-6	Rotor Hub	540-1306	1

Item	Description	Part Number	Qty.
4-7	Buttonhead Screw	797-1261	8
4-8	Ring Adapter	748-1048	1
4-9	Lockwasher	950-0359	6
4-10	Sockethead Screw	797-0424	6
5	Bushing*	180-0223 to 180-0256	1
6	Conduit Box	5200-101-012	1

**How to Order:**

1. Specify Bore Size for Item 5.
2. Specify Voltage for Item 4.
3. See Controls Section.

**Example:**

SF-1525 Clutch Hi-Torque per I-25643 - 90 Volt, 1" Bore

These units, when used in conjunction with the correct Warner Electric conduit box, meet the standards of UL508 and are listed under guide card #NMTR, file #59164. These units are CSA certified under file #LR11543.

\*See page 252 for specific part numbers.

Refer to Service Manual P-215.