

# Custom Design Clutches and Brakes

## Mounting Examples and Options

Warner Electric custom design brakes and clutches are economical to purchase and simple to install. They consist of components which must be assembled on the shaft and properly attached to the machine frame.

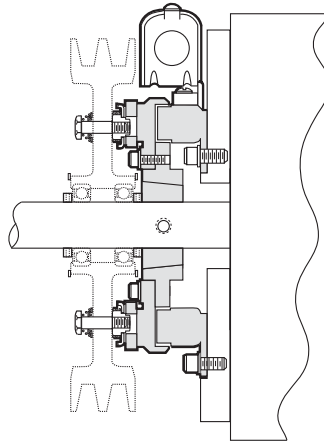
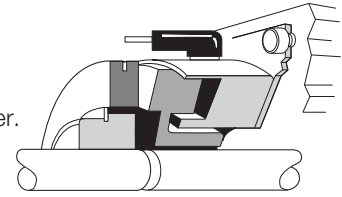
Various customer furnished drive components must be assembled with the brake or clutch. Pulleys, sprockets and bearings/pillow blocks for shafting may be essential elements of a complete drive system. Squareness and concentricity tolerances are specified where critical to proper clutch/brake functioning.

The illustrations show SF, PC and PCB units mounted with customer supplied bearing mounted pulley. In each illustration the drive pin for a normal duty clutch is shown. In this manner the pulley will support the armature.

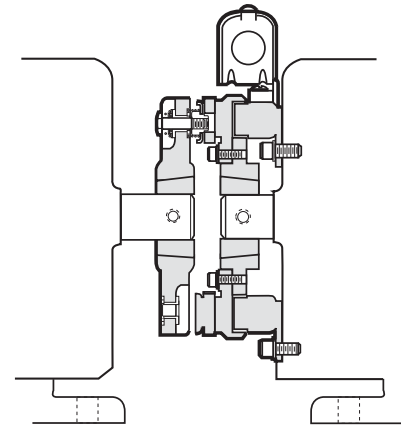
### SF Clutches and SFC Clutch Couplings

#### Flange Mounting

Concentricity tolerances, held by customer, are critical. Pilot surfaces required on machine member. Eliminates bearings. Good design for high speed applications.



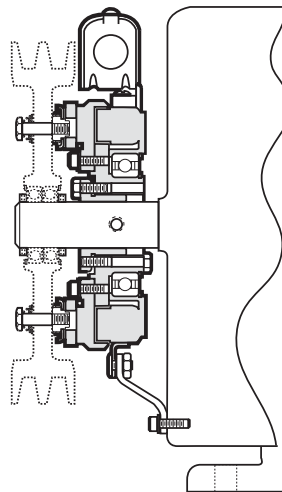
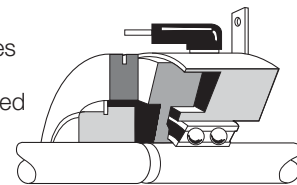
**SF Clutch**  
Typical Installation



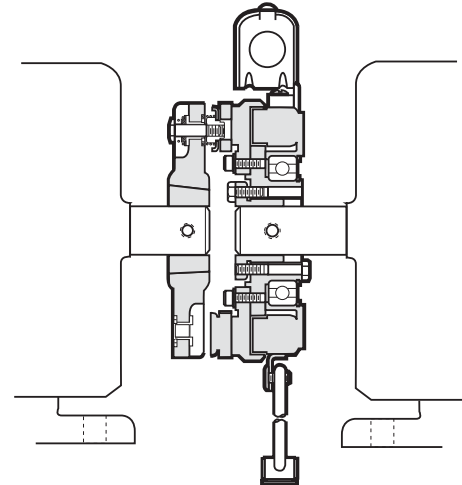
**SFC Clutch Coupling**  
Typical Installation

#### Bearing Mounting

Bearing supports field and holds close tolerances required between rotor and field. Easy to install and priced about the same as the flange mounted design.



**SF Clutch**  
Typical Installation

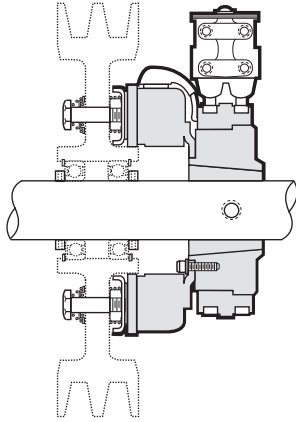


**SFC Clutch Coupling**  
Typical Installation

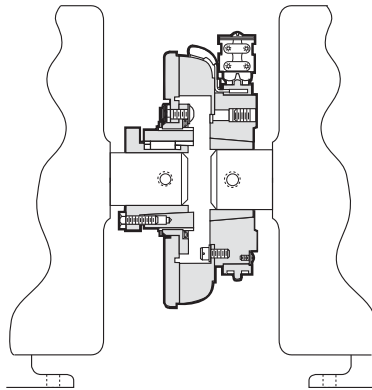
# Custom Design Clutches and Brakes

## Mounting Examples and Options

### PC Clutches and PCC Clutch Couplings



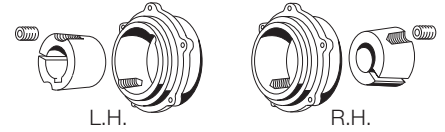
**PC Clutch**  
Typical Installation  
(Left hand hub shown)



**PCC Clutch Coupling**  
Typical Installation

### Left Hand vs. Right Hand Hubs

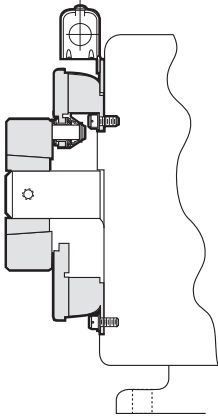
Left handed or right handed Taperlock bushing installation



Taperlock bushing enters from magnet side. Mounting screws accessible from magnet size only.

Taperlock bushing enters from opposite side.

### PB Brakes

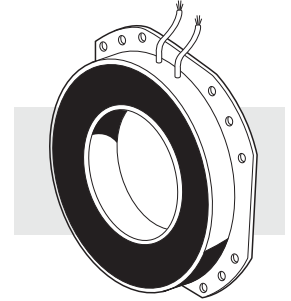


**PB Brake**  
Typical Installation

### Inside or Outside Mounting Option

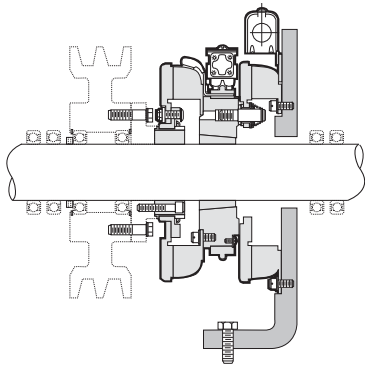


**Inside Mount**  
Mounting screws for the magnet are accessible from inside the magnet only.

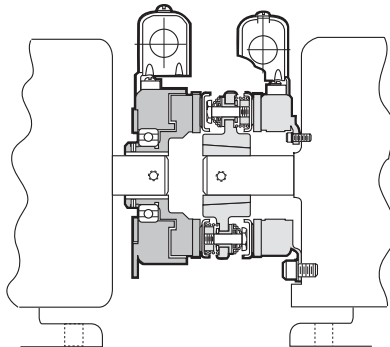


**Outside Mount**  
Mounting screws for the magnet are accessible on the outside of the magnet. Outside mounted units cost slightly more.

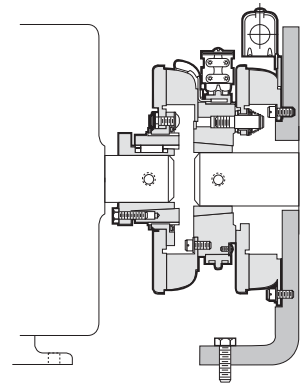
### Clutch/Brake Combinations



**PCB Clutch/Brake**  
Typical Installation



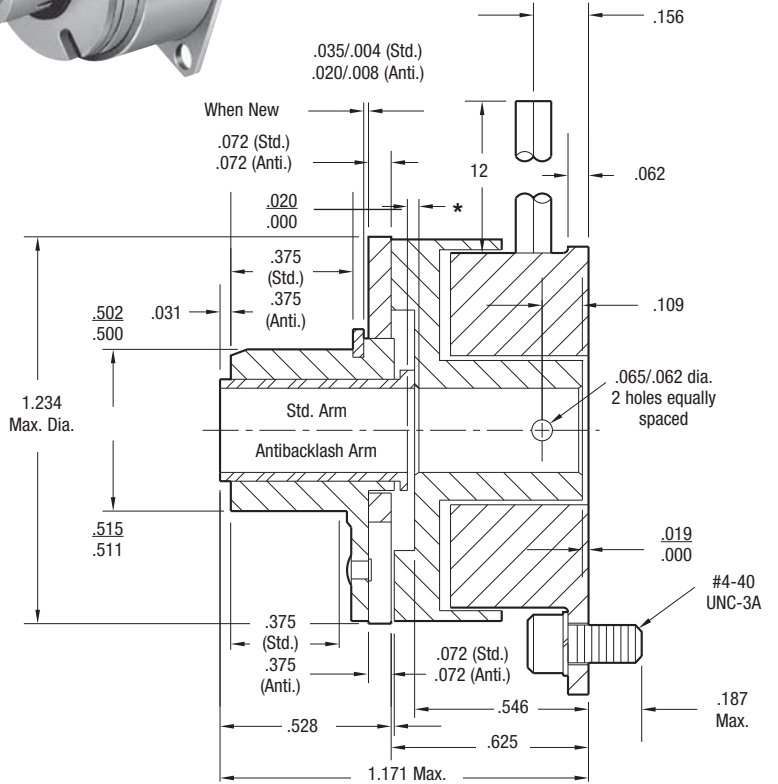
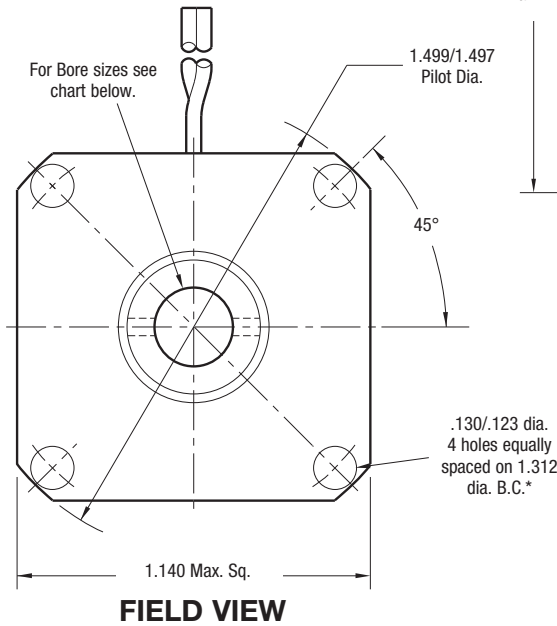
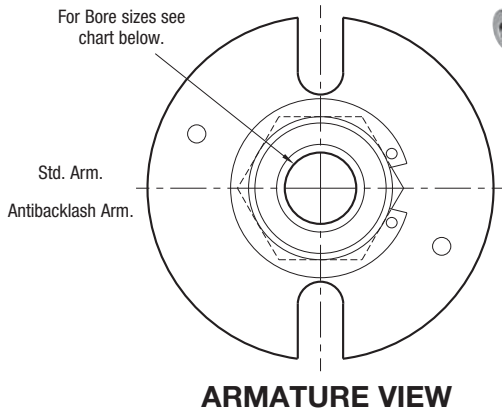
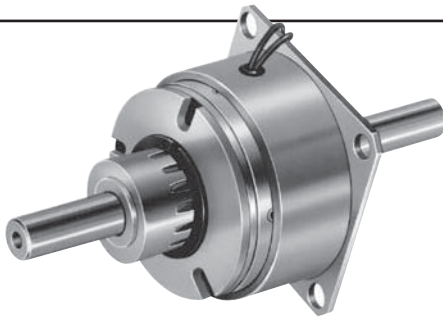
**SFPBC Clutch/Brake Coupling**  
Typical Installation



**PCBC Clutch/Brake Coupling**  
Typical Installation

# SF Series Clutch

## SF-120 Flange Mounted



\* Mounting holes are within .006 of true position relative to pilot diameter.

### Bore Dimensions

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

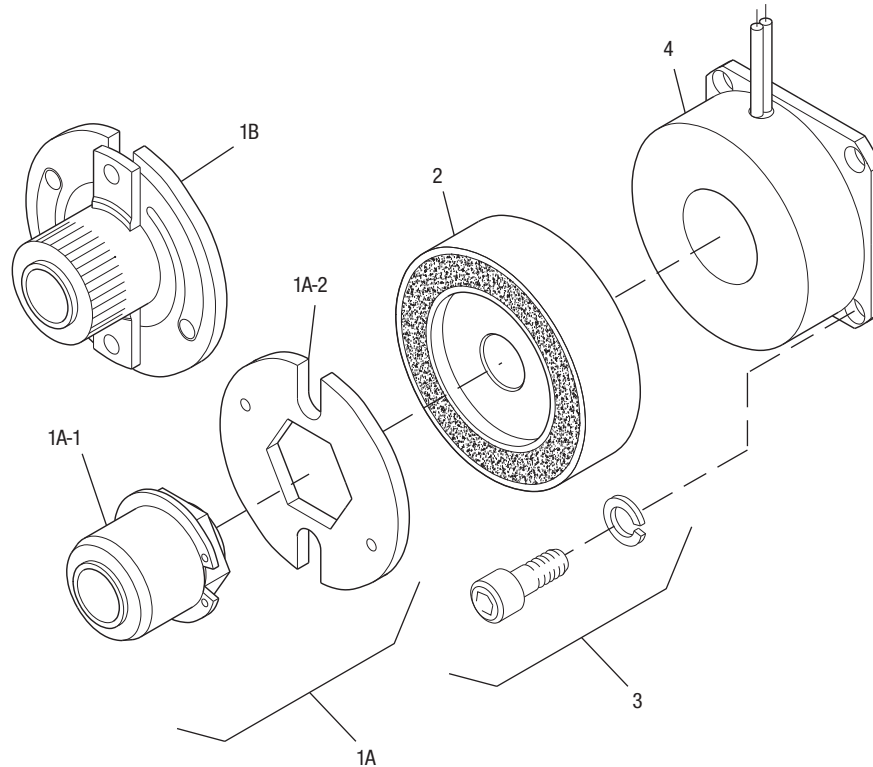
|                  |                |
|------------------|----------------|
| Static Torque    | 5 lb.in.       |
| Maximum Speed    | 3,600 rpm      |
| Standard Voltage | D.C. 6, 24, 90 |

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-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

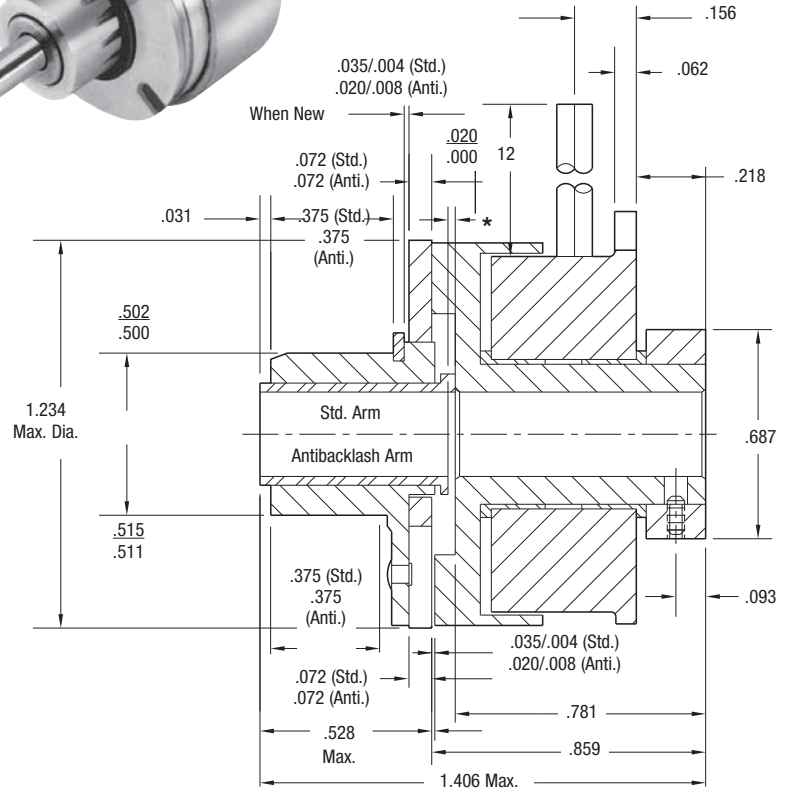
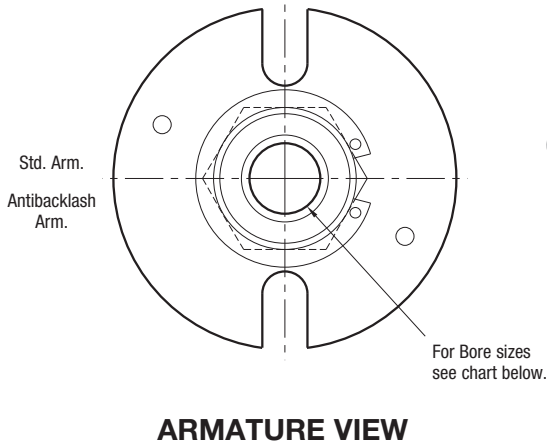
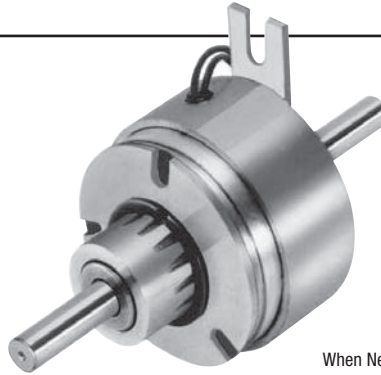
These units meet standards set forth in UL508 and are listed under guide card #NMTR2, file #59164.

These units are CSA certified under file #LR11543.

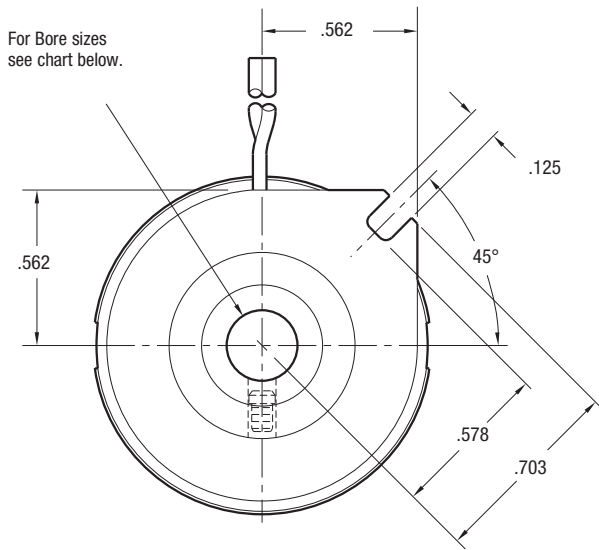
Refer to Service Manual P-0200-WE

# SF Series Clutch

## SF-120 Bearing Mounted



\*Customer shall maintain dimension as noted.



### Bore Dimensions

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

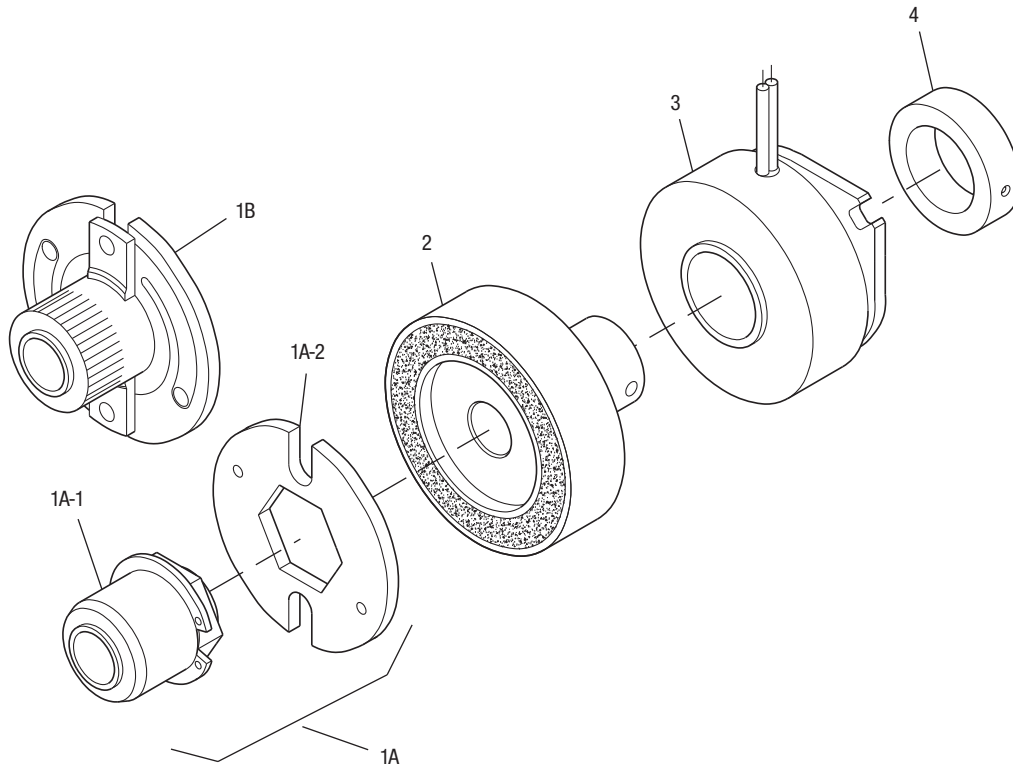
|                  |                |
|------------------|----------------|
| Static Torque    | 5 lb.in.       |
| Maximum Speed    | 3,600 rpm      |
| Standard Voltage | D.C. 6, 24, 90 |

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

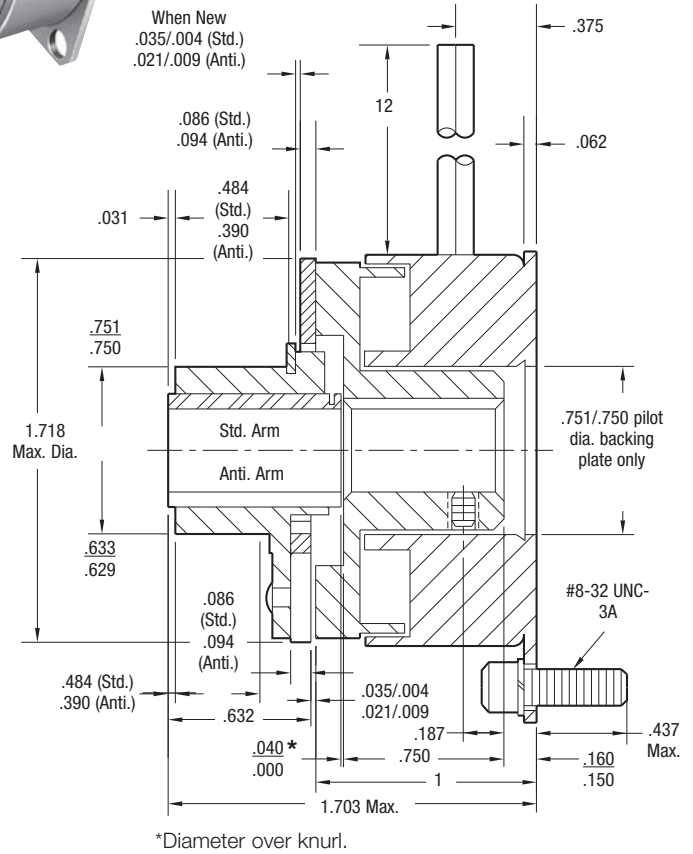
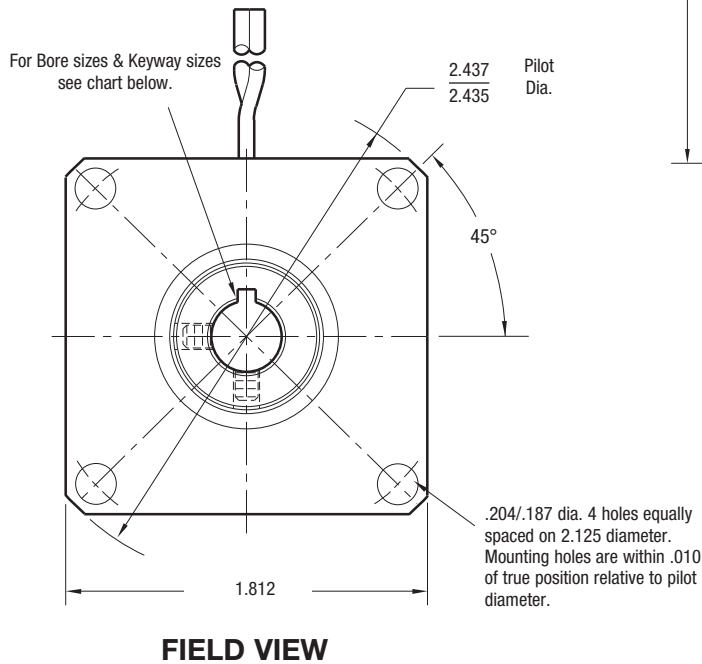
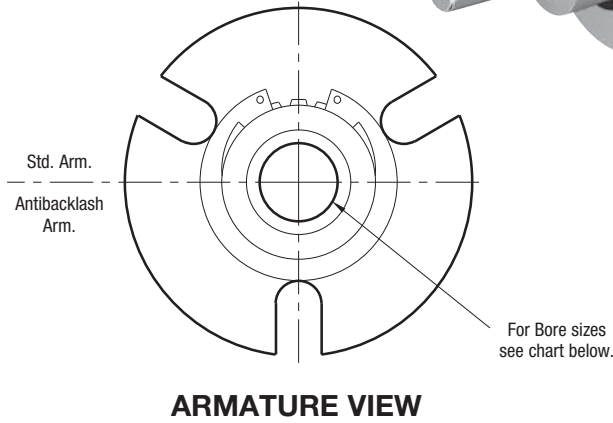
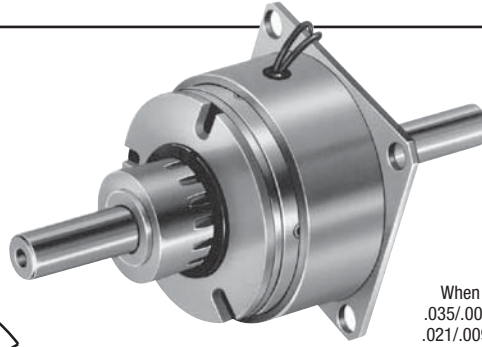
These units meet standards set forth in UL508 and are listed under guide card #NMTR2, file #59164.

These units are CSA certified under file #LR11543.

Refer to Service Manual P-0200-WE

# SF Series Clutch

## SF-170 Flange Mounted



### 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 |

### Customer Shall Maintain:

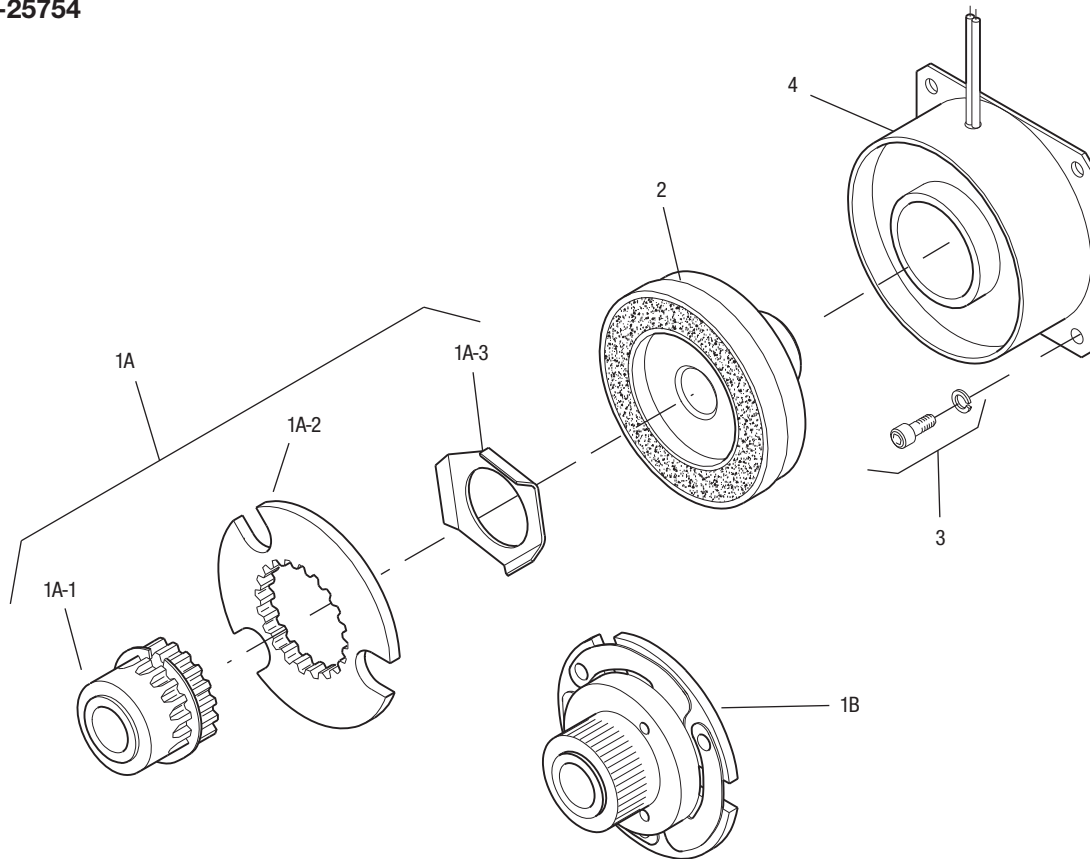
1. Squareness of field mounting face with shaft with .003 T.I.R. measured at pilot diameter.
2. Concentricity of field mounting pilot diameter with rotor mounting shaft within .003 T.I.R.

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-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.

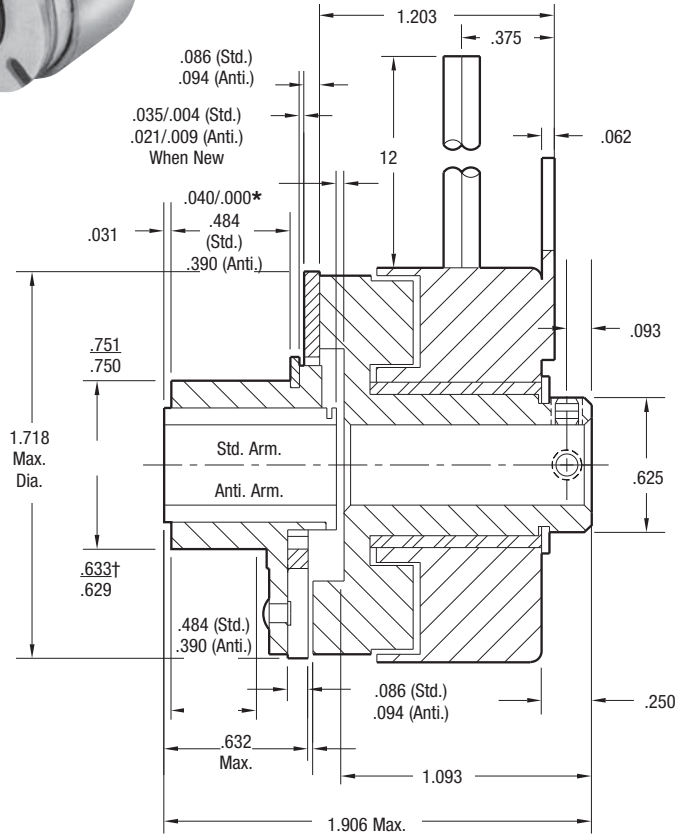
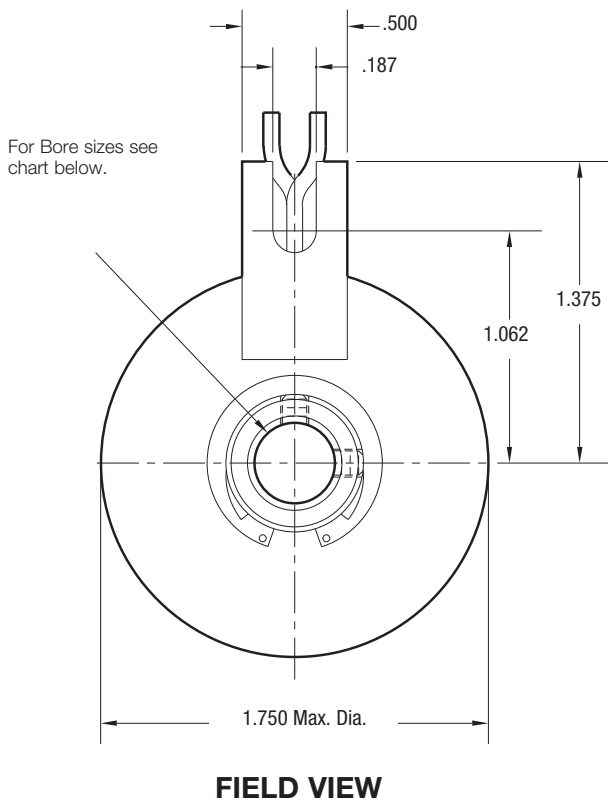
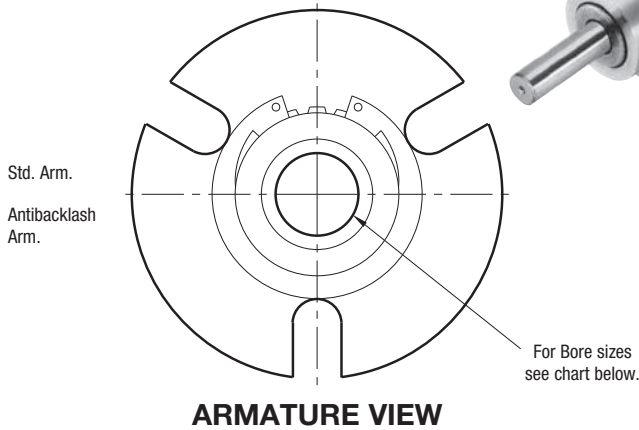
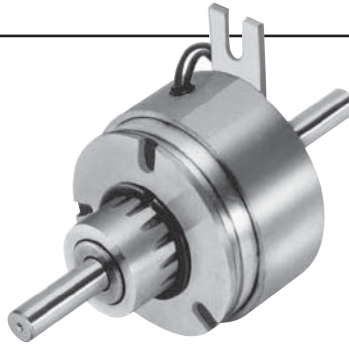
These units are CSA certified under file #LR11543.

Refer to Service Manual P-0200-WE



# SF Series 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 |

### Customer Shall Maintain:

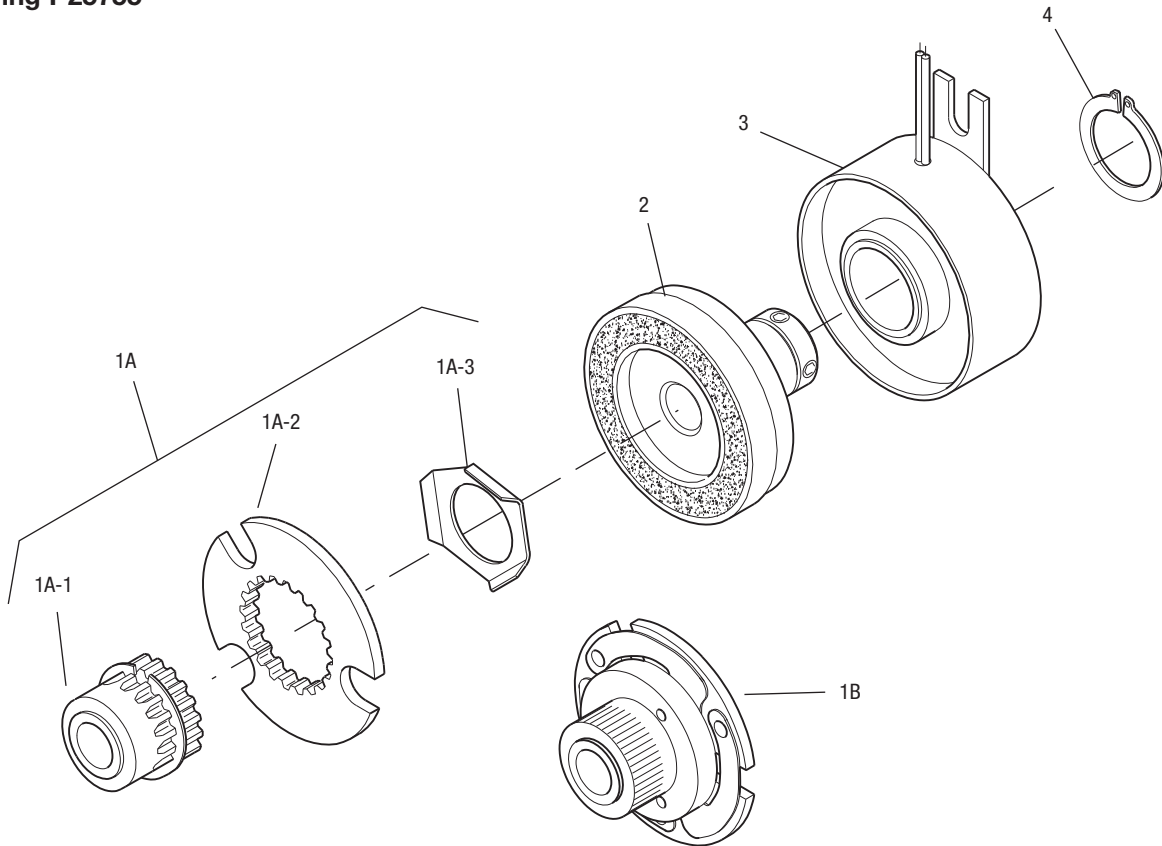
\*Customer shall maintain dimension as noted.  
† over knurl

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-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

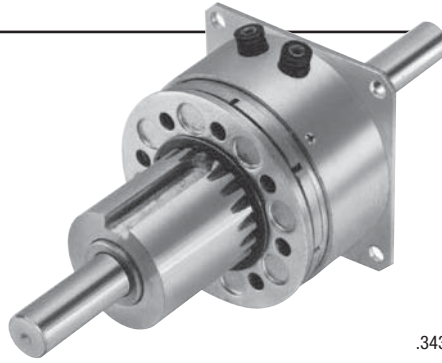
These units meet standards set forth in  
UL508 and are listed under guide card  
#NMTR2, file #59164.

These units are CSA certified under file  
#LR11543.

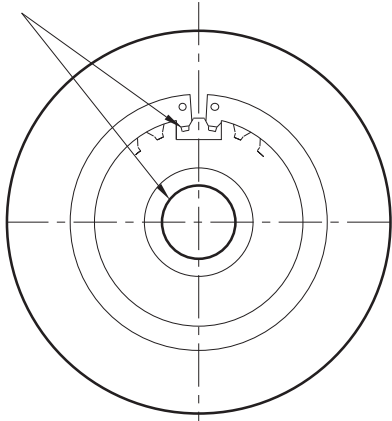
Refer to Service Manual P-0200-WE

# SF Series Clutch

## SF-250 Flange Mounted

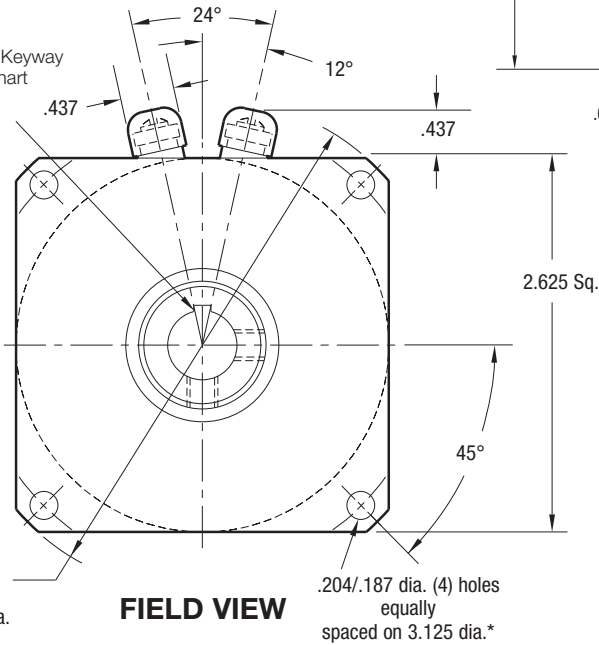


For Bore & Keyway sizes see chart below.

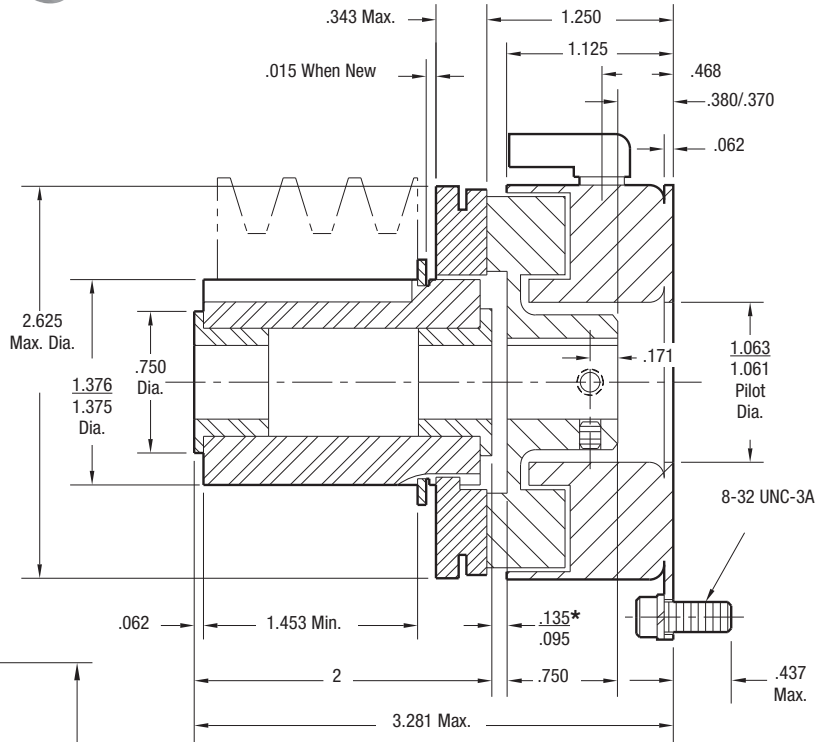


**ARMATURE VIEW**

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.

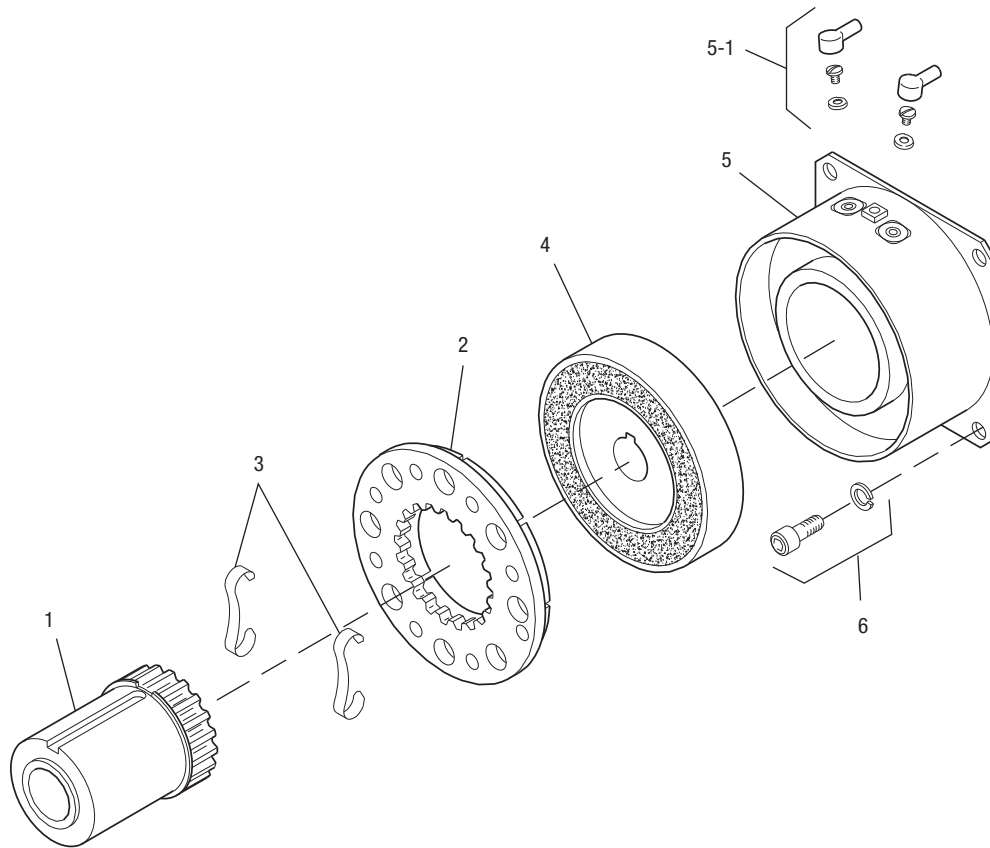
### Customer Shall Maintain:

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

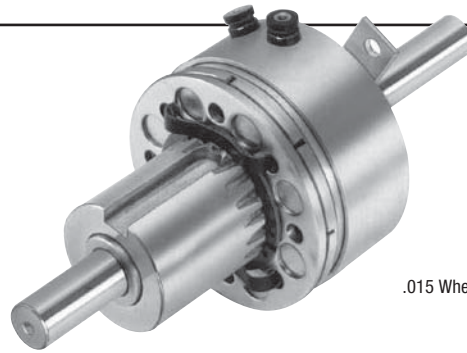
These units meet standards set forth in UL508 and are listed under guide card #NMTR2, file #59164.

These units are CSA certified under file #LR11543.

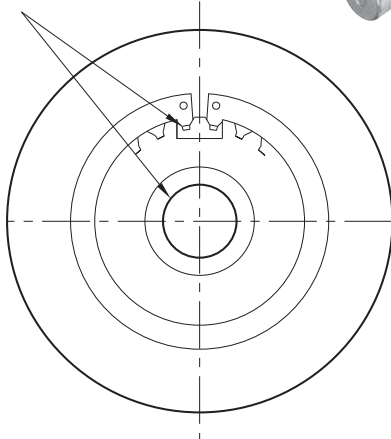
Refer to Service Manual P-0200-WE

# SF Series Clutch

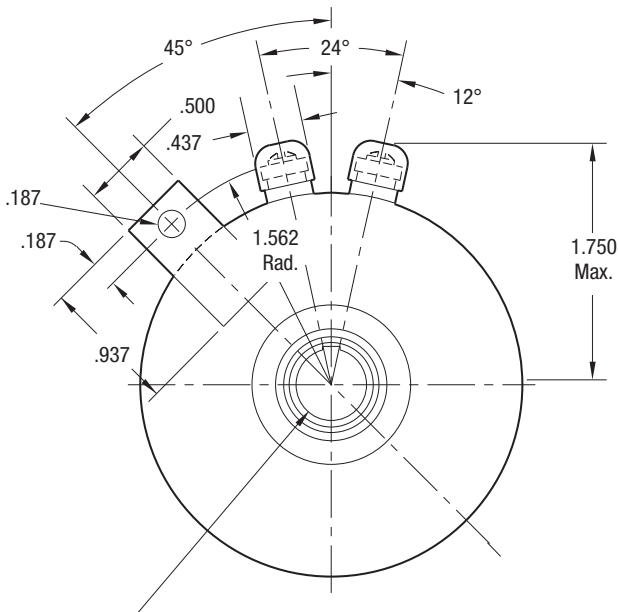
## SF-250 Bearing Mounted



For Bore & Keyway sizes see chart below.

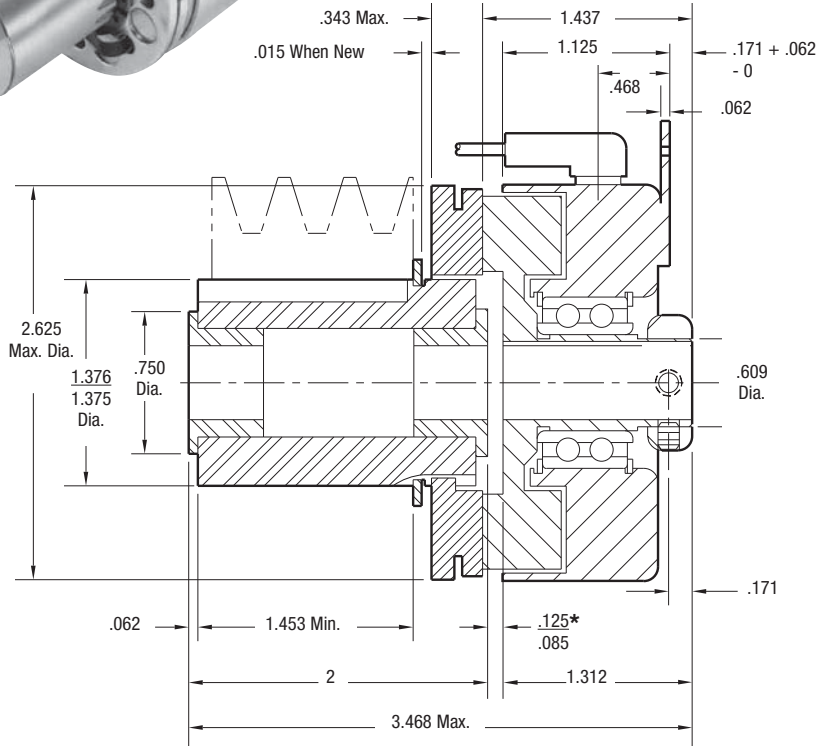


**ARMATURE VIEW**



For Bore & Keyway sizes see to the right.

**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.

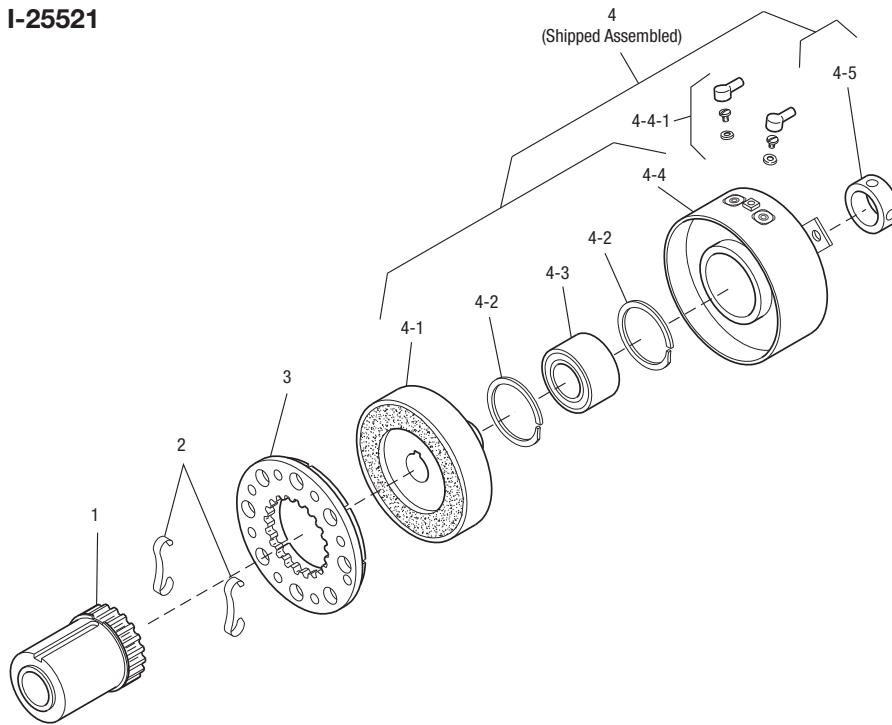
|                  |                |
|------------------|----------------|
| Static Torque    | 70 lb.in.      |
| Maximum Speed    | 7,500 rpm      |
| Standard Voltage | D.C. 6, 24, 90 |

All dimensions are nominal unless otherwise noted.

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



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 |      |
| 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.

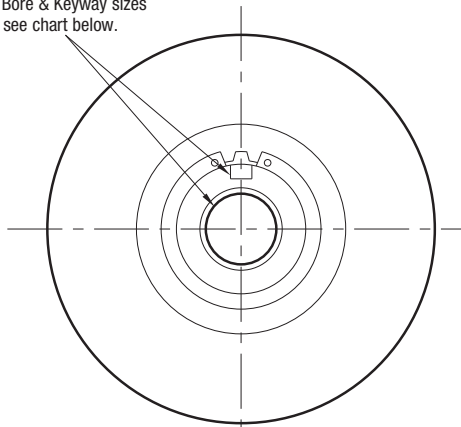
Refer to Service Manual P-0200-WE

# SF Series Clutch

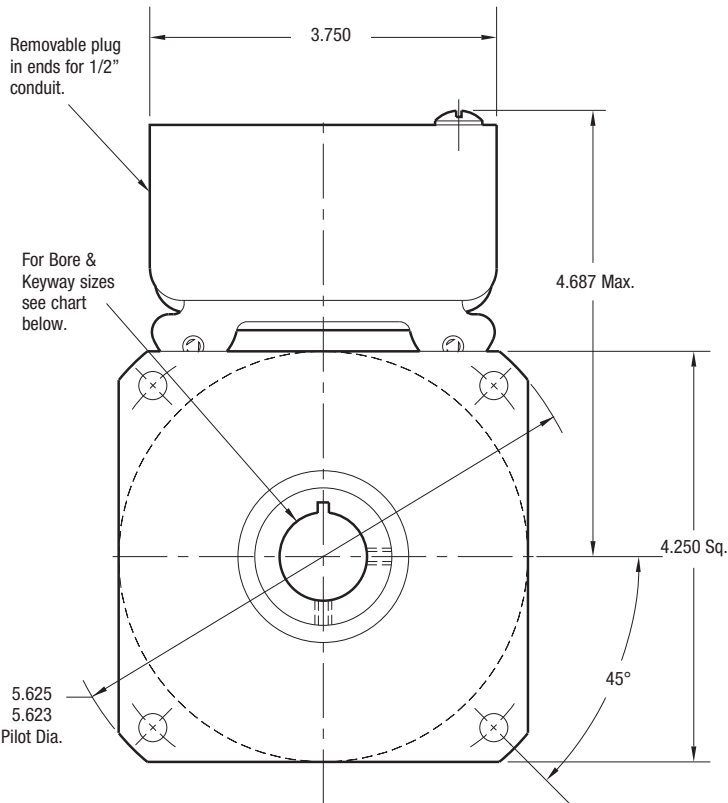
## SF-400 Flange Mounted



For Bore & Keyway sizes see chart below.

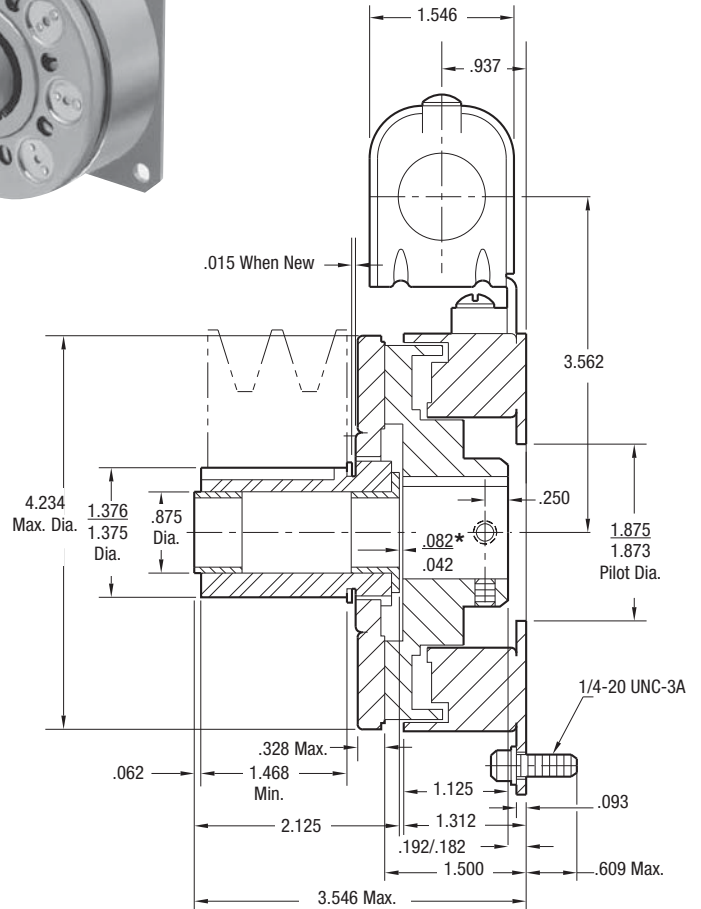


**ARMATURE VIEW**



**FIELD VIEW**

.296/.280 dia. (4) holes equally spaced on 5.000 dia. Mounting holes are within .010 of true position relative to pilot diameter.



\*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.

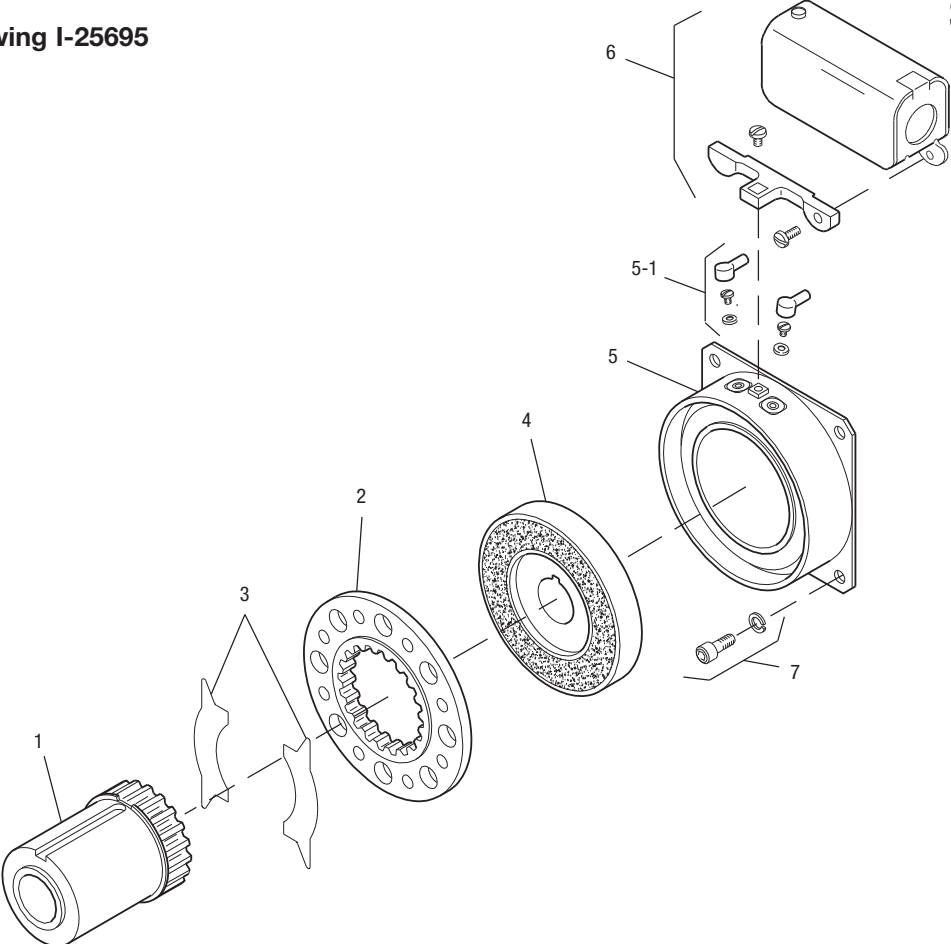
### Customer Shall Maintain:

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.



## 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 |      |
|      | 7/8" Bore          | 5104-751-036 |      |
|      | 1" Bore            | 5104-751-037 |      |
| 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-0200-WE

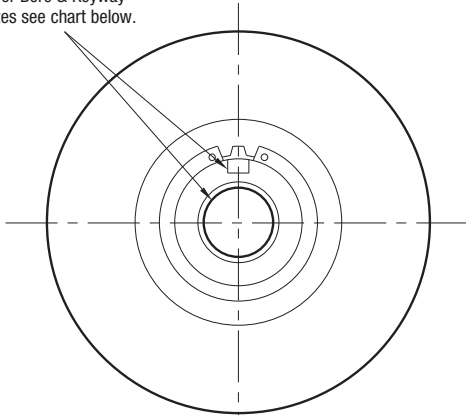


# SF Series Clutch

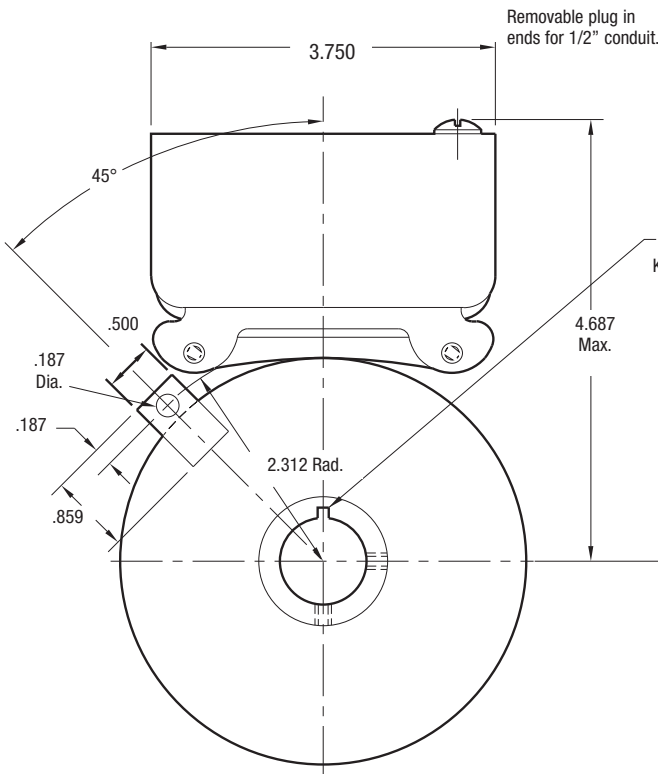
## SF-400 Bearing Mounted



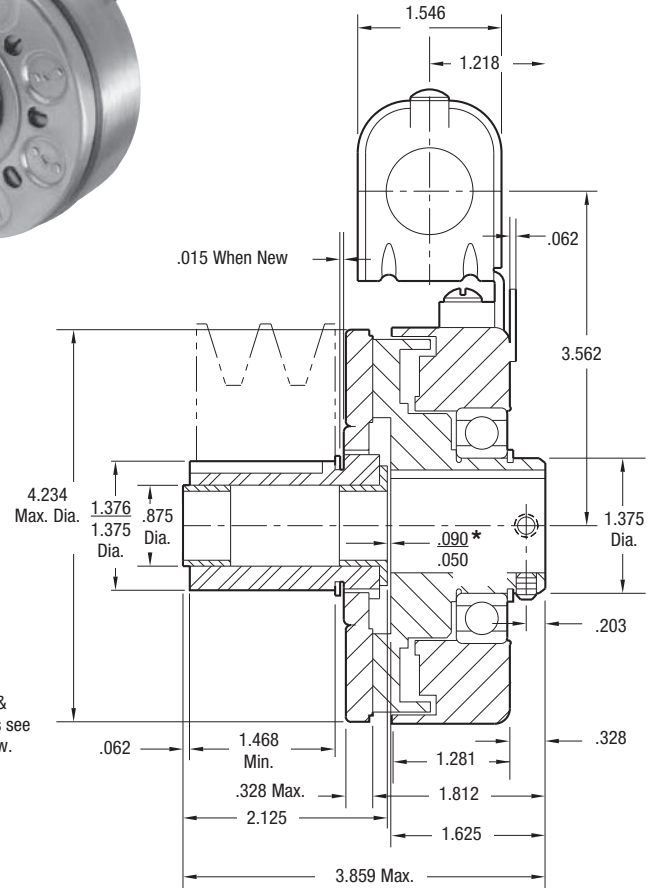
For Bore & Keyway sizes see chart below.



**ARMATURE VIEW**



**FIELD VIEW**



\*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       | .187 x .093 |
| .7500/.7495        |             | .751/.750       |             |
|                    |             | .876/.875       |             |
|                    |             | 1.001/1.000     |             |

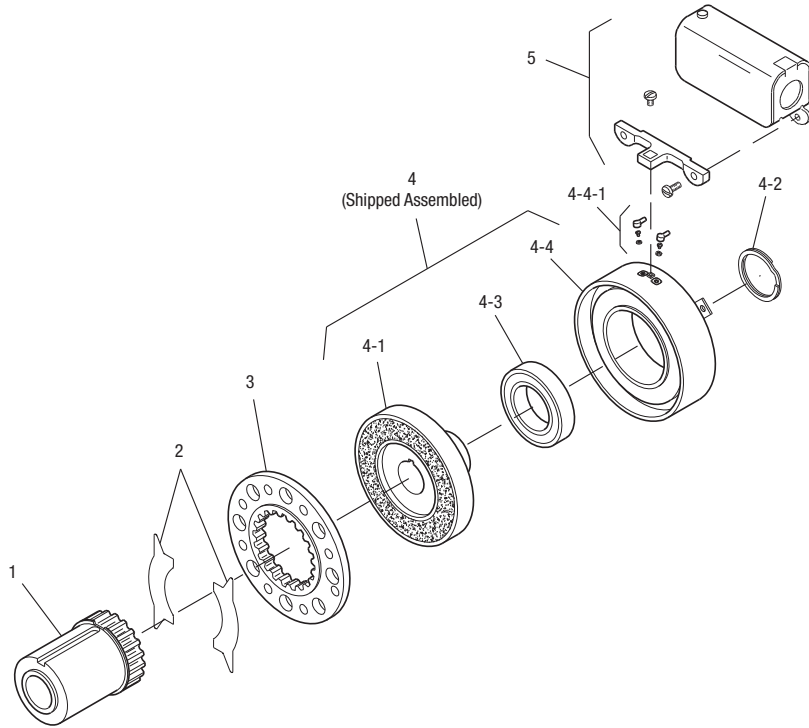
|                  |                |
|------------------|----------------|
| Static Torque    | 270 lb.in.     |
| Maximum Speed    | 4,500 rpm      |
| Standard Voltage | D.C. 6, 24, 90 |

All dimensions are nominal unless otherwise noted.

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



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 |      |
|                     | 24 Volt – 3/4" Bore      | 5104-452-059 |      |
|                     | 90 Volt – 3/4" Bore      | 5104-452-060 |      |
|                     | 6 Volt – 7/8" Bore       | 5104-452-061 |      |
|                     | 24 Volt – 7/8" Bore      | 5104-452-062 |      |
| 90 Volt – 7/8" Bore | 5104-452-063             |              |      |
| 6 Volt – 1" Bore    | 5104-452-064             |              |      |
| 24 Volt – 1" Bore   | 5104-452-065             |              |      |
| 90 Volt – 1" Bore   | 5104-452-066             |              |      |
| 4-1                 | Rotor                    |              | 1    |
|                     | 1/2" Bore                | 5104-751-043 |      |

| Item  | Description        | Part Number  | Qty. |
|-------|--------------------|--------------|------|
|       | 5/8" Bore          | 5104-751-044 |      |
|       | 3/4" Bore          | 5104-751-045 |      |
|       | 7/8" Bore          | 5104-751-046 |      |
|       | 1" Bore            | 5104-751-047 |      |
| 4-2   | Retainer Ring      | 748-0018     | 1    |
| 4-3   | Ball Bearing       | 166-0150     | 1    |
| 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.

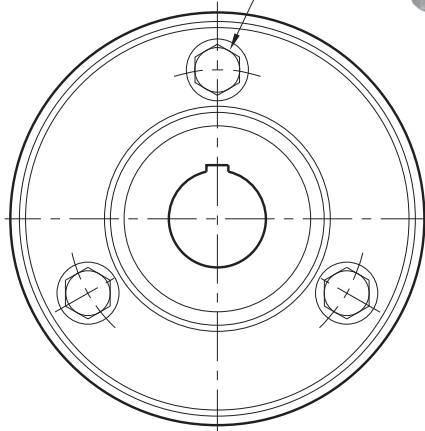
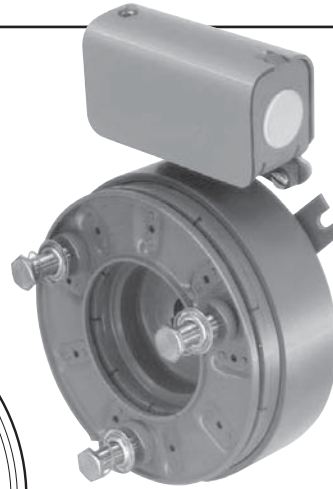
These units are CSA certified under file #LR11543

Service Manual P-0200-WE

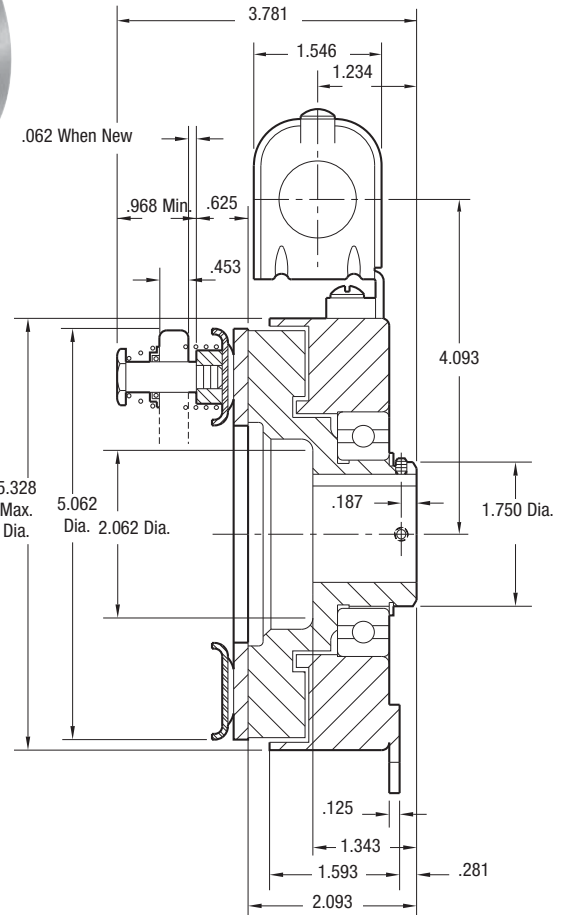
# SF Series Clutch

## SF-500 Bearing Mounted

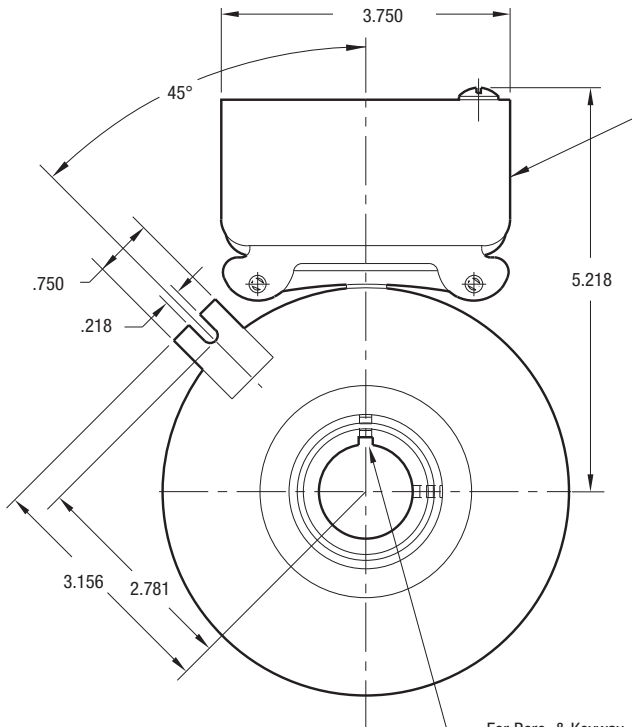
See page 230 for details on Drive Pin mountings.



**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<br>.876/.875                                   | .187 x .093 |
| .9385/.9375<br>1.001/1.000<br>1.126/1.125<br>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.

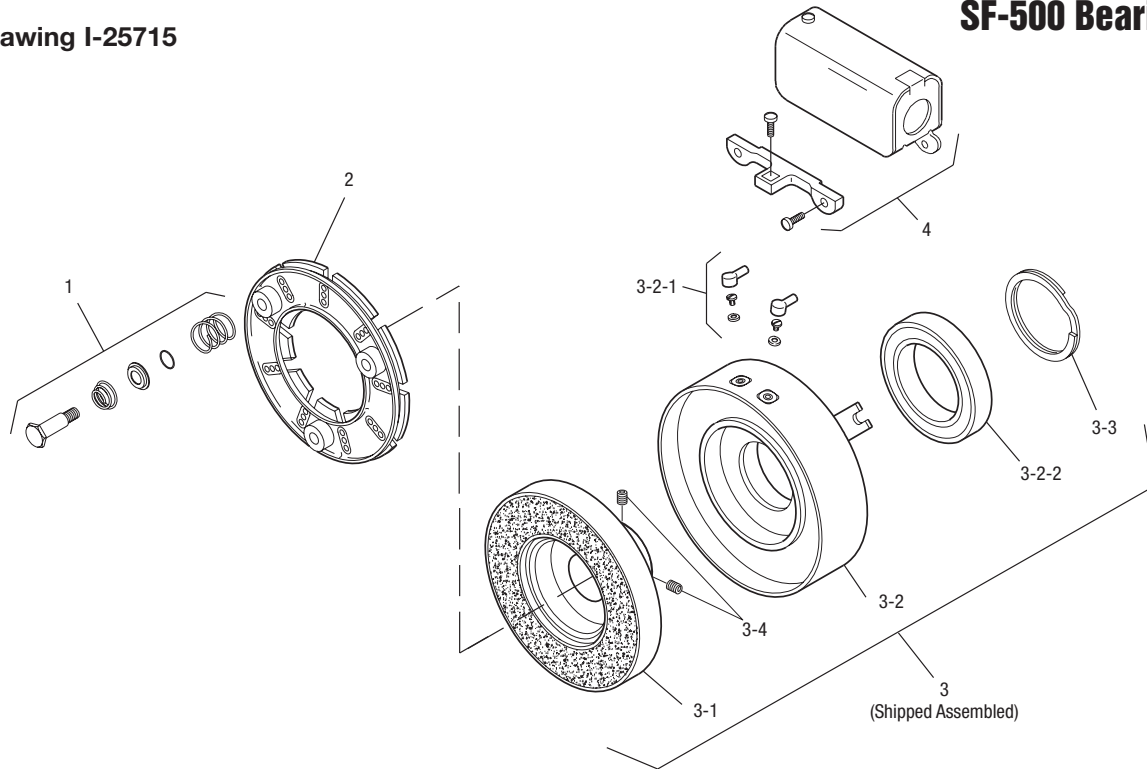
### Customer Shall Maintain:

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    |
|      | 90 Volt – 5/8" Bore      | 5200-452-115 |      |
|      | 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    |
|      | 5/8" Bore                | 5200-751-048 |      |
|      | 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 |      |
| 3-2-1 | Terminal Accessory       | 5311-101-001 | 1    |
| 3-2-2 | Ball Bearing             | 166-0110     | 1    |
| 3-3   | Retainer Ring            | 748-0002     | 1    |
| 3-4   | Setscrew                 | 797-0069     | 2    |
| 4     | Conduit Box              | 5200-101-010 | 1    |

### How to Order:

1. Specify Bore Size for Item 3.
2. Specify Voltage for Item 3.
3. 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.

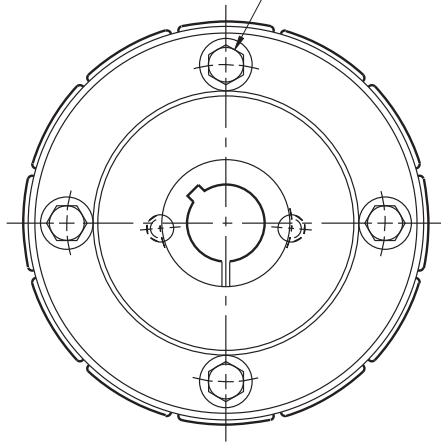
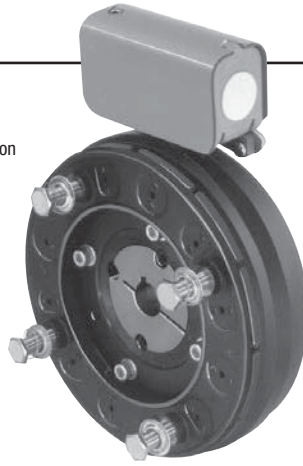
These units are CSA certified under file #LR11543.

Refer to Service Manual P-0202-WE

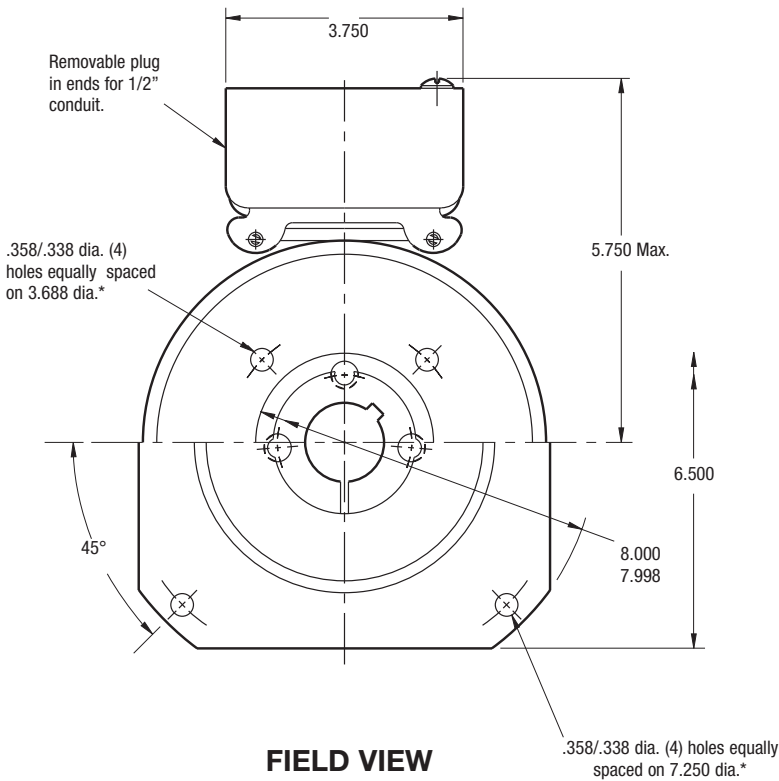
# SF Series Clutch

## SF-650 Flange Mounted

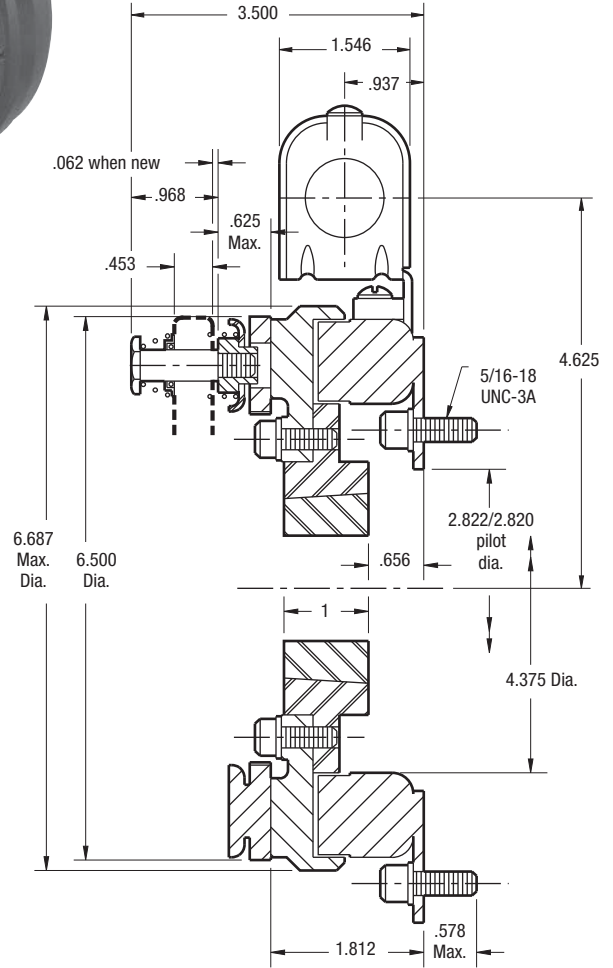
See page 230 for details on Drive Pin mountings.



**ARMATURE VIEW**



**FIELD VIEW**  
(Inside & Outside Mounted)



|                  |                |
|------------------|----------------|
| 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.

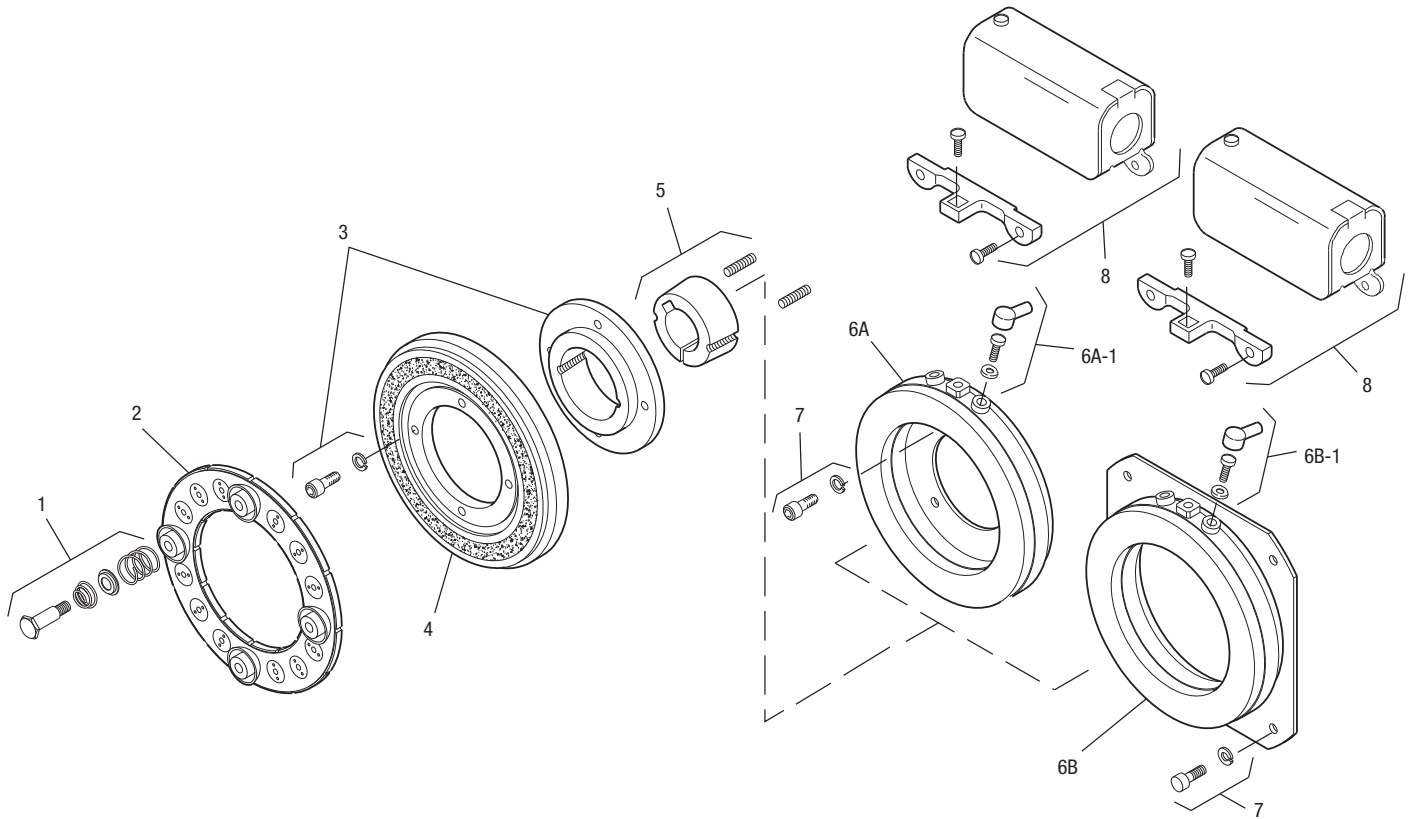
### Customer Shall Maintain:

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.

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



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.

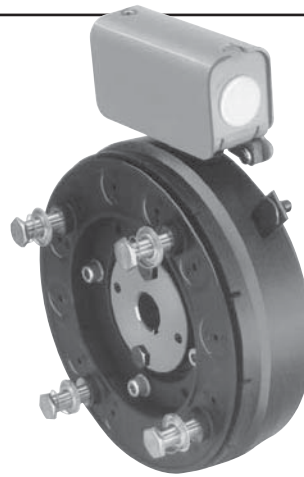
These units are CSA certified under file #LR11543

\*See page 252 for specific part numbers.

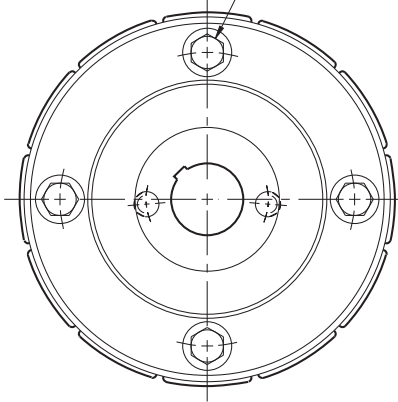
Refer to Service Manual P-0202-WE

# SF Series Clutch

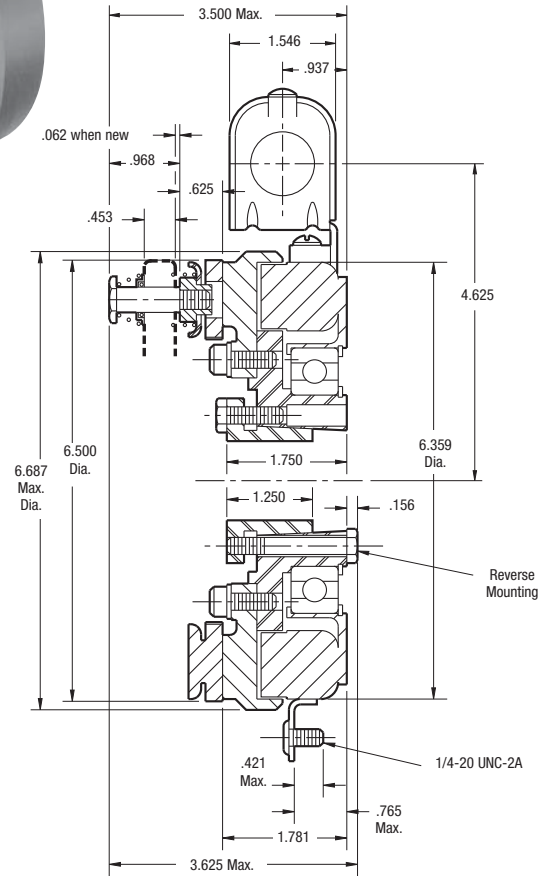
## SF-650 Bearing Mounted



See page 230 for details on Drive Pin mountings.



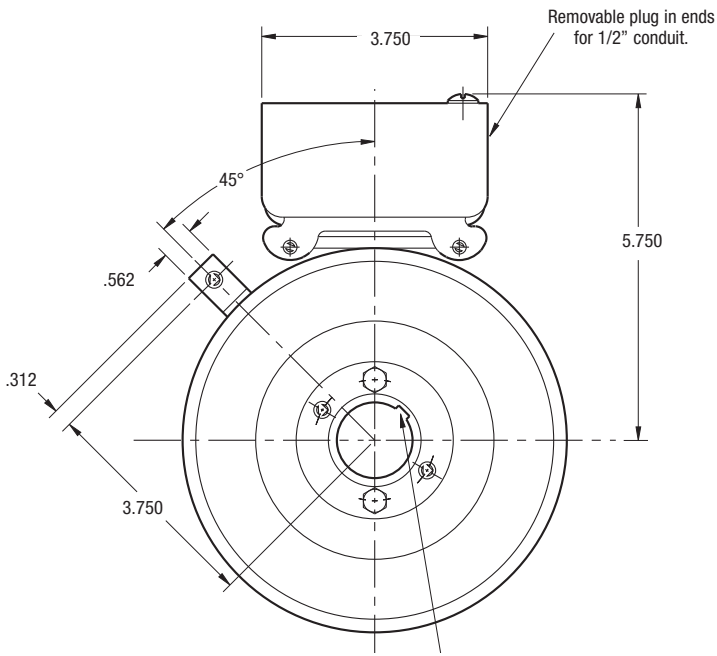
**ARMATURE VIEW**



|                  |                |
|------------------|----------------|
| 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.

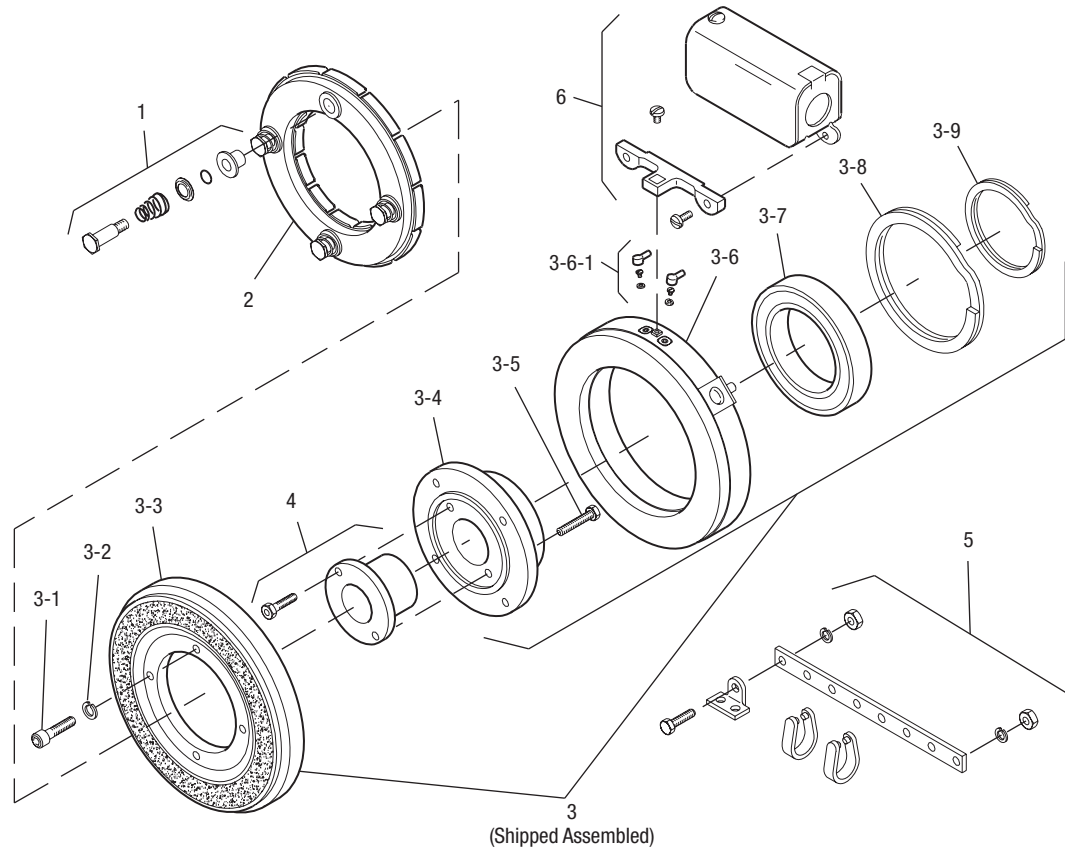


See page 252 for details on Bushings.

**FIELD VIEW**



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

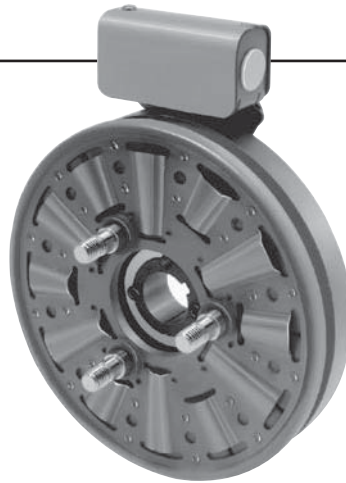
\*See page 252 for specific part numbers.

Refer to Service Manual P-0202-WE

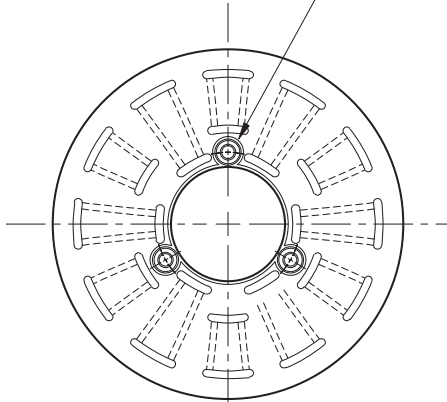


# Series SF Clutch

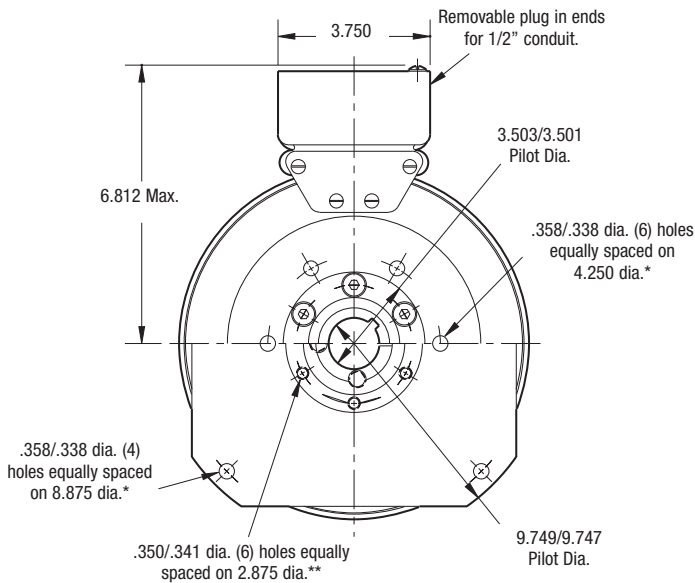
## SF-825 Flange Mounted Normal Duty



See page 230 for Drive Pin mountings.



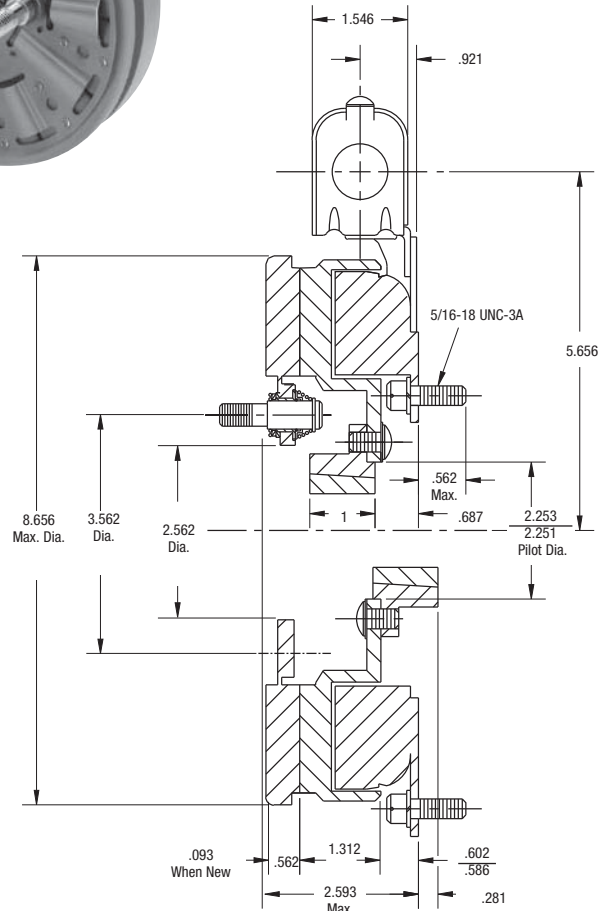
**ARMATURE VIEW**



**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.



\* 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 |

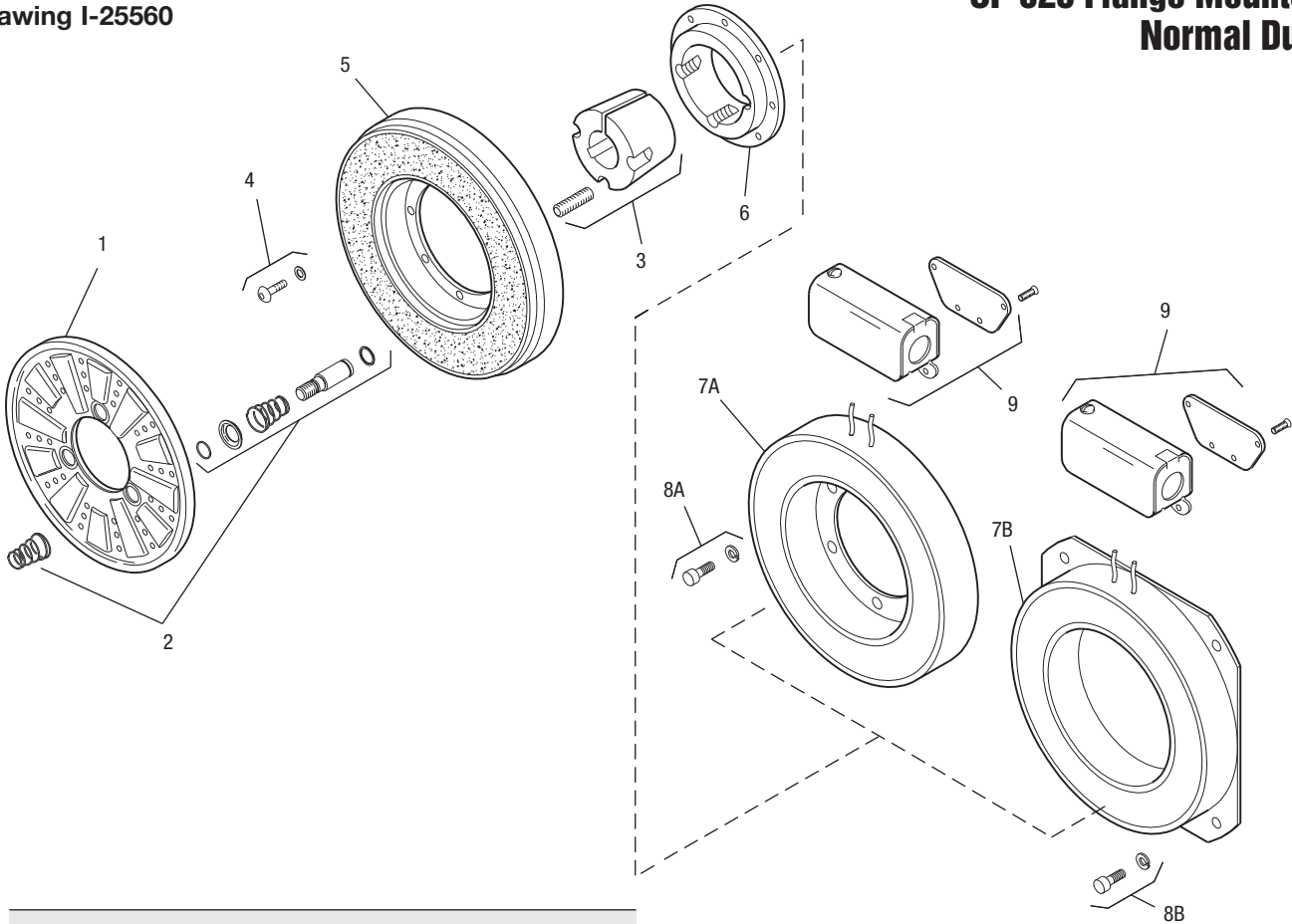
All dimensions are nominal unless otherwise noted.

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



## SF-825 Flange Mounted Normal Duty

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.

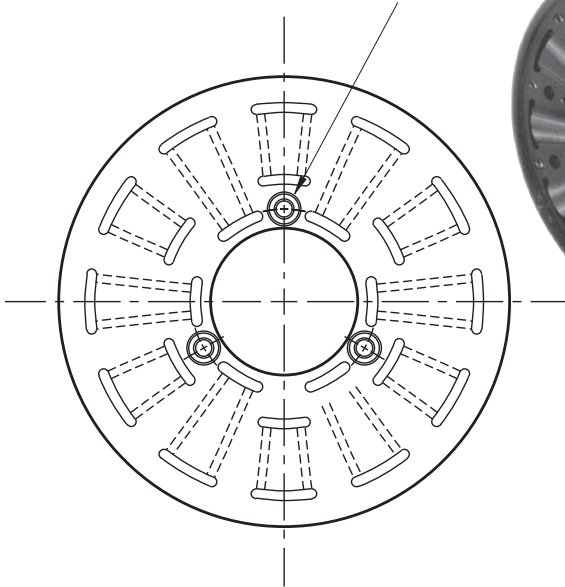
Refer to Service Manual P-0222-WE

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

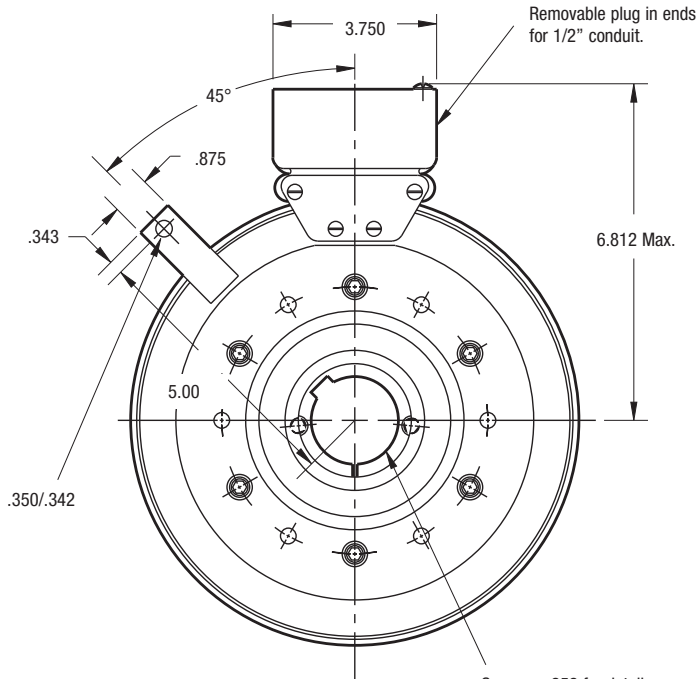
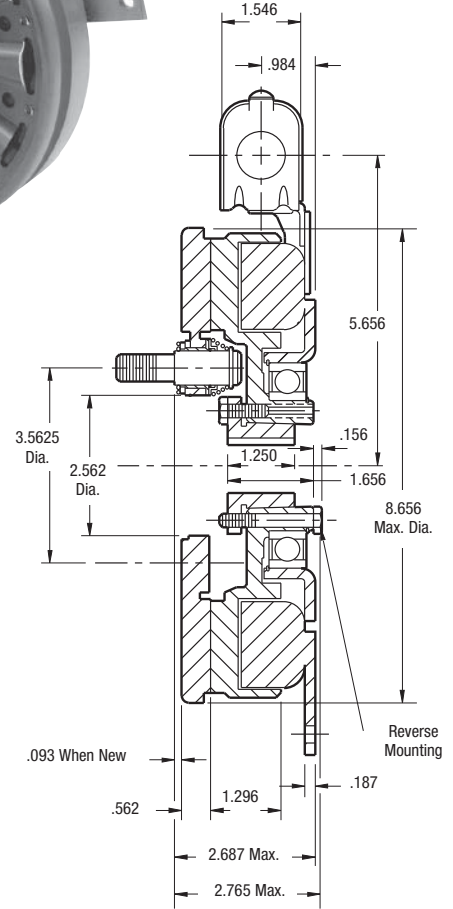
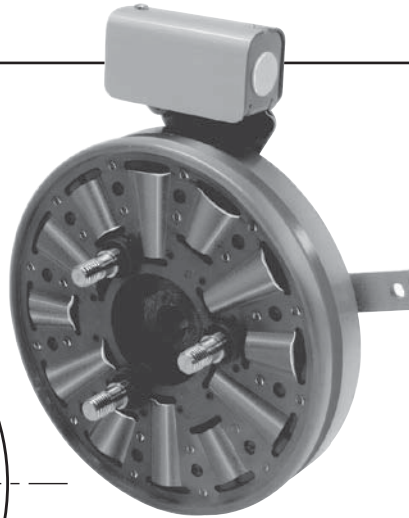
# Series SF Clutch

## SF-825 Bearing Mounted Normal Duty

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 |

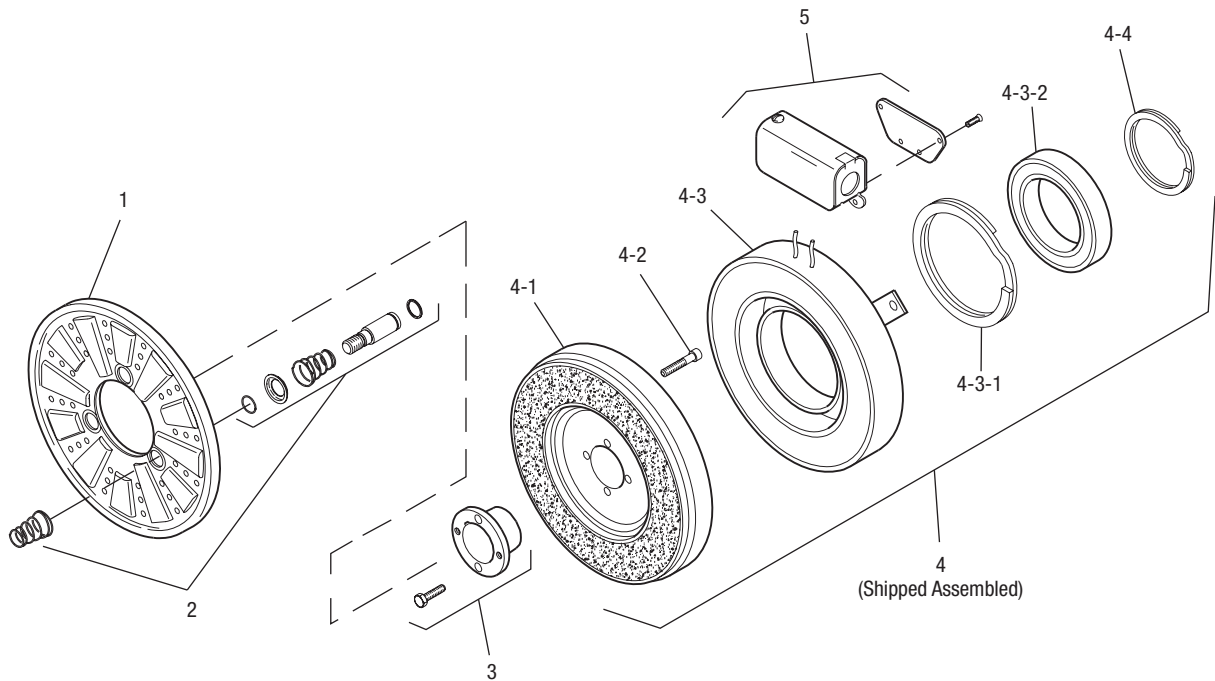
All dimensions are nominal unless otherwise noted.

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



Drawing I-25575

## SF-825 Bearing Mounted Normal Duty



| 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         |      |
|       | †Optional LK Facing        | 5201-751-014         |      |
| 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 | Retainer Ring              | 748-0111             | 1    |
| 4-3-2 | Ball Bearing               | 166-0142             | 1    |
| 4-4   | 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.
3. 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.

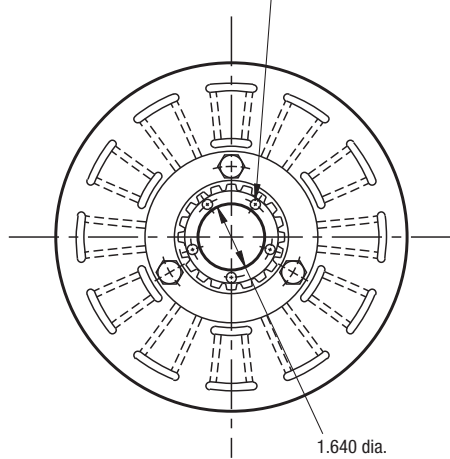
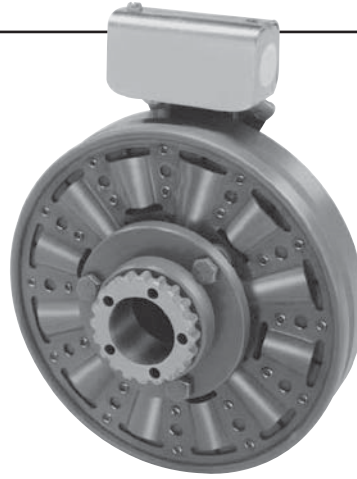
Refer to Service Manual P-0215-WE

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

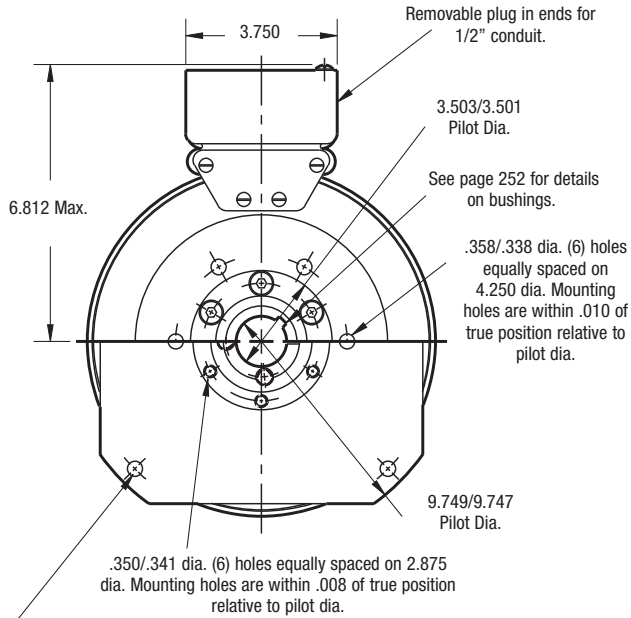
# Series SF Clutch

## SF-825 Flange Mounted Heavy Duty

.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**



**FIELD VIEW**

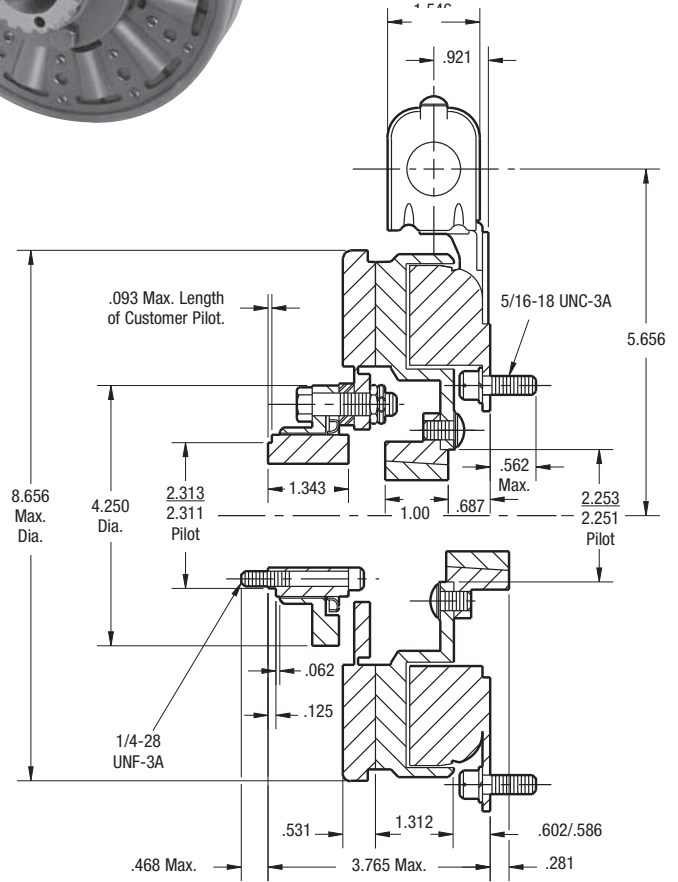
(Inside & Outside Mounted)

### 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 |

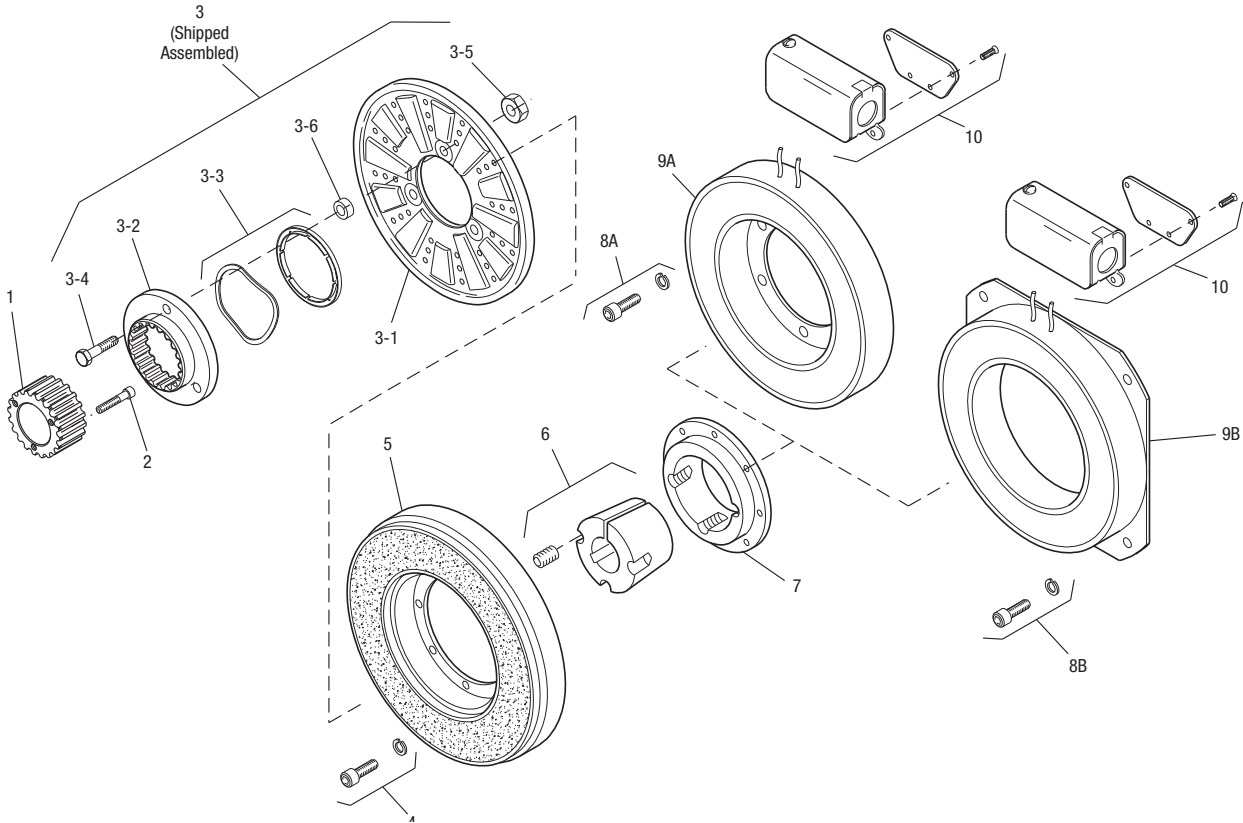
All dimensions are nominal unless otherwise noted.

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



## SF-825 Flange Mounted Heavy Duty

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.

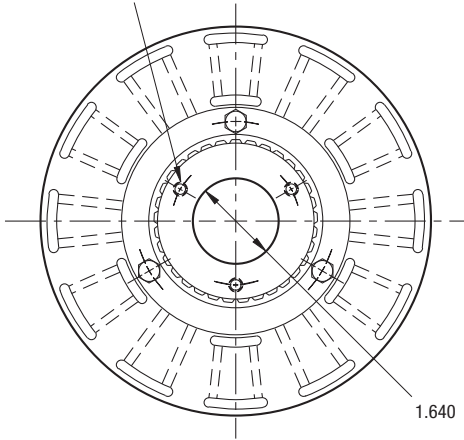
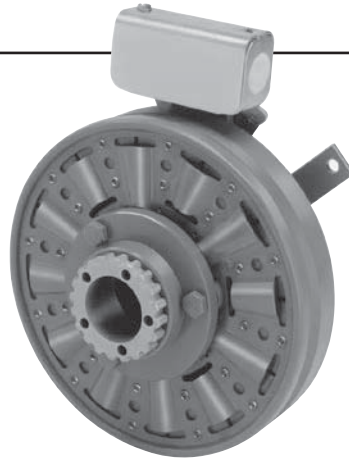
Refer to Service Manual P-0215-WE

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

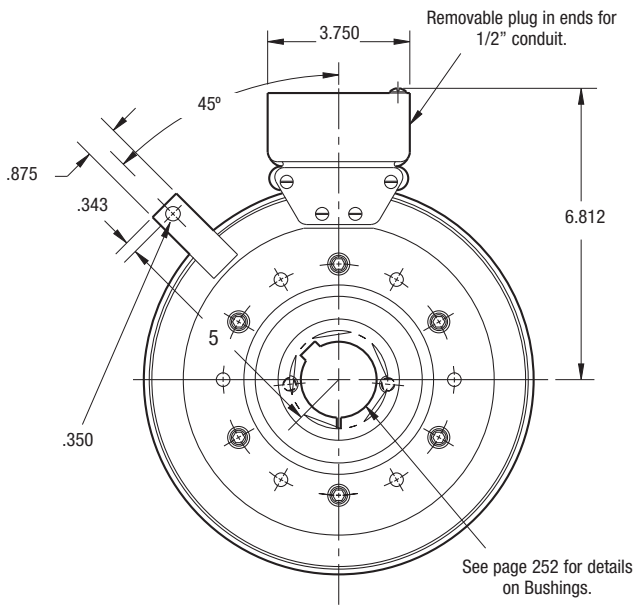
# Series SF Clutch

## SF-825 Bearing Mounted Heavy Duty

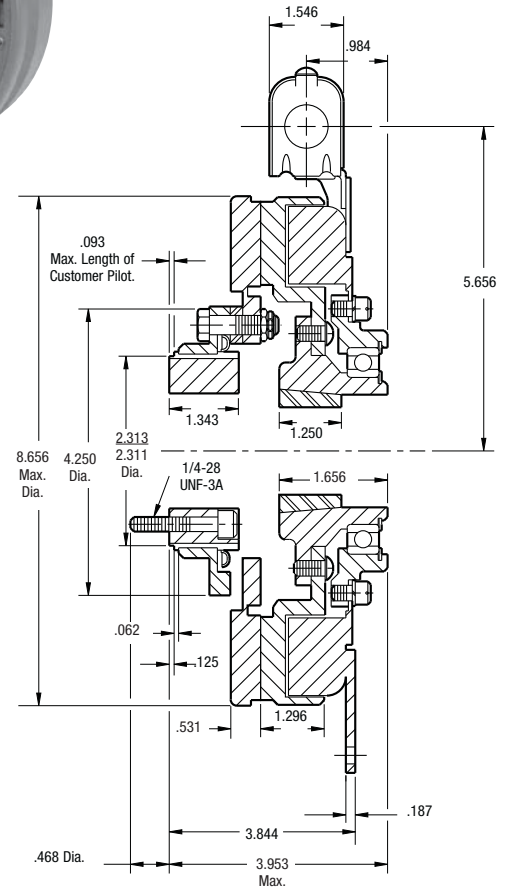
.271/.263 dia. 5 holes (hub) equally spaced on 2.015 dia. and within .003 of true position relation to 2.313/2.311 pilot dia.



**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.

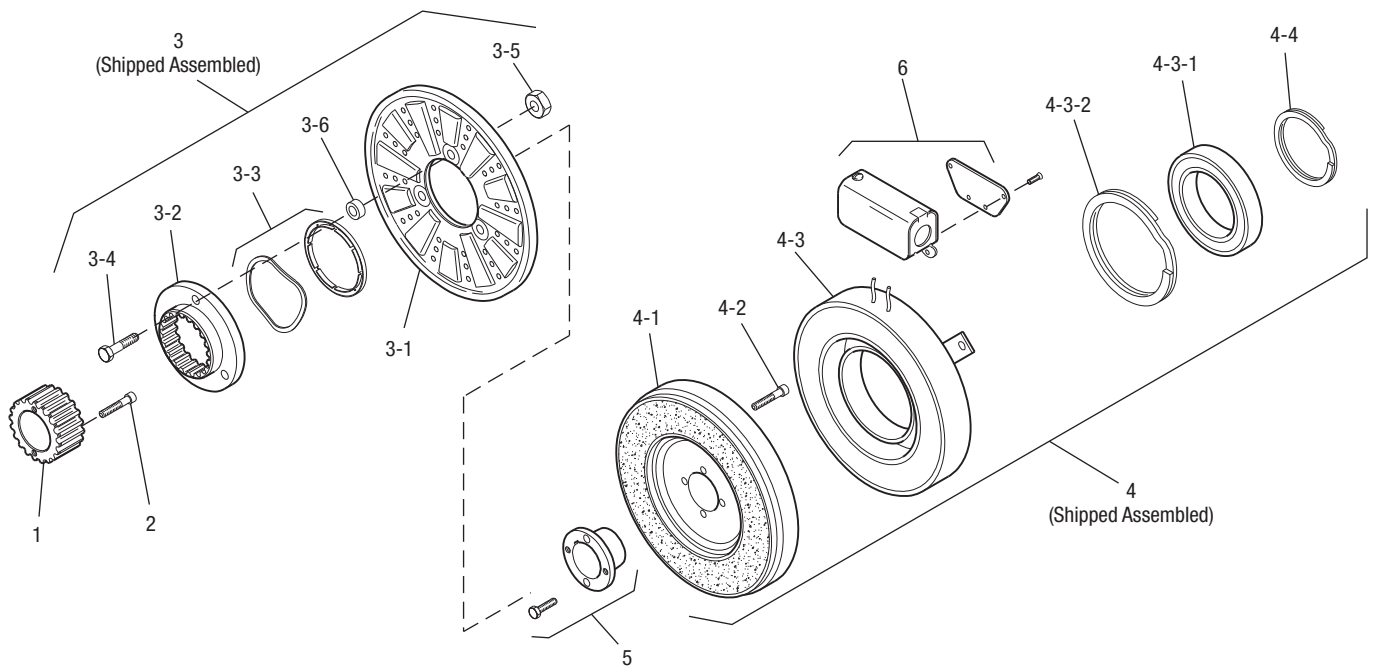
### Customer Shall Maintain:

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



## SF-825 Bearing Mounted Heavy Duty

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                       |              |      |
|      | Standard Friction Material  | 5201-751-008 | 1    |
|      | †Optional LK Facing         | 5201-751-014 |      |
| 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    |
| 4-3-2 | Retainer Ring | 748-0111                | 1    |
| 4-4   | Retainer Ring | 748-0016                | 1    |
| 5     | Bushing*      | 180-0002 to<br>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.
3. 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.

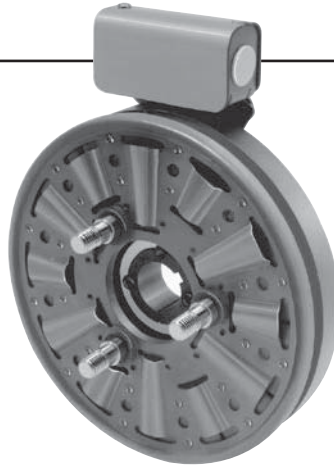
Refer to Service Manual P-0215-WE

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

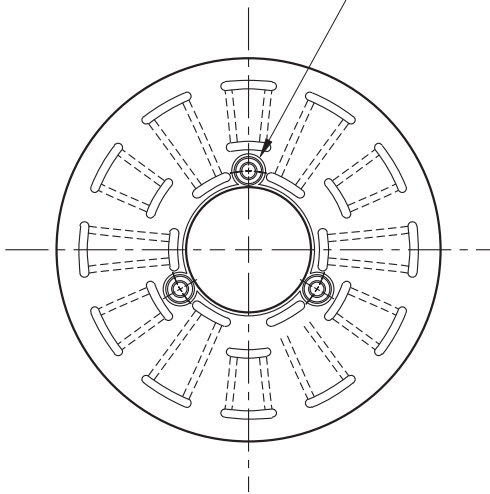


# Series SF Clutch

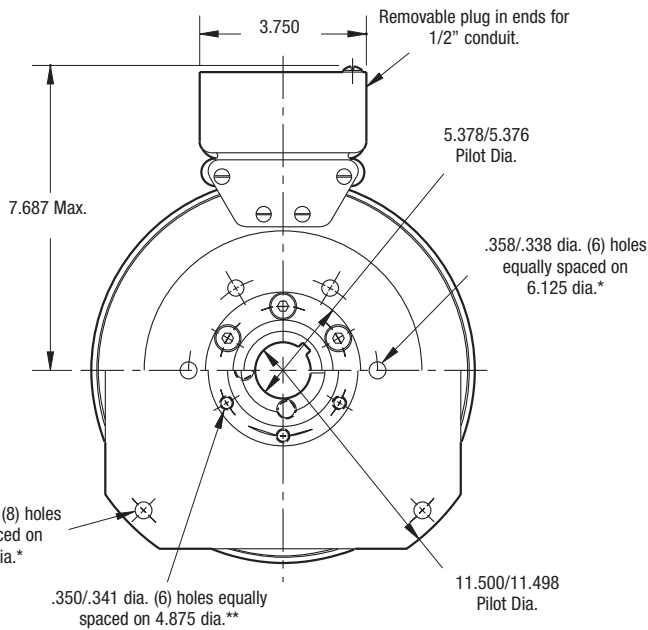
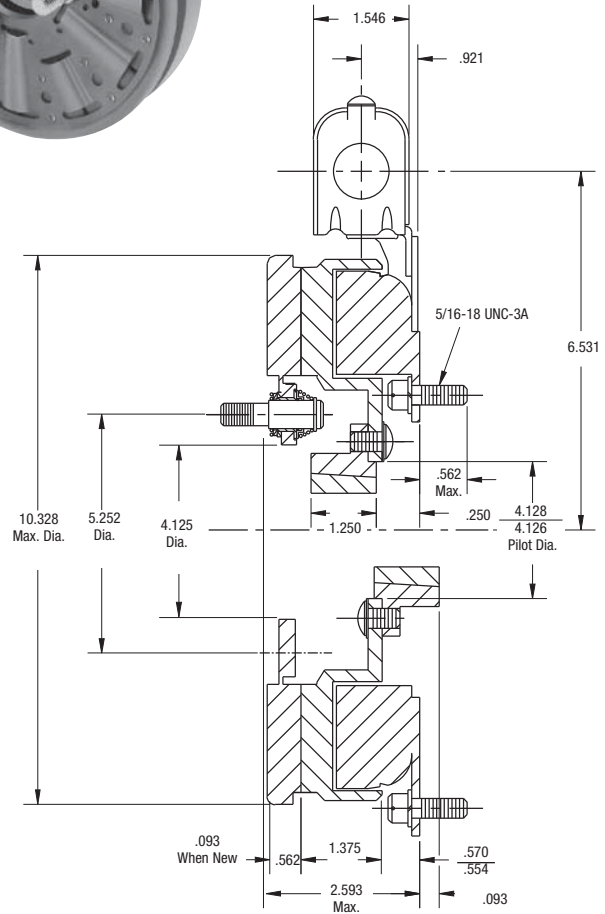
## SF-1000 Flange Mounted Normal Duty



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.

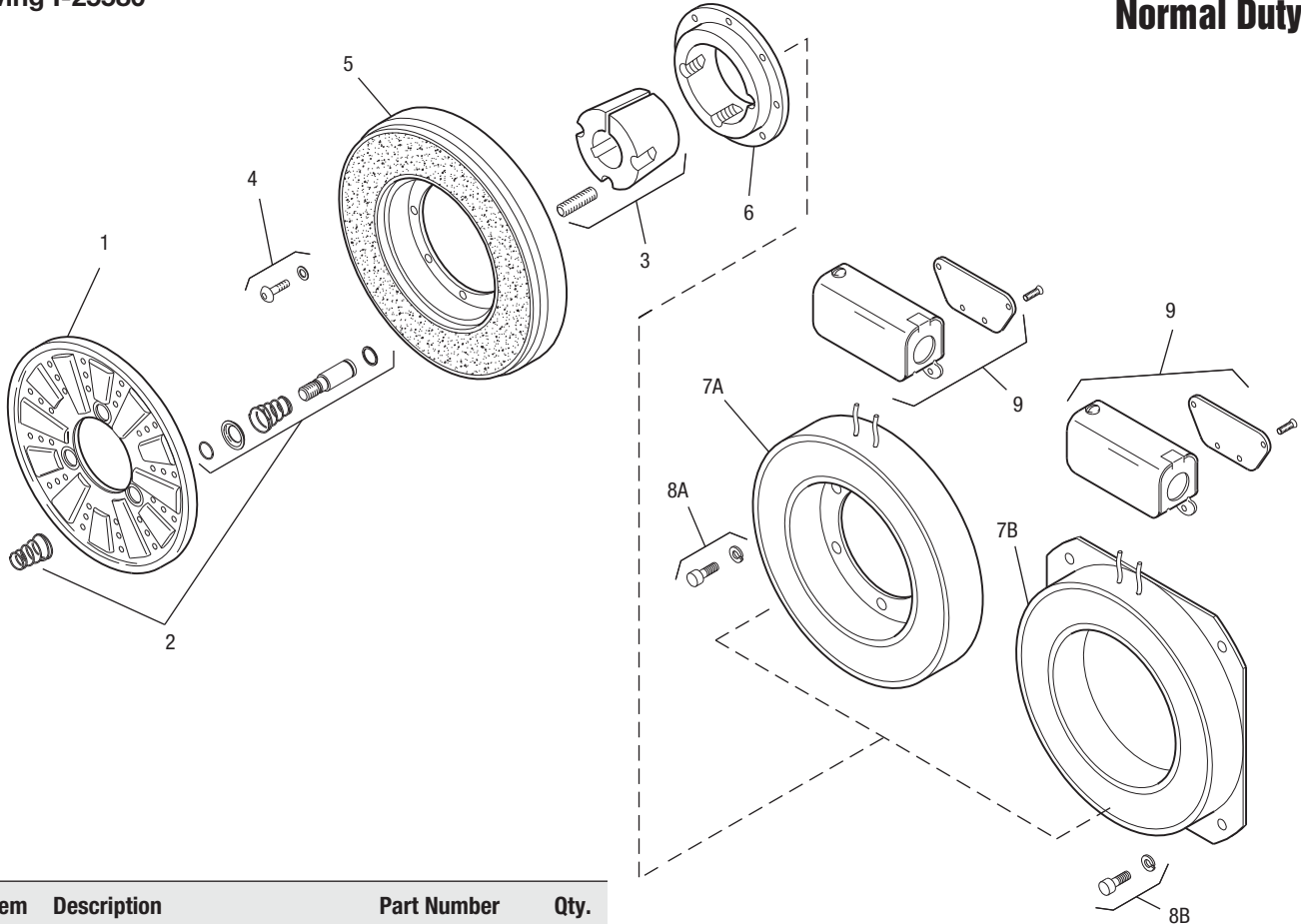
**Customer Shall Maintain:**

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.



## SF-1000 Flange Mounted Normal Duty

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.

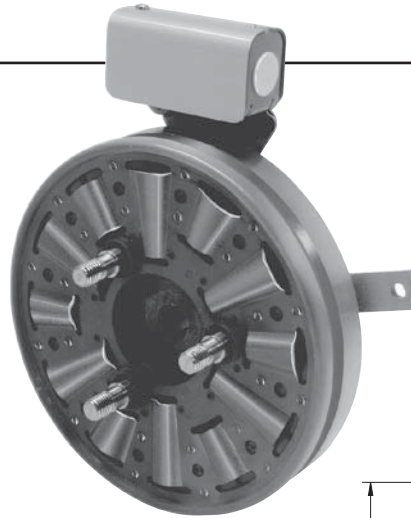
\*See page 252 for specific part numbers.

Refer to Service Manual P-0222-WE

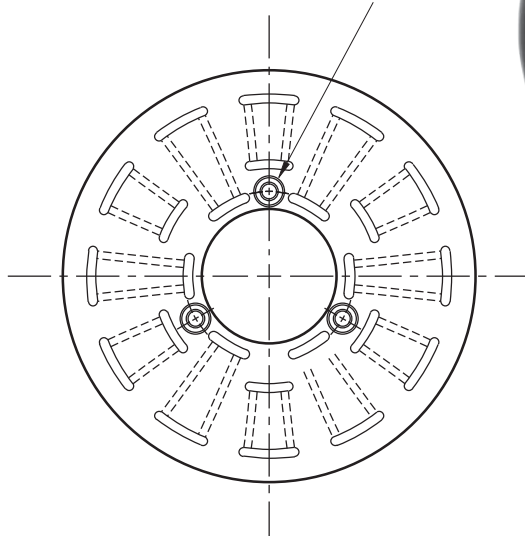
†Optional LK facing available. For more information, see page 232.

# Series SF Clutch

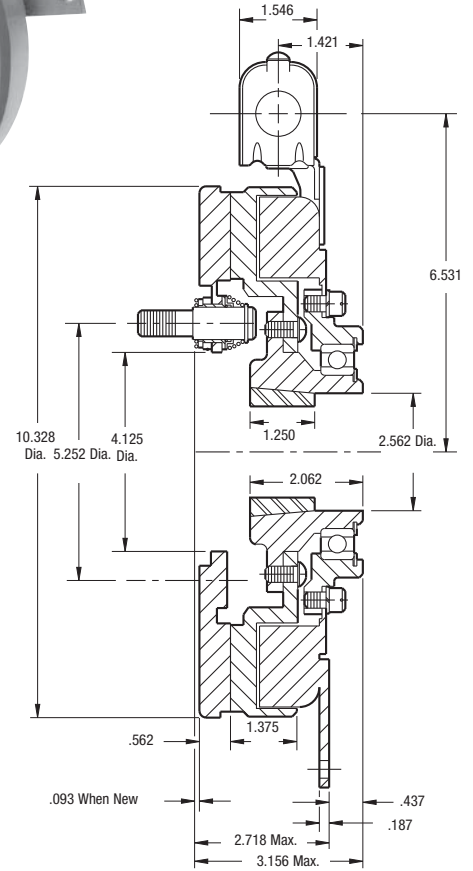
## SF-1000 Bearing Mounted Normal Duty



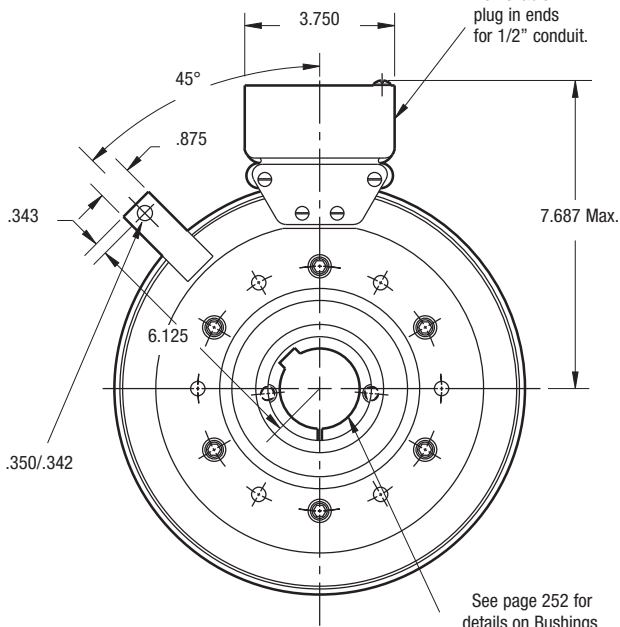
See page 252 for details on Bushings.



**ARMATURE VIEW**



Removable plug in ends for 1/2" conduit.



**FIELD VIEW**

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

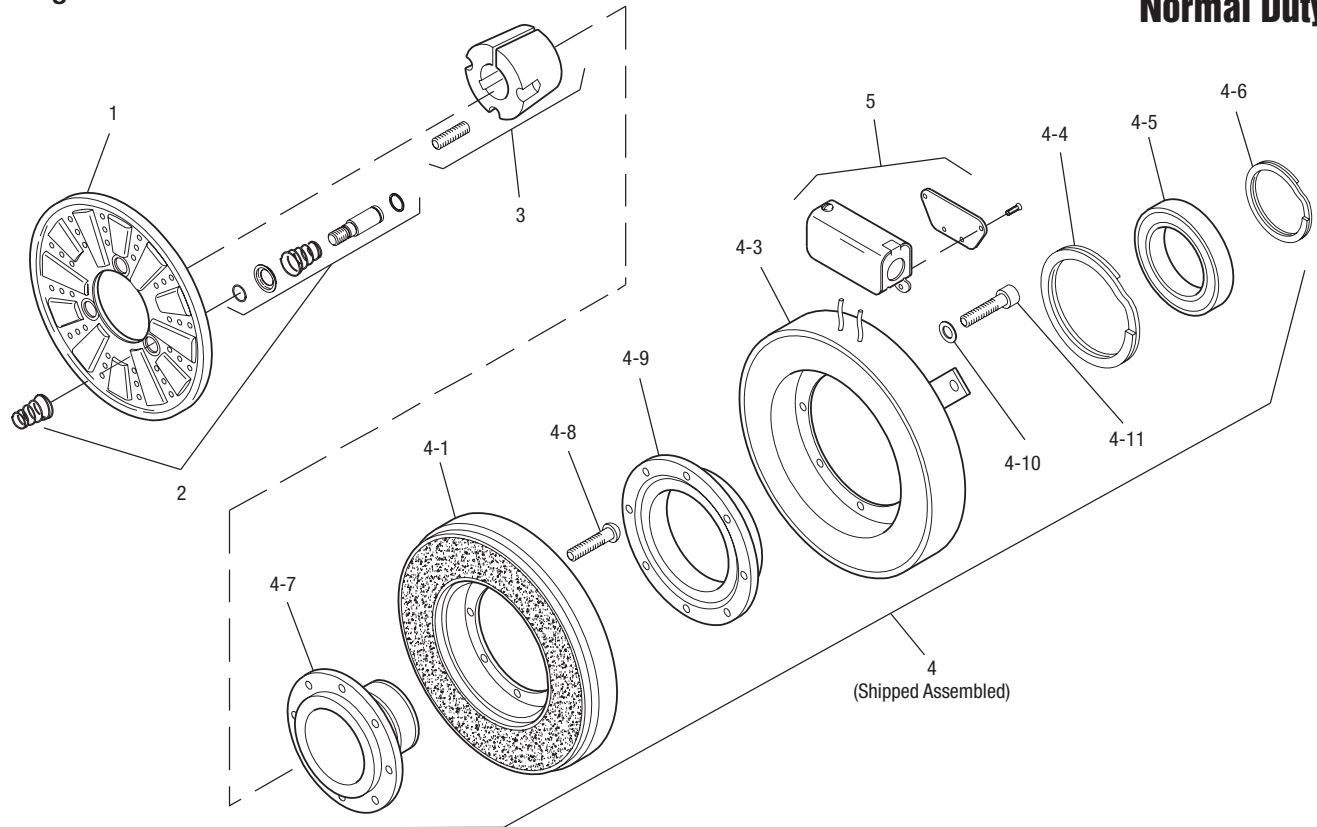
All dimensions are nominal unless otherwise noted.

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



## SF-1000 Bearing Mounted Normal Duty

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.

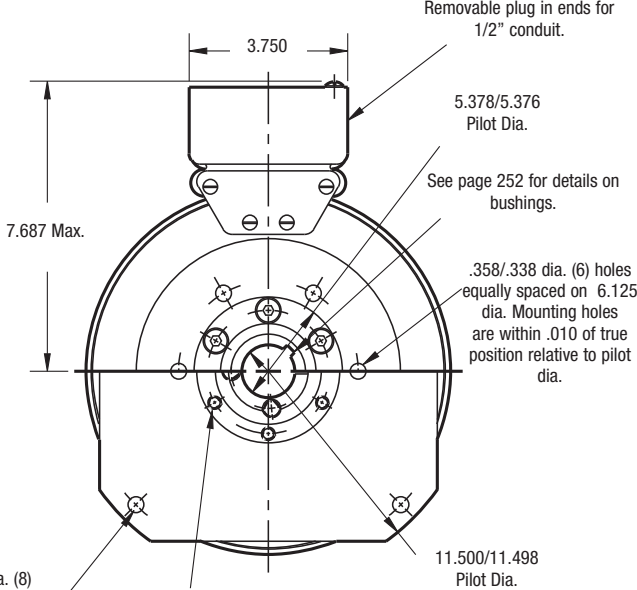
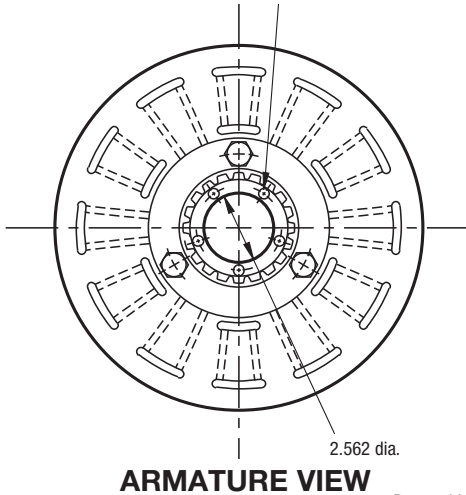
Refer to Service Manual P-0215-WE

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

# Series SF Clutch

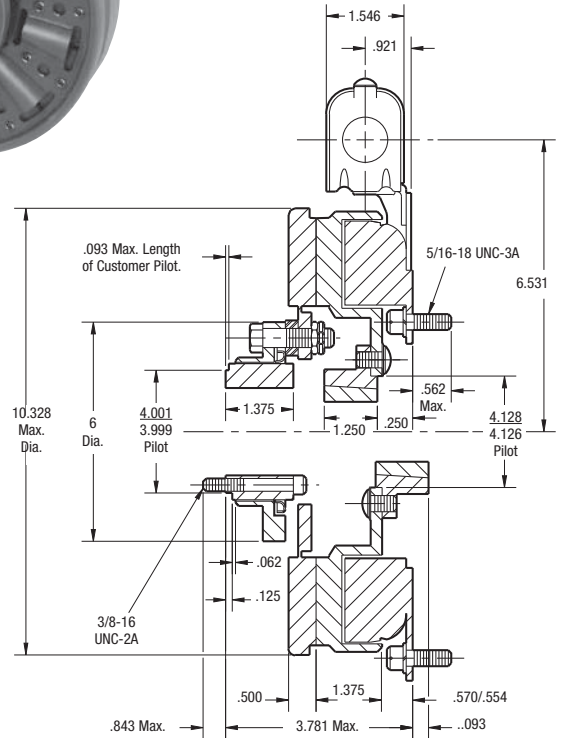
## SF-1000 Flange Mounted Heavy Duty

.397/.388 dia. 3 holes (hub) equally spaced on 3.187 dia. Mounting holes are within .003 of true position relative to pilot dia.



**FIELD VIEW**  
(Inside & Outside Mounted)

.358/.338 dia. (8) holes equally spaced on 10.625 dia. are within .010 of true position relative to pilot dia.



|                  |                |
|------------------|----------------|
| 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.

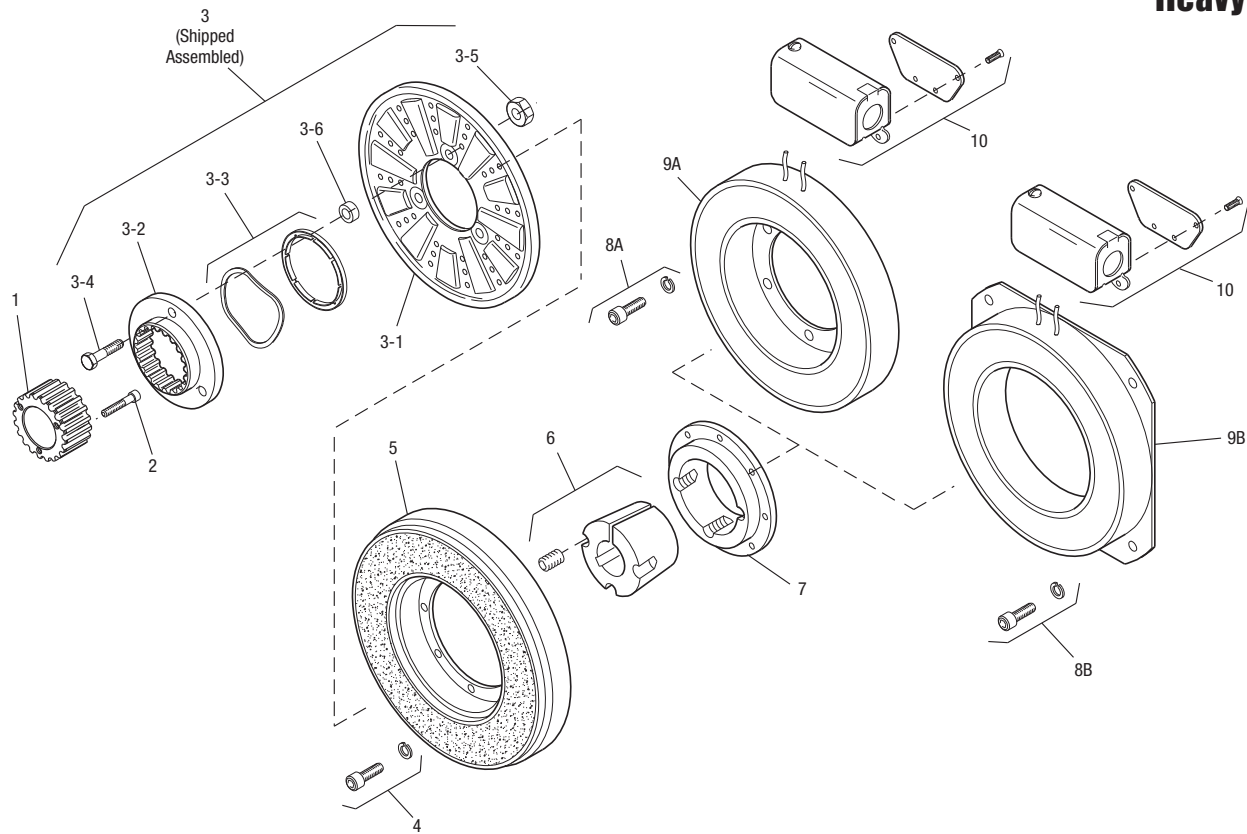
All dimensions are nominal unless otherwise noted.

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



Drawing I-25581

## SF-1000 Flange Mounted Heavy Duty



| 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.

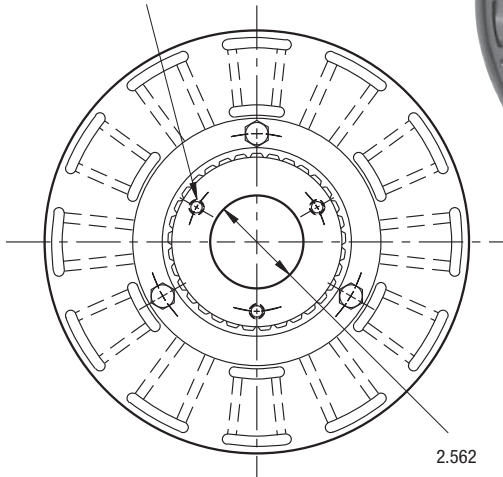
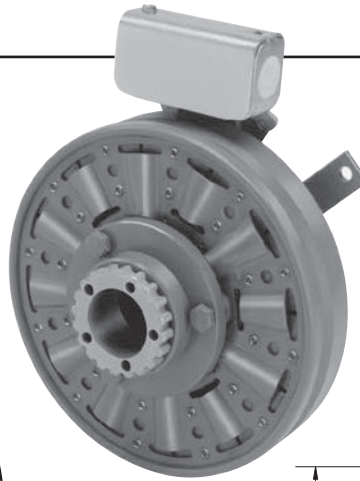
Refer to Service Manual P-0215-WE

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

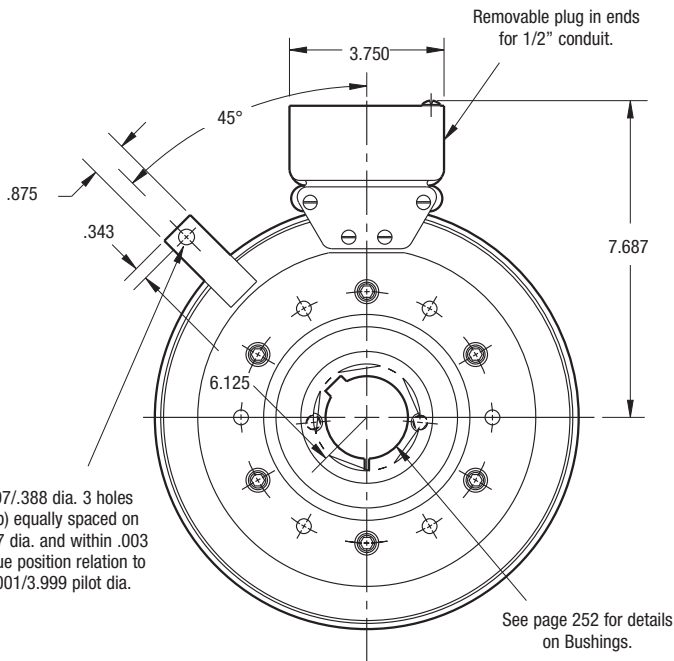
# Series SF Clutch

## SF-1000 Bearing Mounted Heavy Duty

.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.

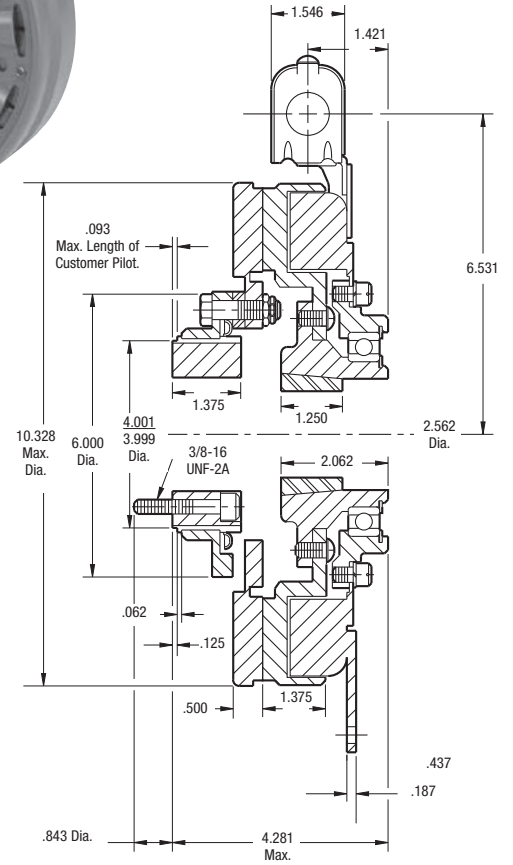


**ARMATURE VIEW**



**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.



|                  |                |
|------------------|----------------|
| 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.

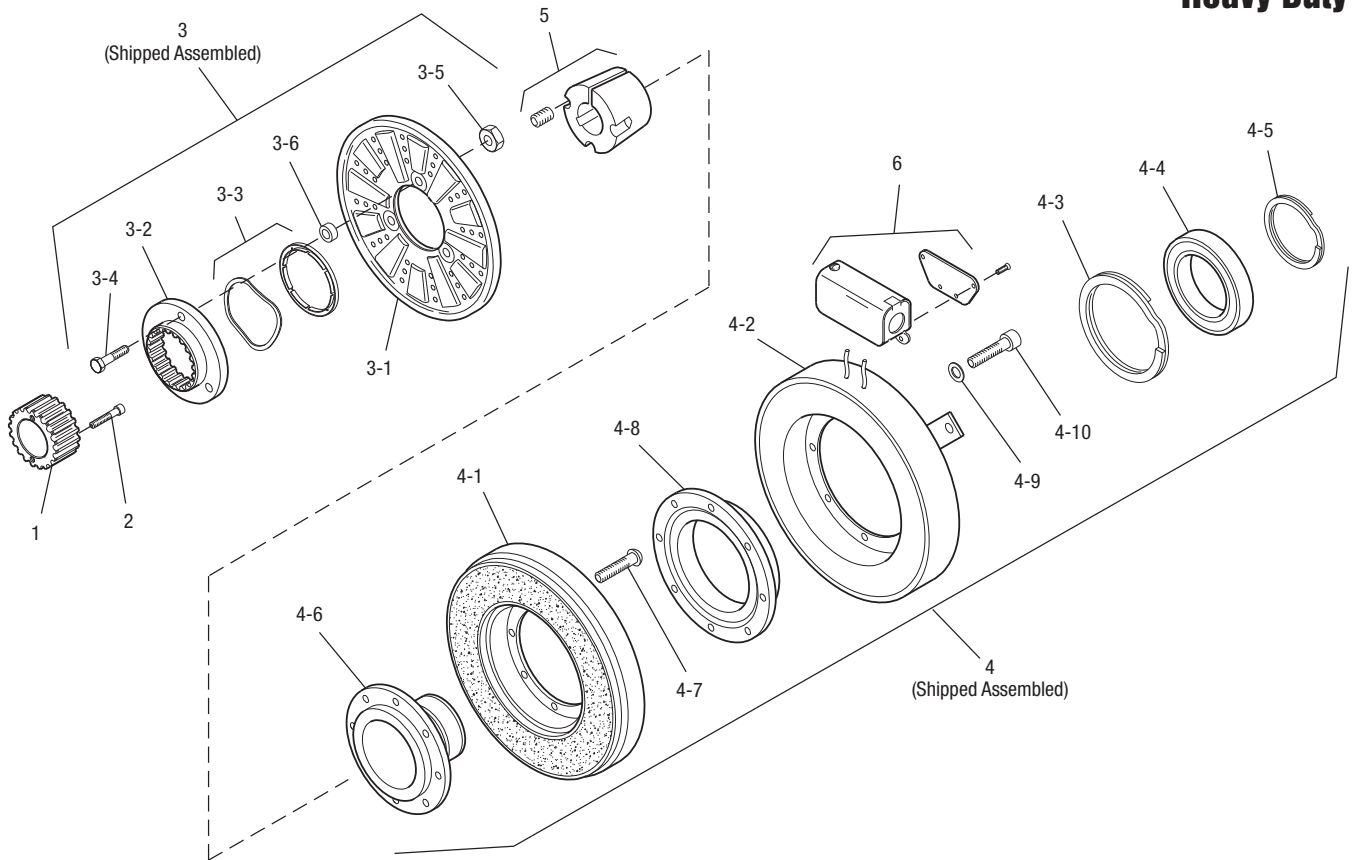
### Customer Shall Maintain:

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



## SF-1000 Bearing Mounted Heavy Duty

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.

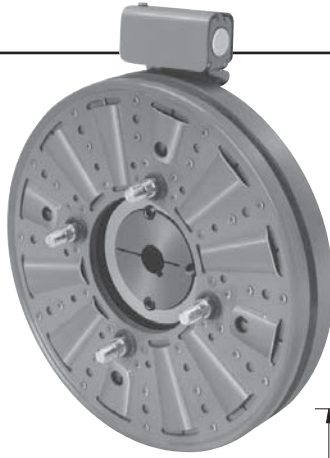
Refer to Service Manual P-0215-WE

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

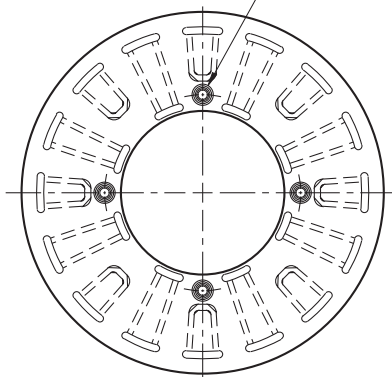


# SF Series Clutch

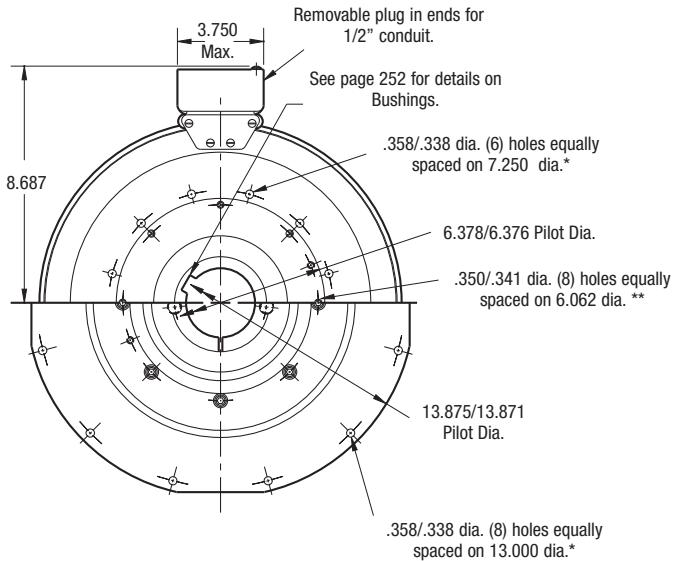
## SF-1225 Flange Mounted Normal Duty



See page 230 for details on Drive Pin mountings.



**ARMATURE VIEW**



**FIELD VIEW**

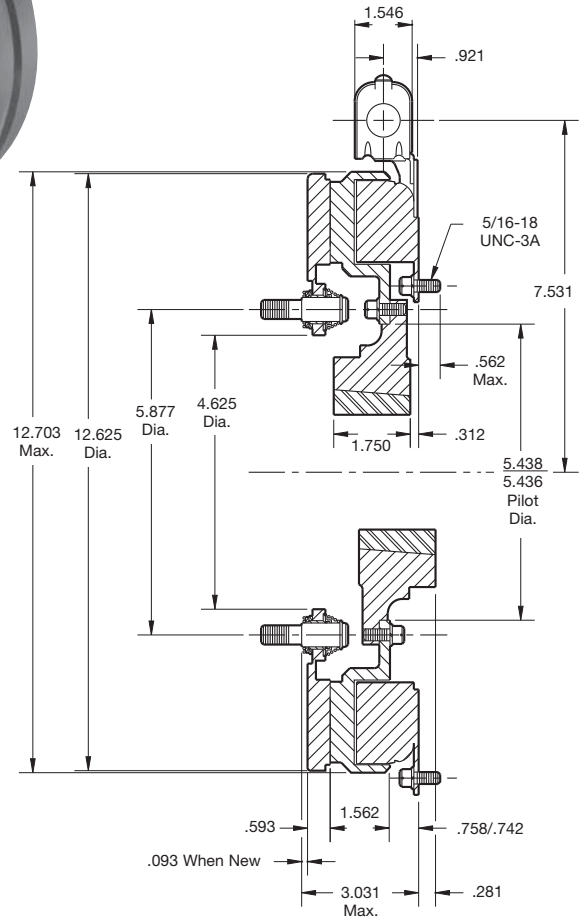
(Inside & Outside Mounted)

### 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.

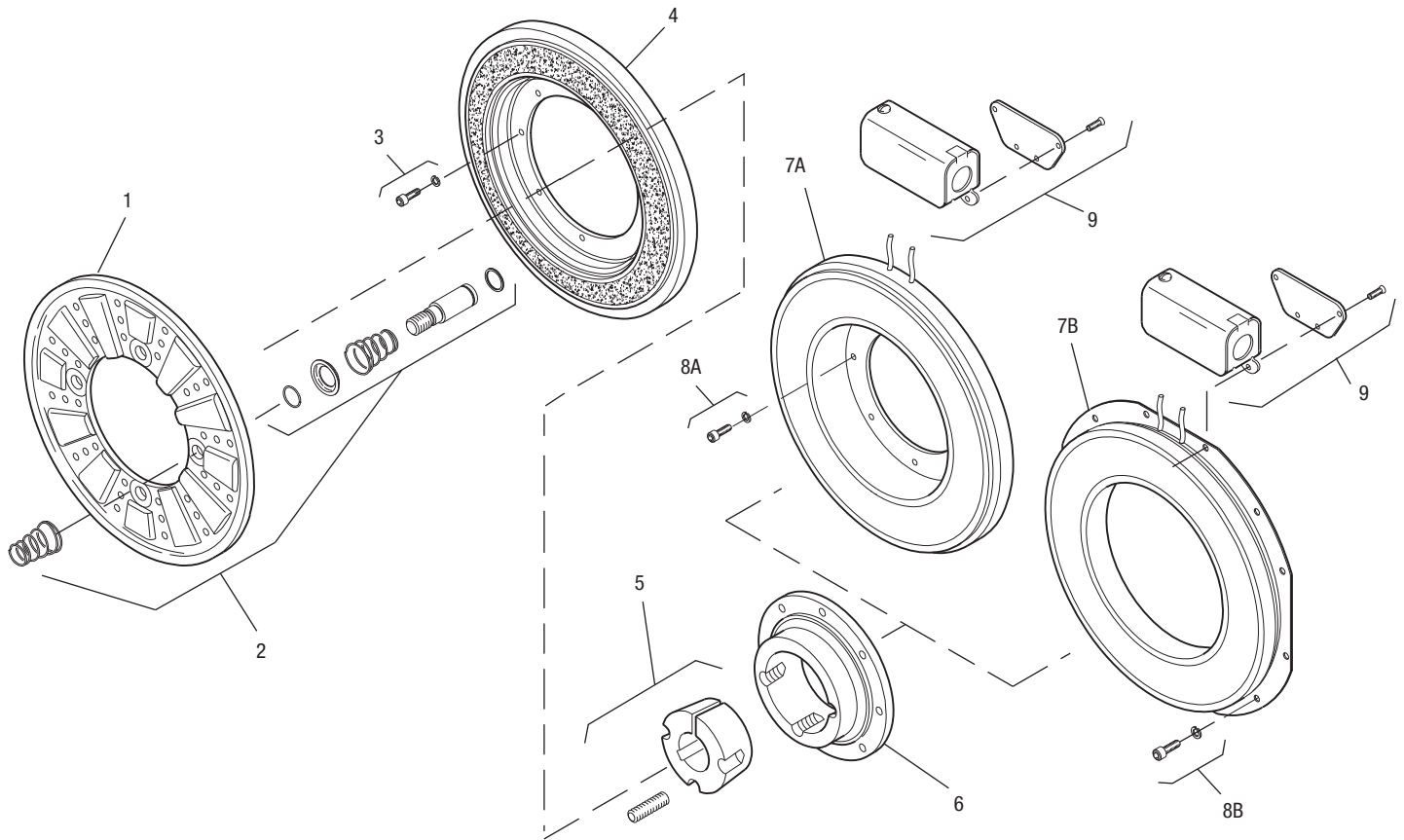
|                  |                |
|------------------|----------------|
| Shaft Size       | .500 – 2.500   |
| Static Torque    | 465 lb.ft.     |
| Maximum Speed    | 3,000 rpm      |
| Standard Voltage | D.C. 6, 24, 90 |

All dimensions are nominal unless otherwise noted.

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

Drawing I-25600

## SF-1225 Flange Mounted Normal Duty



| 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.

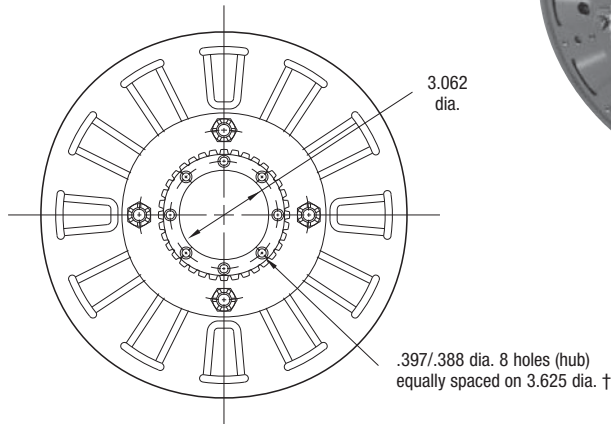
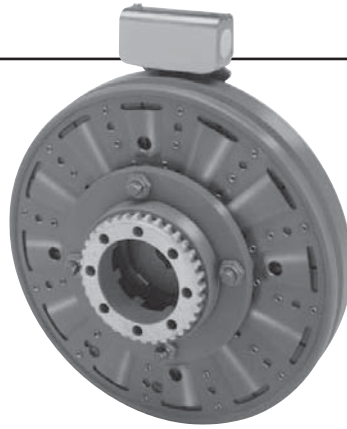
\*See page 252 for specific part numbers.

Refer to Service Manual P-0215-WE

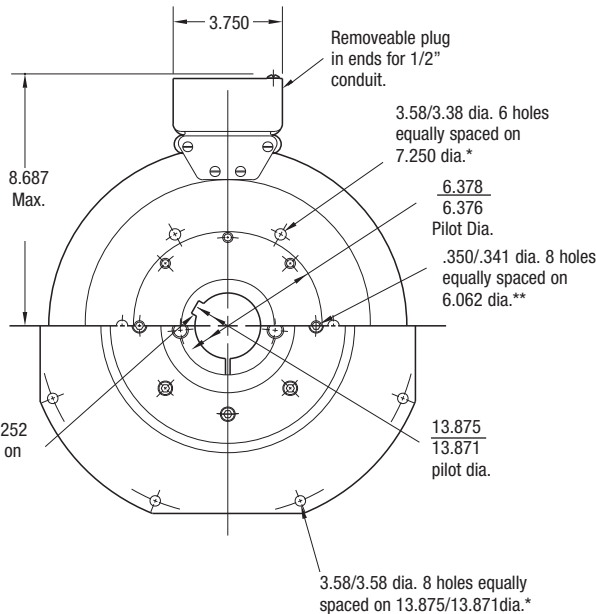
†Optional LK facing available. For more information, see page 232.

# SF Series Clutch

## SF-1225 Flange Mounted Heavy Duty



**ARMATURE VIEW**



**FIELD VIEW**

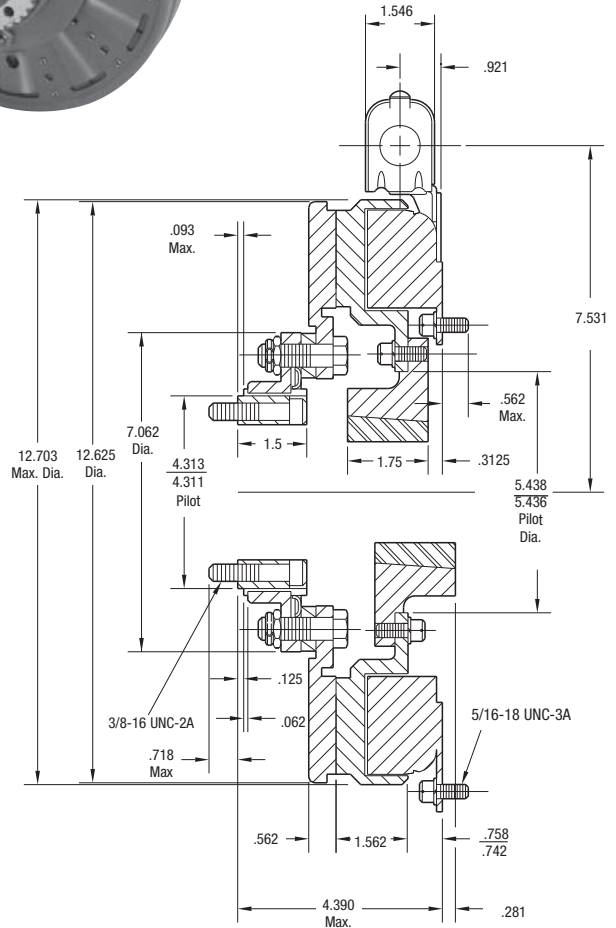
(Inside & Outside Mounted)

### 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.

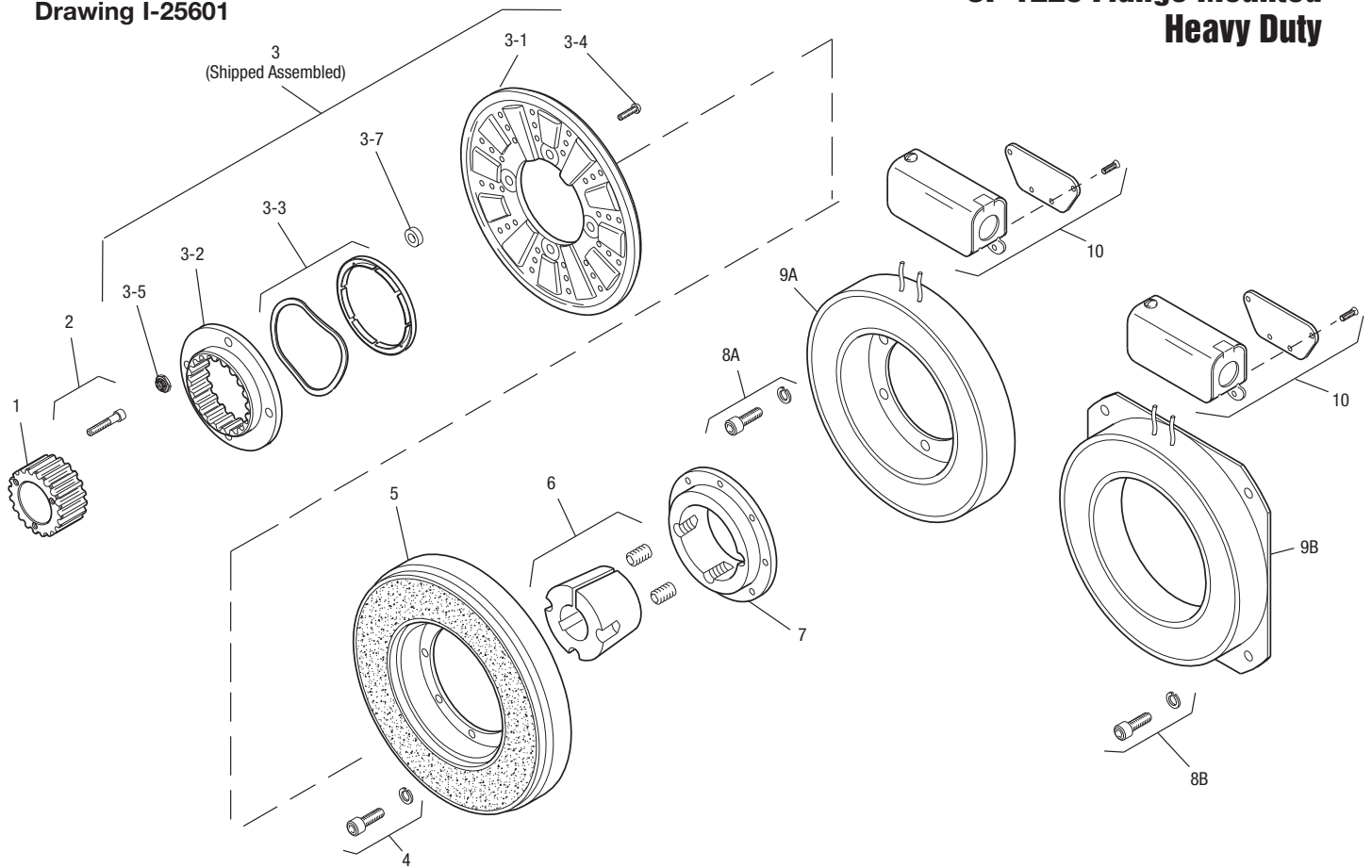
Information on inertia and weights begins on page 239. Coil data is on pages 250 and 251.



# SF Series Clutch

## SF-1225 Flange Mounted Heavy Duty

Drawing I-25601



| Item | Description                  | Part Number          | Qty. |
|------|------------------------------|----------------------|------|
| 1    | Splined Hub                  | 540-0148             | 1    |
| 2    | Mounting Accessory           | 5202-101-001         | 3    |
| 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.

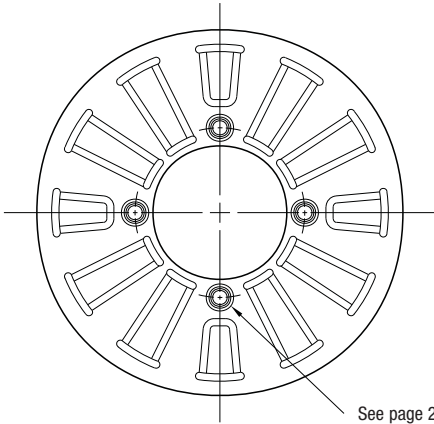
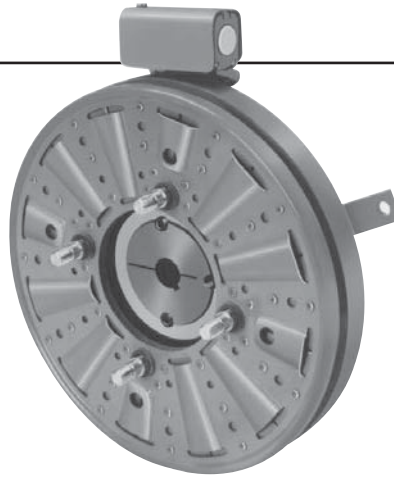
\*See page 252 for specific part numbers.

Refer to Service Manual P-0215-WE

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

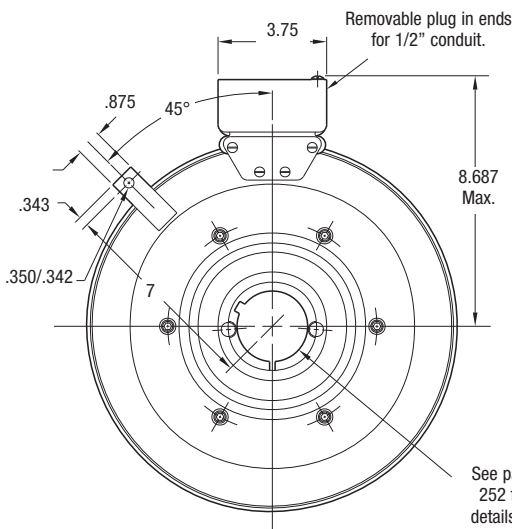
# SF Series Clutch

## SF-1225 Bearing Mounted Normal Duty



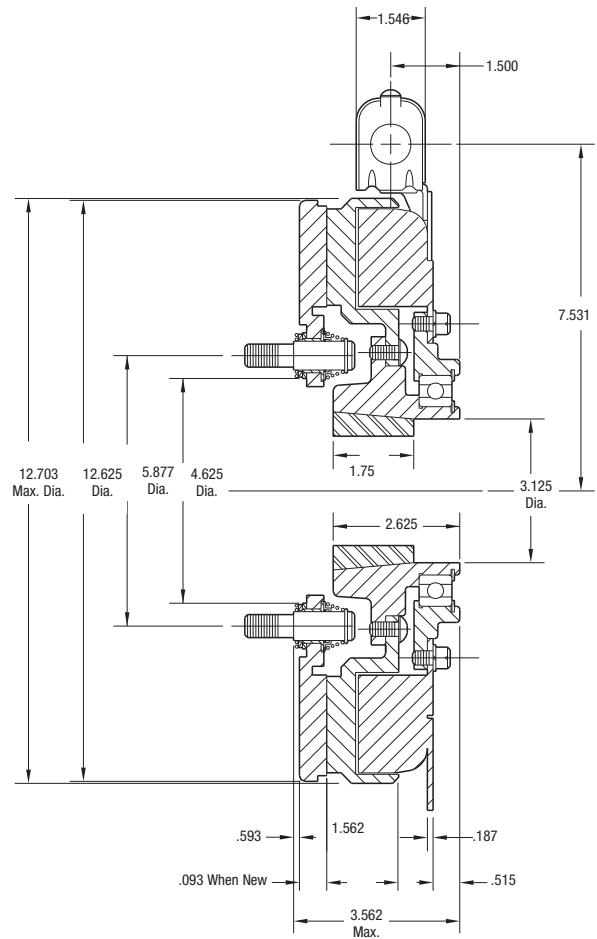
See page 230 for details on Drive Pin mountings.

### 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 |

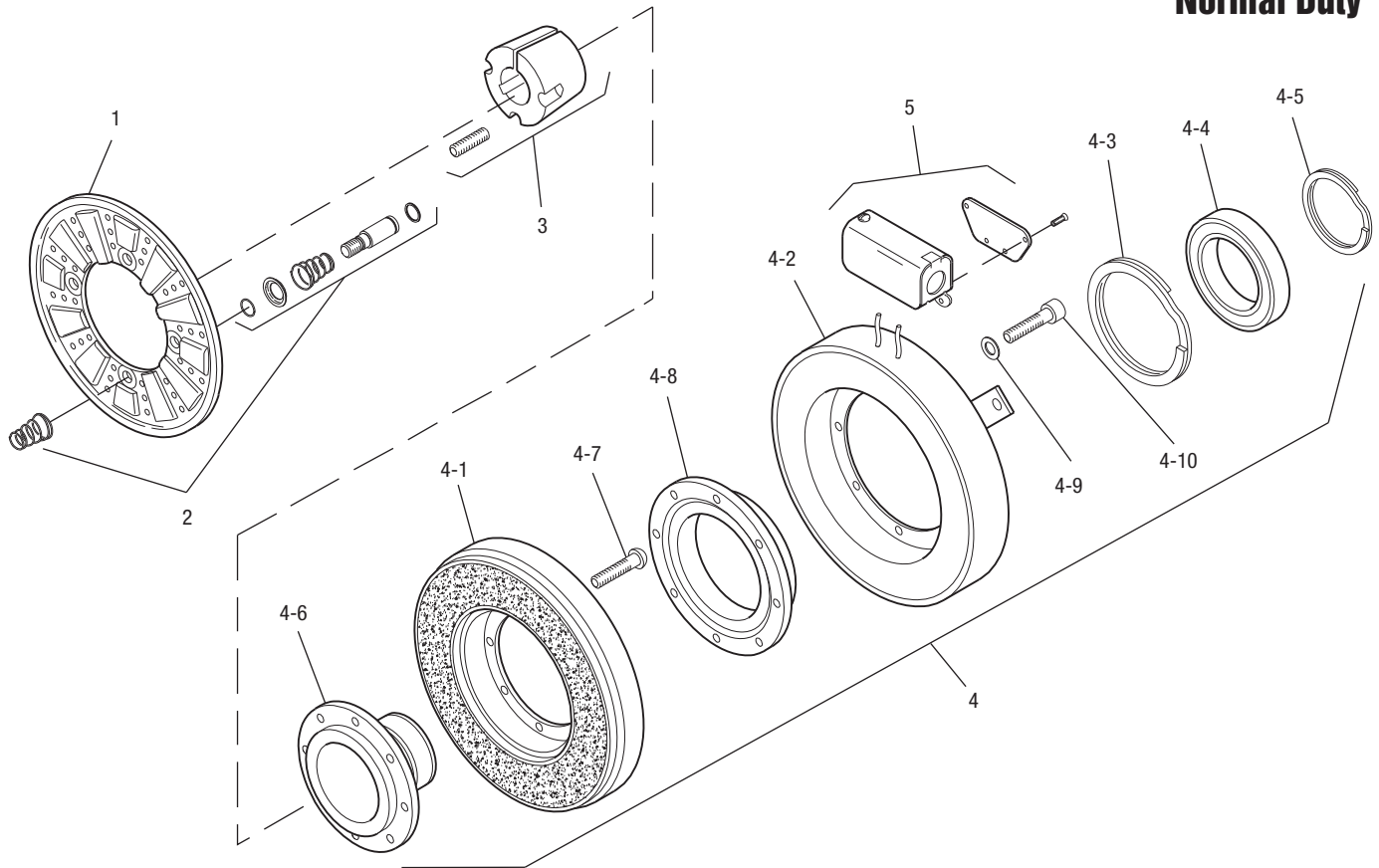
All dimensions are nominal unless otherwise noted.

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



## SF-1225 Bearing Mounted Normal Duty

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.

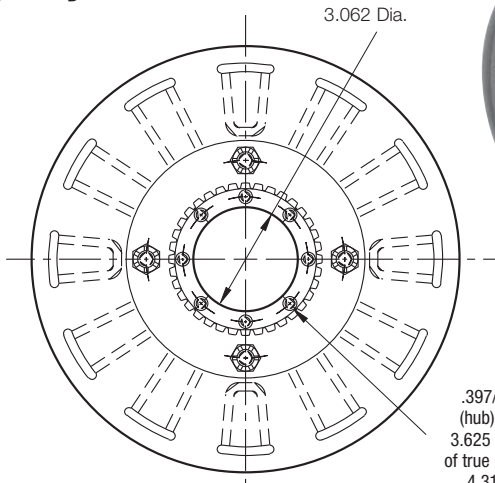
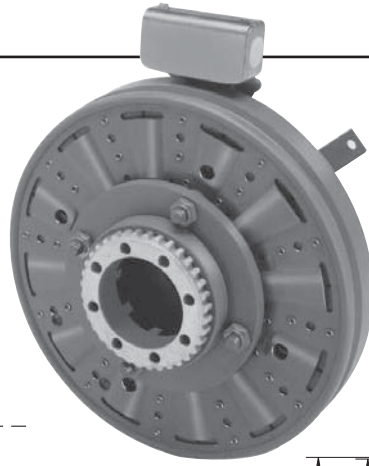
\*See page 252 for specific part numbers.

Refer to Service Manual P-0215-WE

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

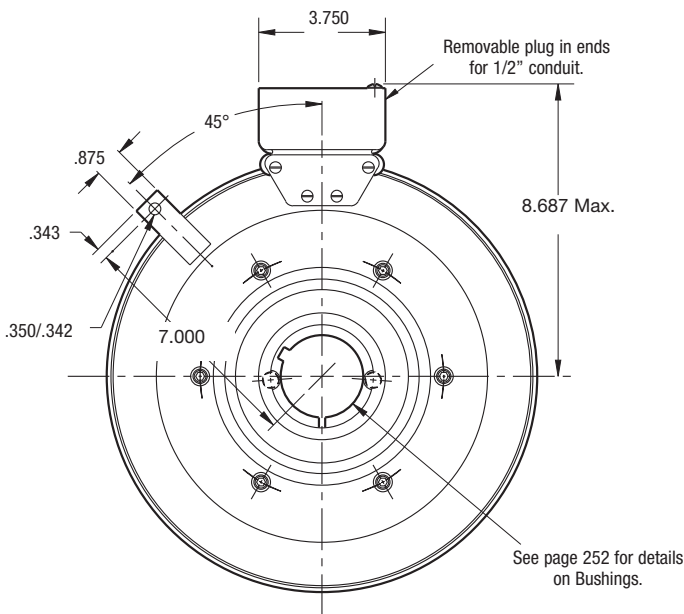
# SF Series Clutch

## SF-1225 Bearing Mounted Heavy Duty

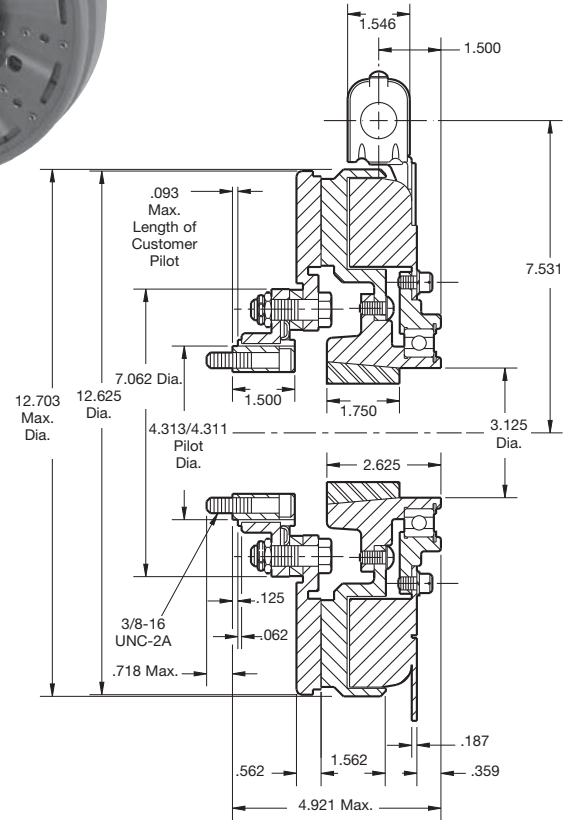


.397/.388 dia. (8) holes (hub) equally spaced on 3.625 dia. and within .003 of true position in relation to 4.313/4.311 pilot dia.

**ARMATURE VIEW**



**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.

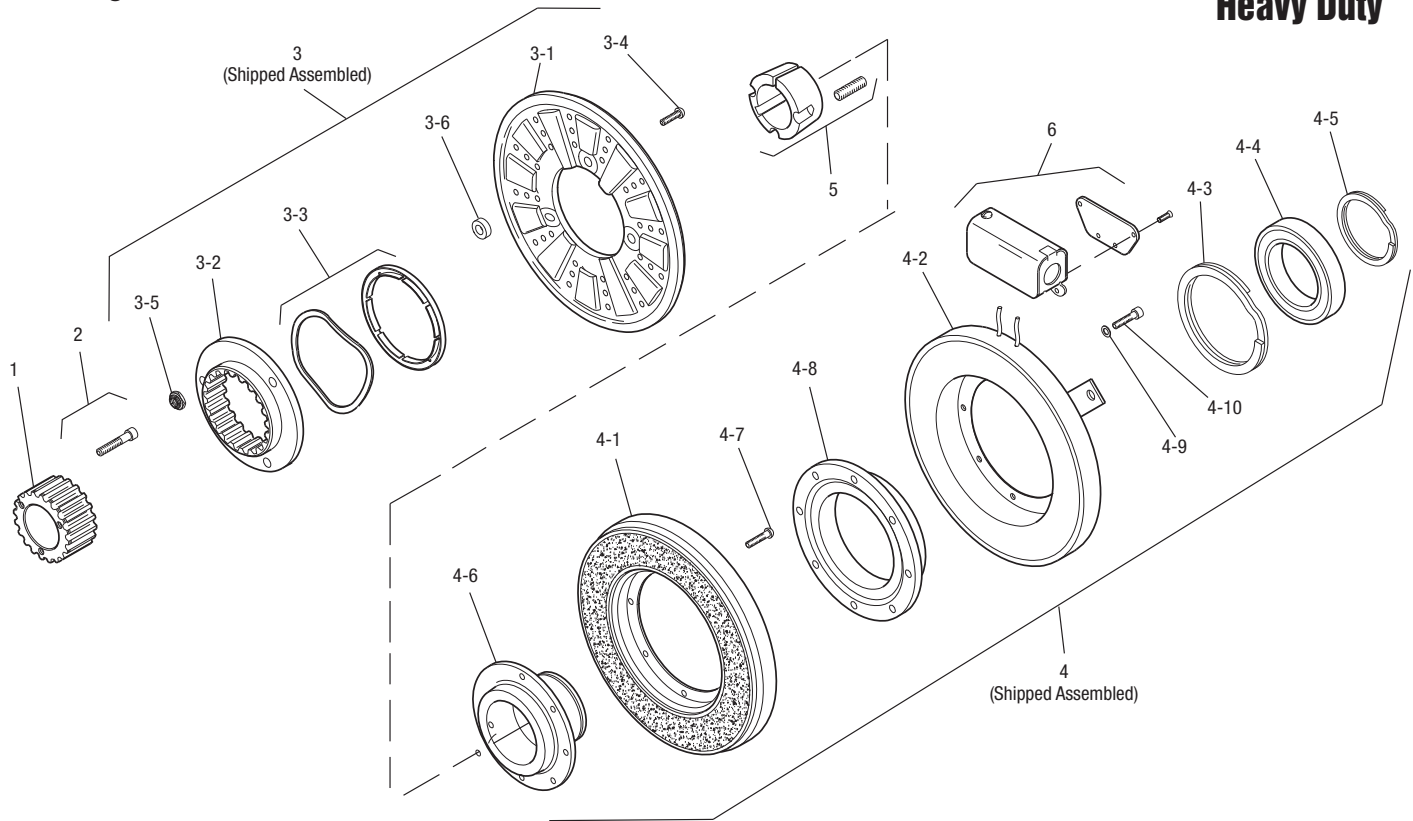
### Customer Shall Maintain:

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



## SF-1225 Bearing Mounted Heavy Duty

Drawing I-25622



| Item | Description                 | Part Number  | Qty. |
|------|-----------------------------|--------------|------|
| 1    | Splined Hub                 | 540-0148     | 1    |
| 2    | Accessory Mounting          | 5202-101-001 | 3    |
| 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.

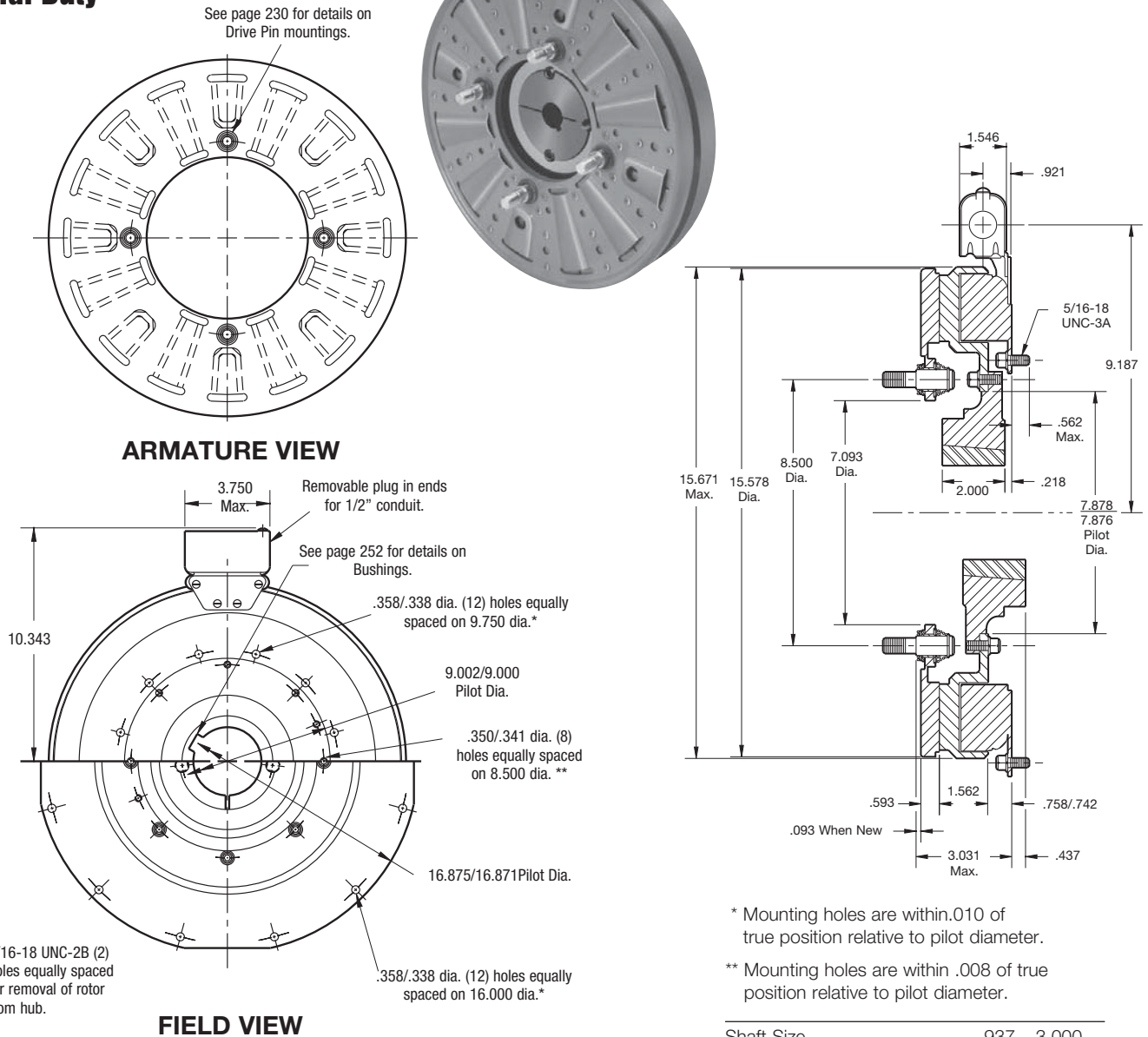
Refer to Service Manual P-0215-WE

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



# SF Series Clutch

## SF-1525 Flange Mounted Normal Duty



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

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

### 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.

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

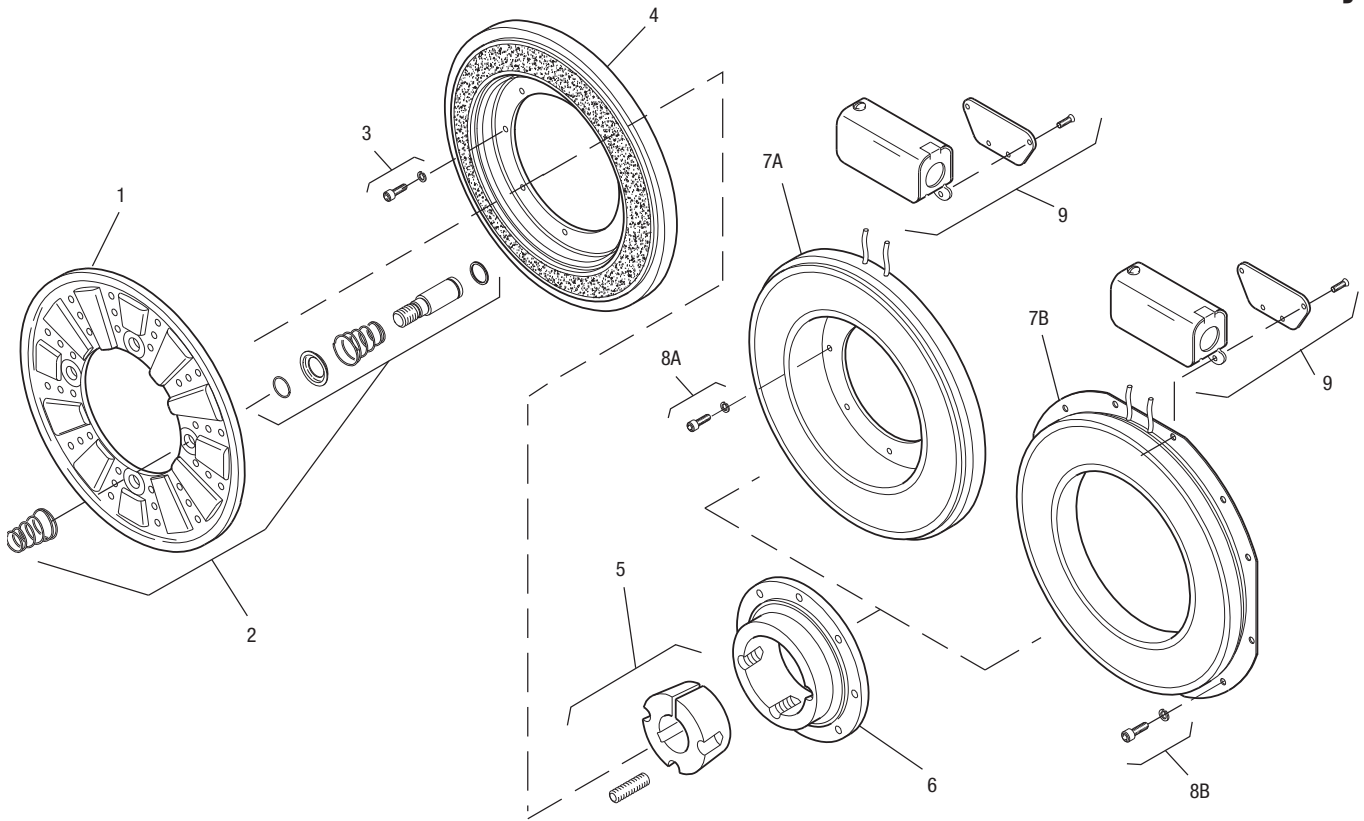
All dimensions are nominal unless otherwise noted.

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



Drawing I-25625

## SF-1525 Flange Mounted Normal Duty



| 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.

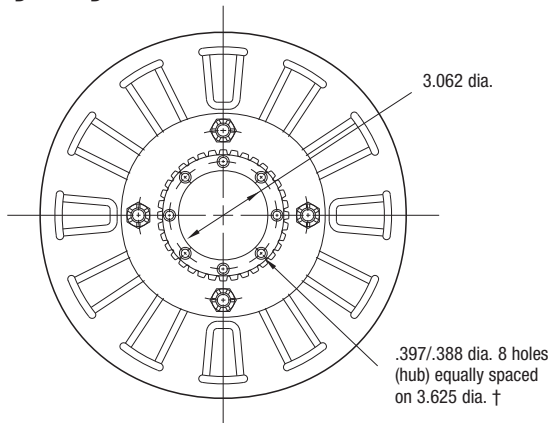
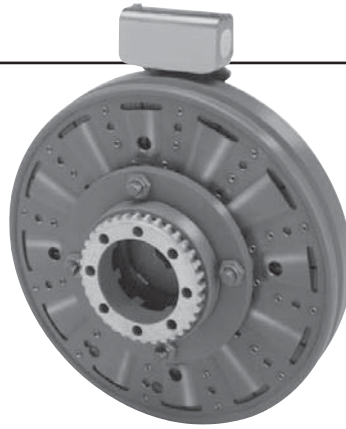
\*See page 252 for specific part numbers.

Refer to Service Manual P-0215-WE

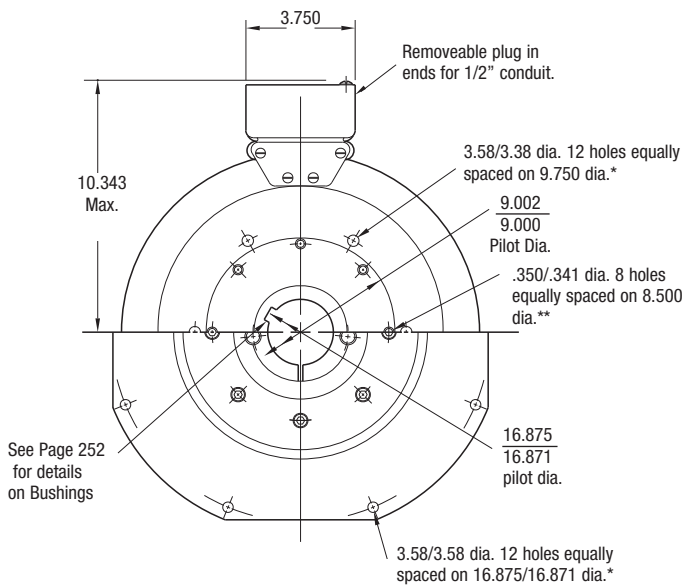
†Optional LK facing available. For more information, see page 232.

# SF Series Clutch

## SF-1525 Flange Mounted Heavy Duty



**ARMATURE VIEW**



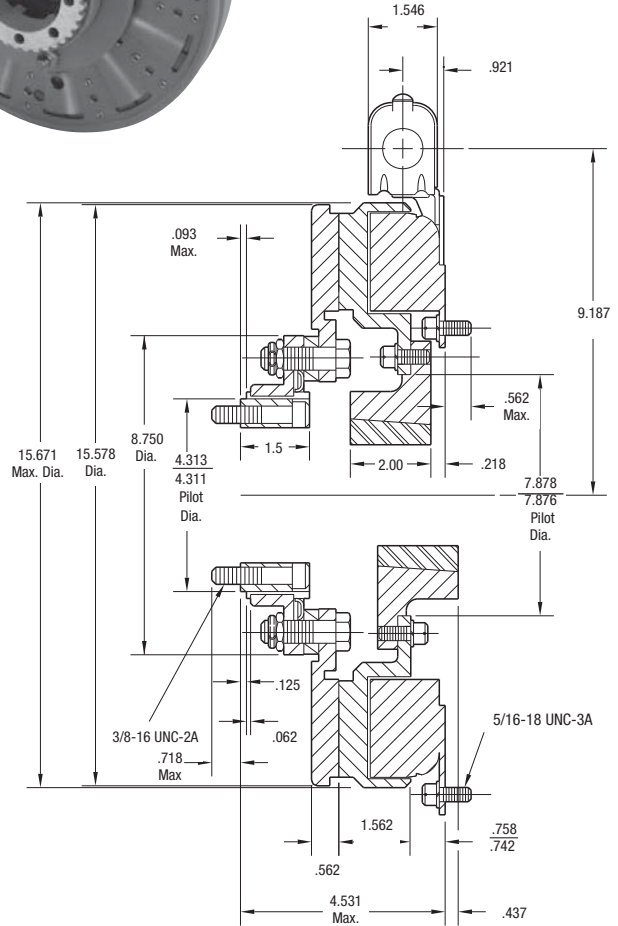
**FIELD VIEW**  
(Inside & Outside Mounted)

**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.

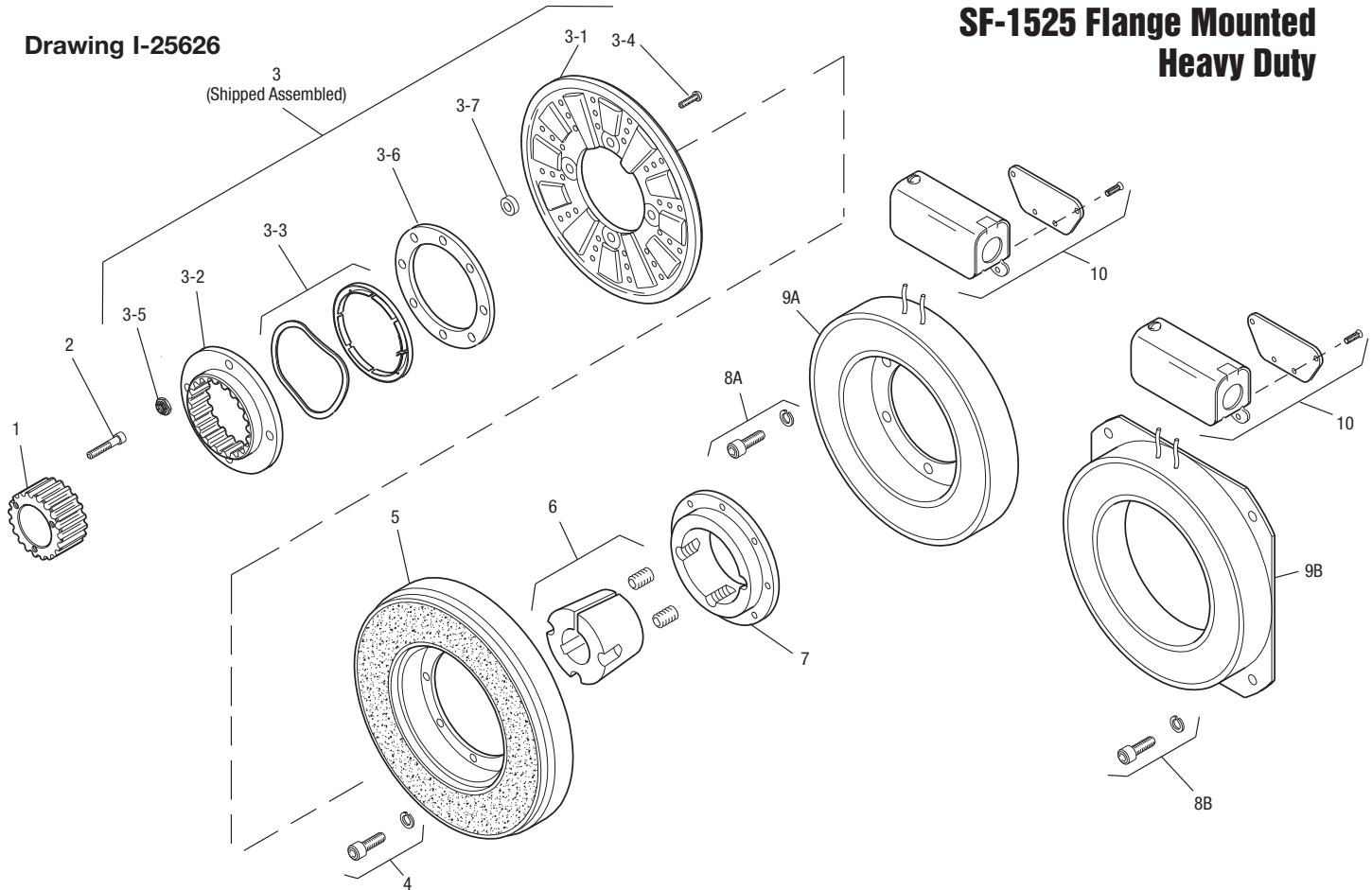
Information on inertia and weights begins on page 239. Coil data is on pages 250 and 251.



# SF Series Clutch

## SF-1525 Flange Mounted Heavy Duty

Drawing I-25626



| Item | Description                  | Part Number          | Qty. |
|------|------------------------------|----------------------|------|
| 1    | Splined Hub                  | 540-0148             | 1    |
| 2    | Mounting Accessory           | 5202-101-001         | 3    |
| 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.

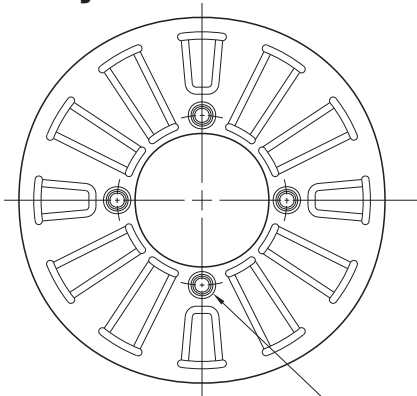
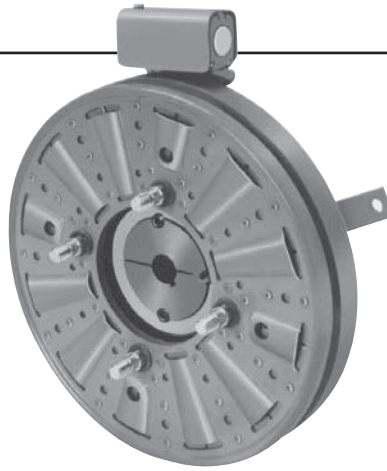
\*See page 252 for specific part numbers.

Refer to Service Manual P-0215-WE

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

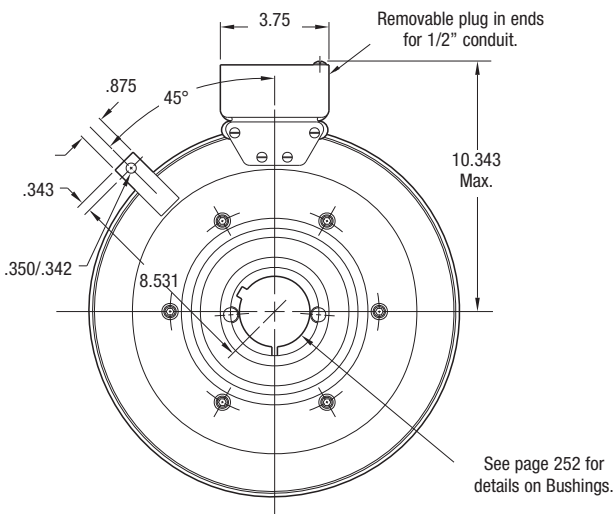
# SF Series Clutch

## SF-1525 Bearing Mounted Normal Duty



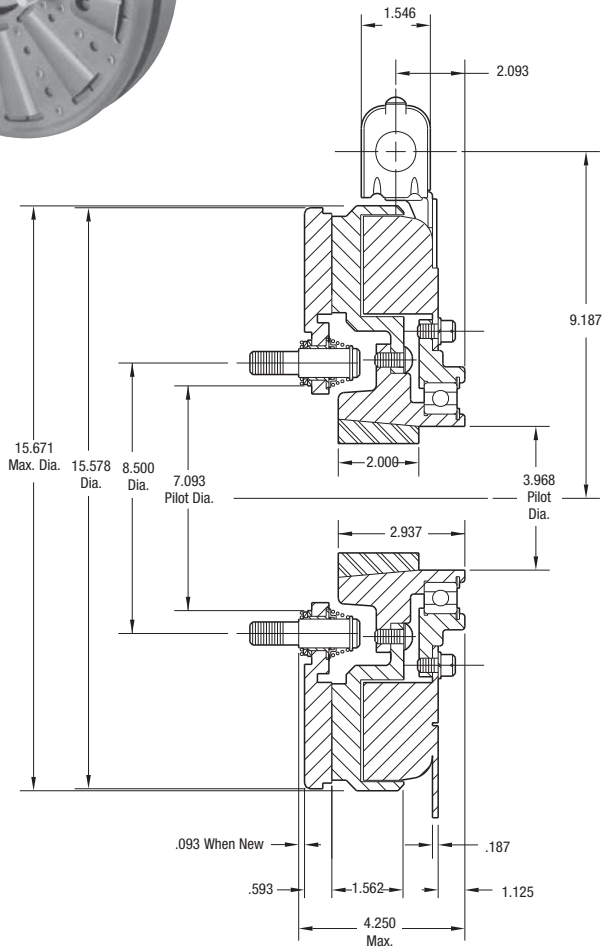
See page 230 for details on Drive Pin mountings.

**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 |

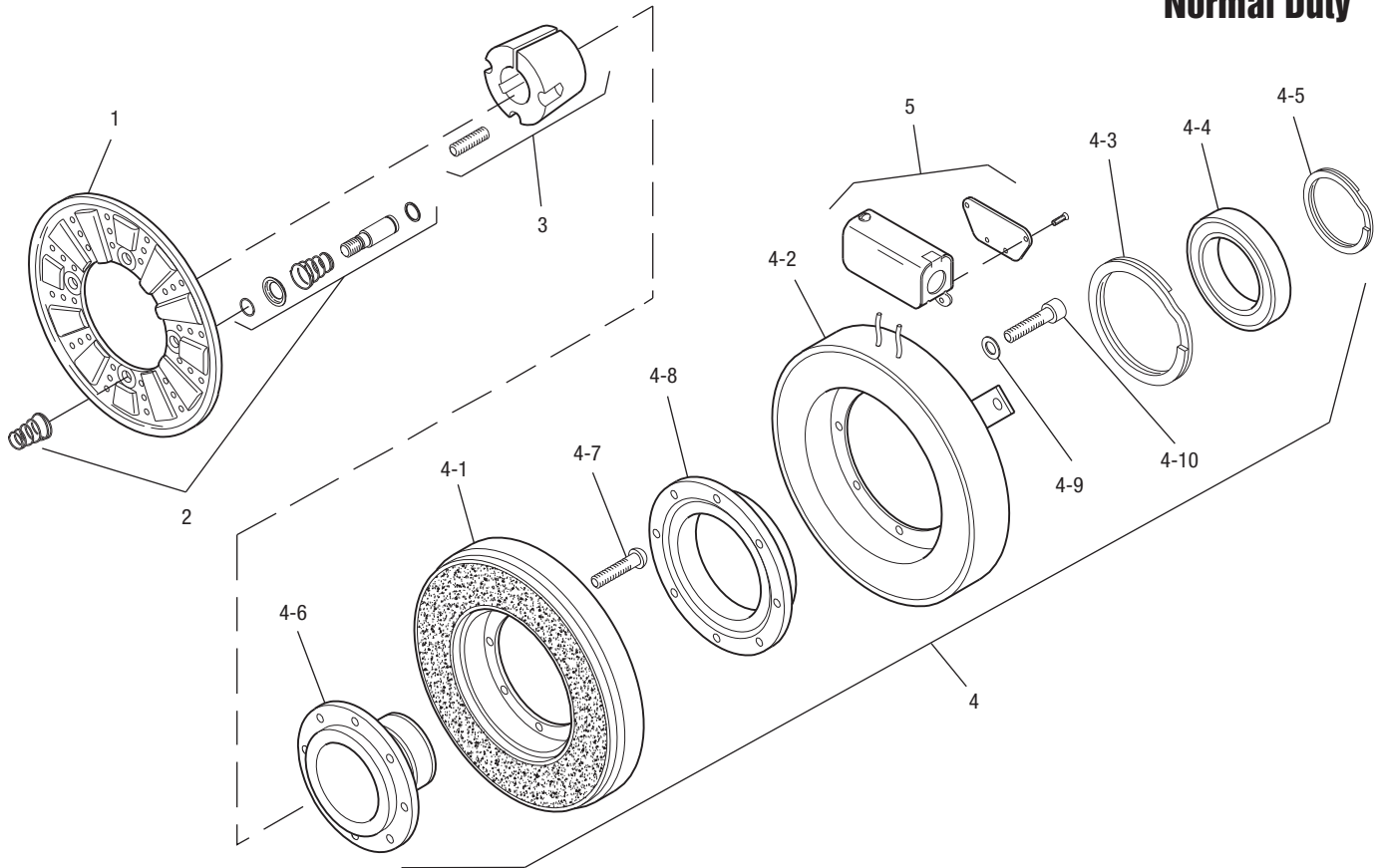
All dimensions are nominal unless otherwise noted.

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



## SF-1525 Bearing Mounted Normal Duty

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.

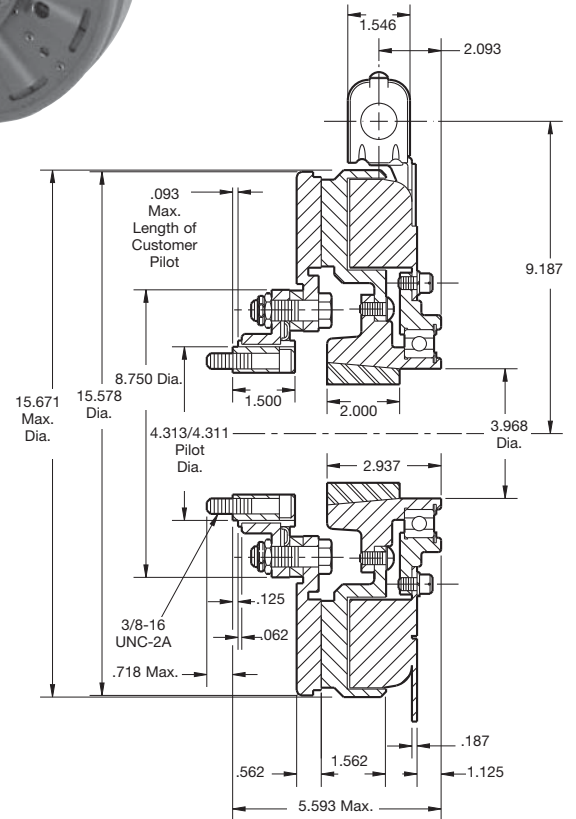
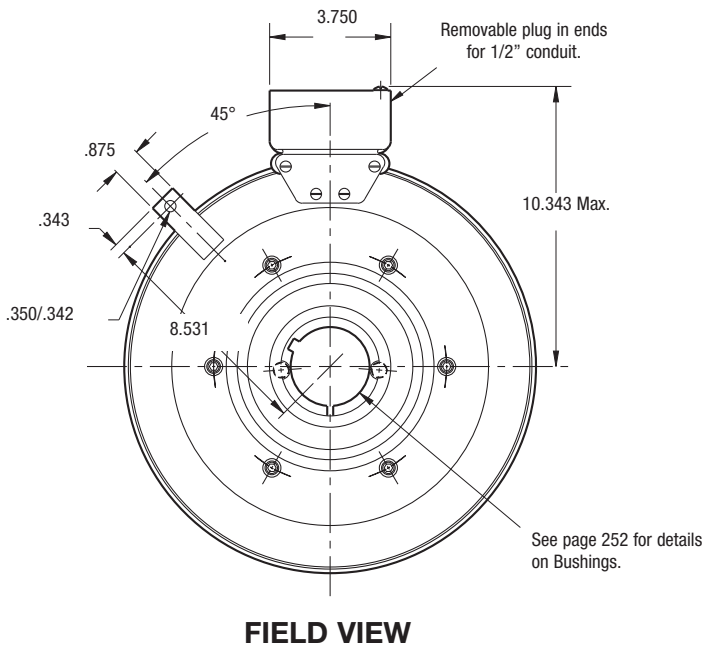
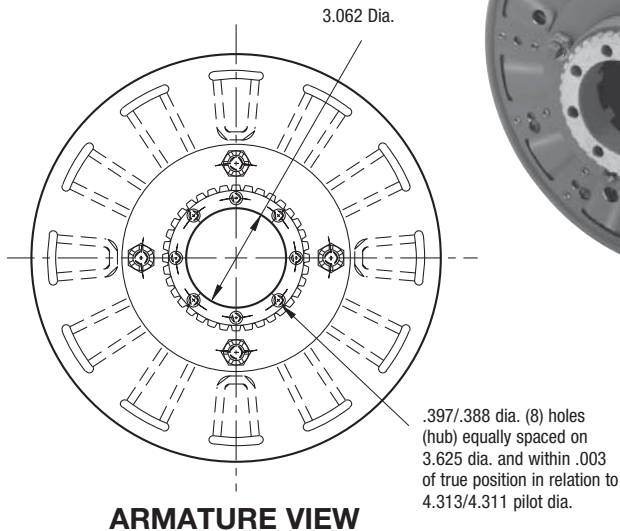
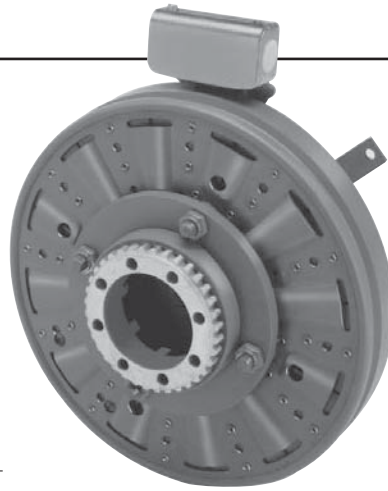
\*See page 252 for specific part numbers.

Refer to Service Manual P-0215-WE

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

# SF Series Clutch

## SF-1525 Bearing Mounted Heavy Duty



|                  |                |
|------------------|----------------|
| 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:

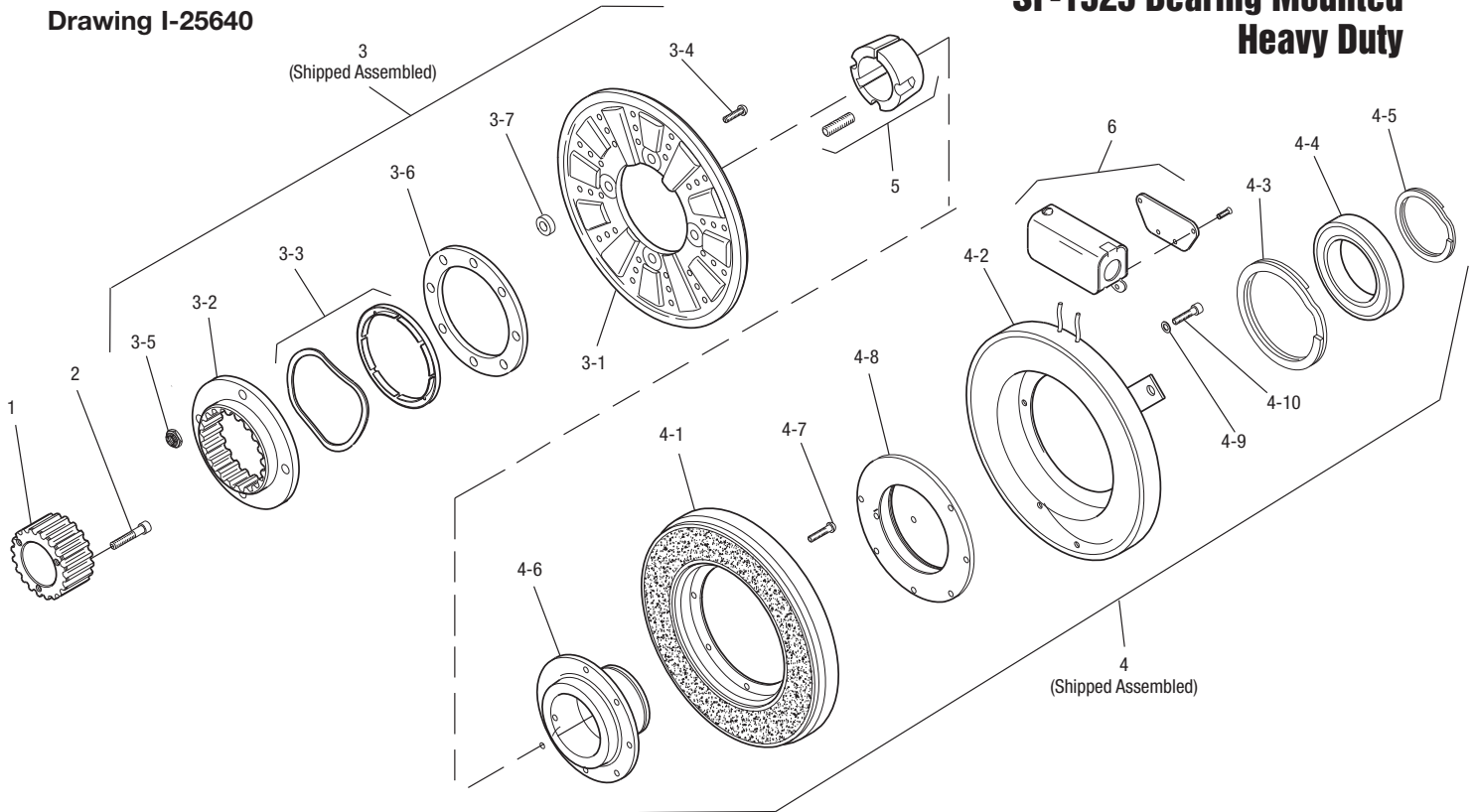
1. Armature hub pilot diameter to be concentric with field and rotor mounting shaft within .010 T.I.R.



# SF Series Clutch

## SF-1525 Bearing Mounted Heavy Duty

Drawing I-25640



| Item | Description                 | Part Number  | Qty. |
|------|-----------------------------|--------------|------|
| 1    | Splined Hub                 | 540-0148     | 1    |
| 2    | Accessory Mounting          | 5202-101-001 | 3    |
| 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.

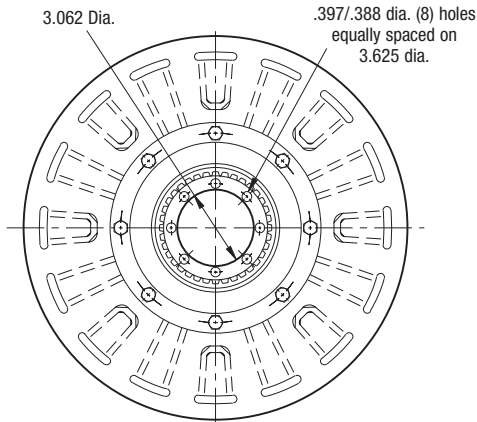
Refer to Service Manual P-0215-WE

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

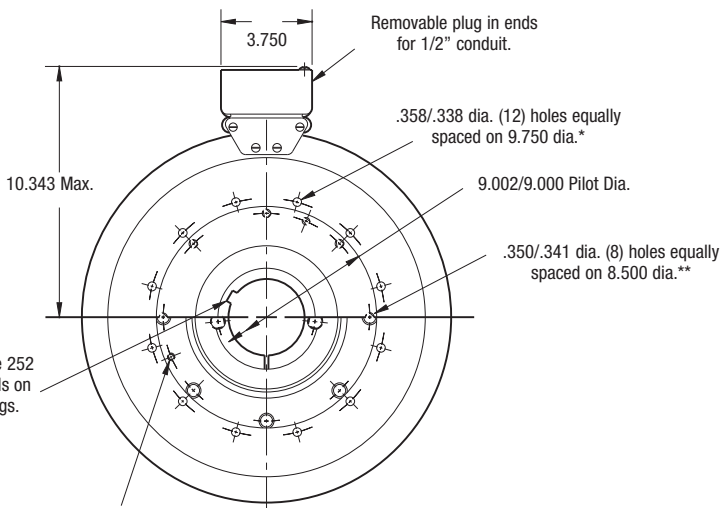


# SF Series Clutch

## SF-1525 HT Flange Mounted High Torque



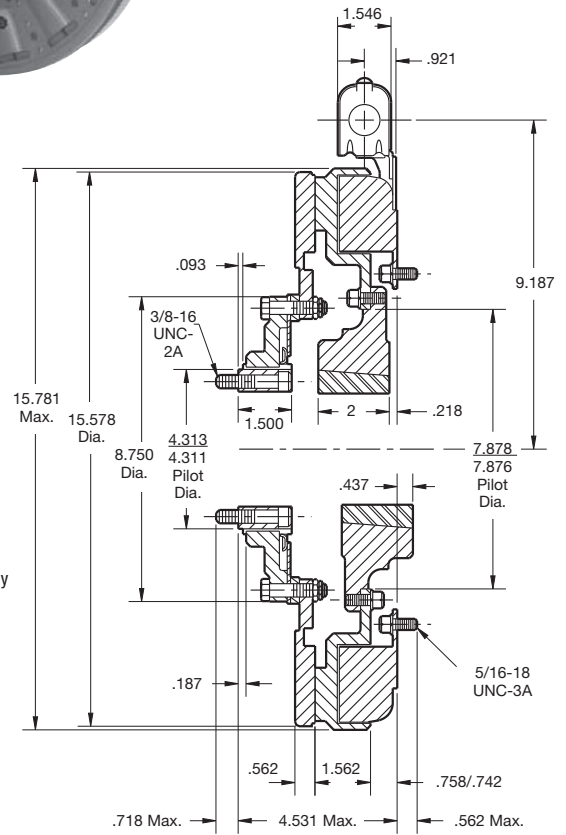
**ARMATURE VIEW**



See page 252 for details on Bushings.

5/16-18 UNC-2B (2) holes equally spaced for removal of rotor from hub.

**FIELD VIEW**



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

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

### 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.

|                  |              |
|------------------|--------------|
| 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.

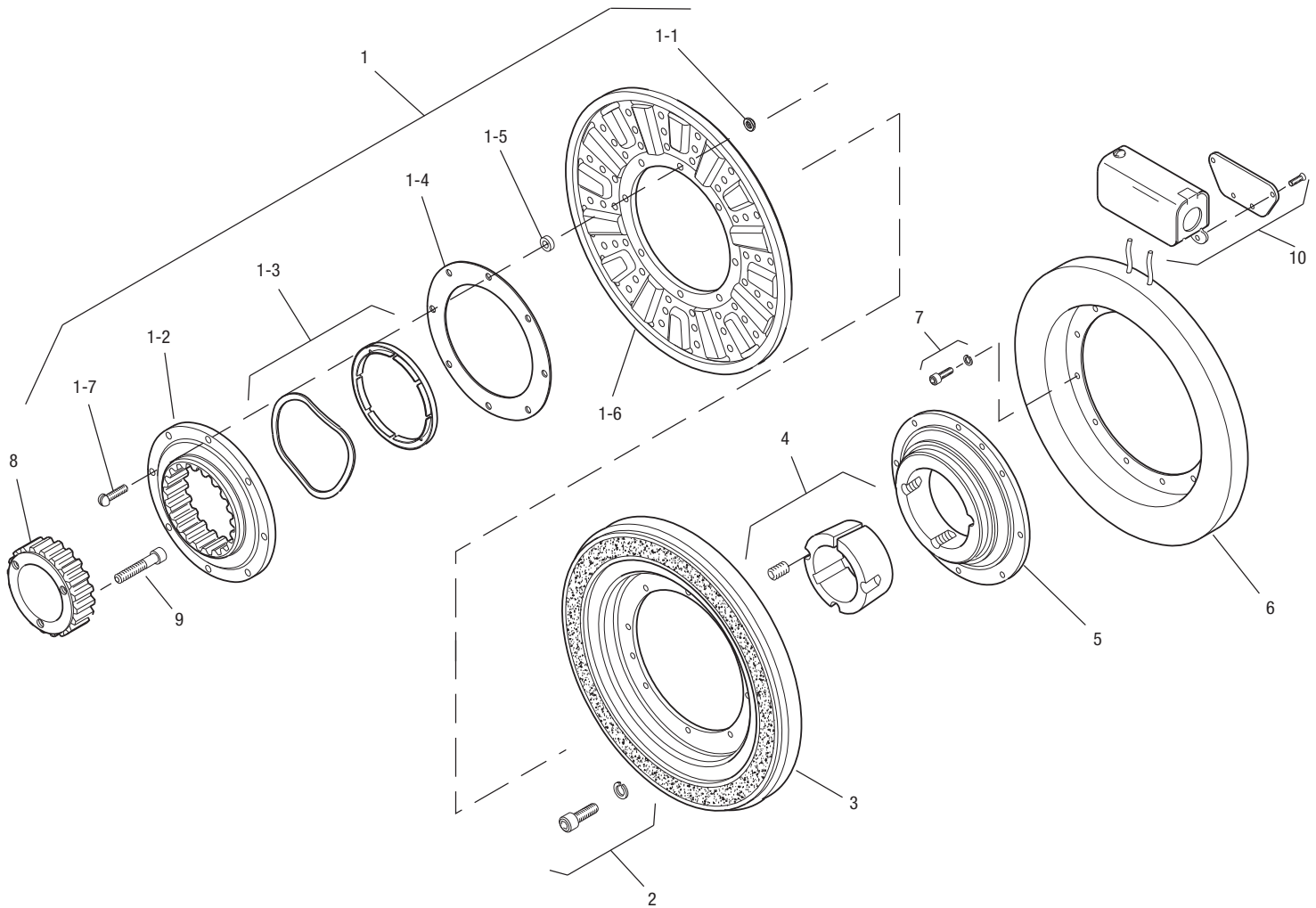
Information on inertia and weights begins on page 239. Coil data is on pages 250 and 251.



# SF Series Clutch

## SF-1525 HT Flange Mounted High Torque

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         |      |
|      | 24 Volt                | 5204-451-066         |      |
|      | 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 | 3    |
| 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

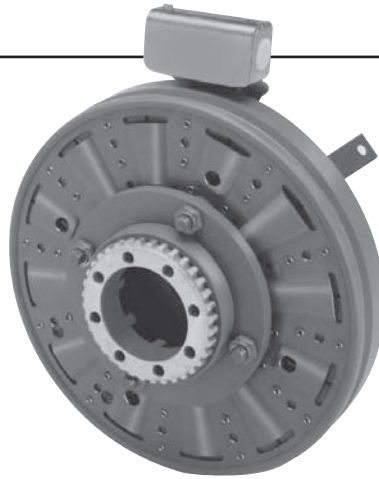
These units, when used in conjunction with the correct Warner Electric conduit box, meet the standards of UL508 and are listed under guide card #NMTR, file #59164. These units are CSA certified under file #LR11543.

\*See page 252 for specific part numbers.

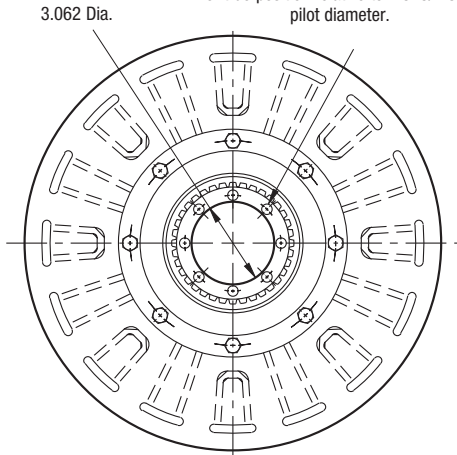
Refer to Service Manual P-0215-WE

# SF Series Clutch

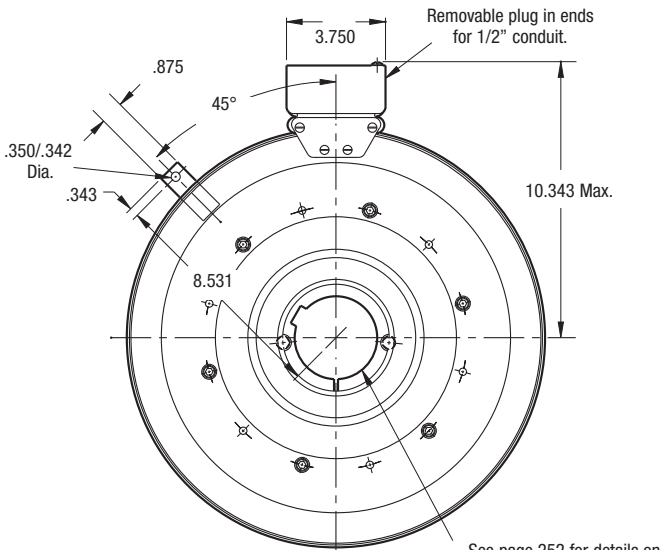
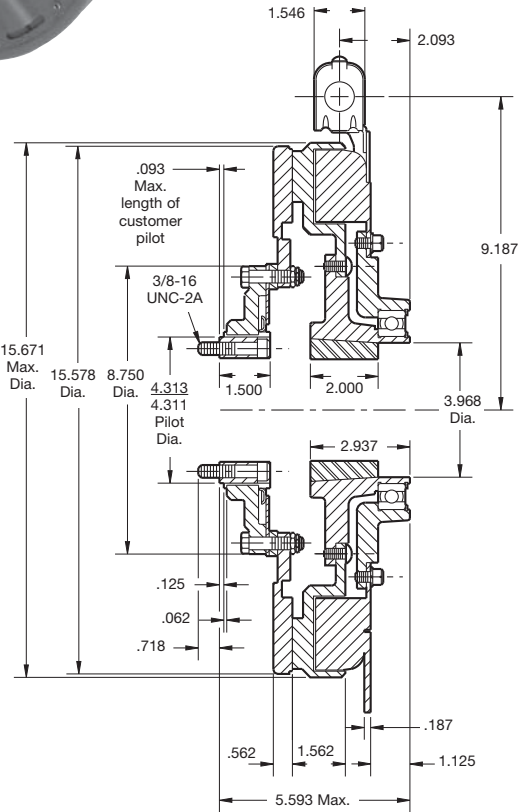
## SF-1525 HT Bearing Mounted High Torque



.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**

See page 252 for details on Bushings.

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

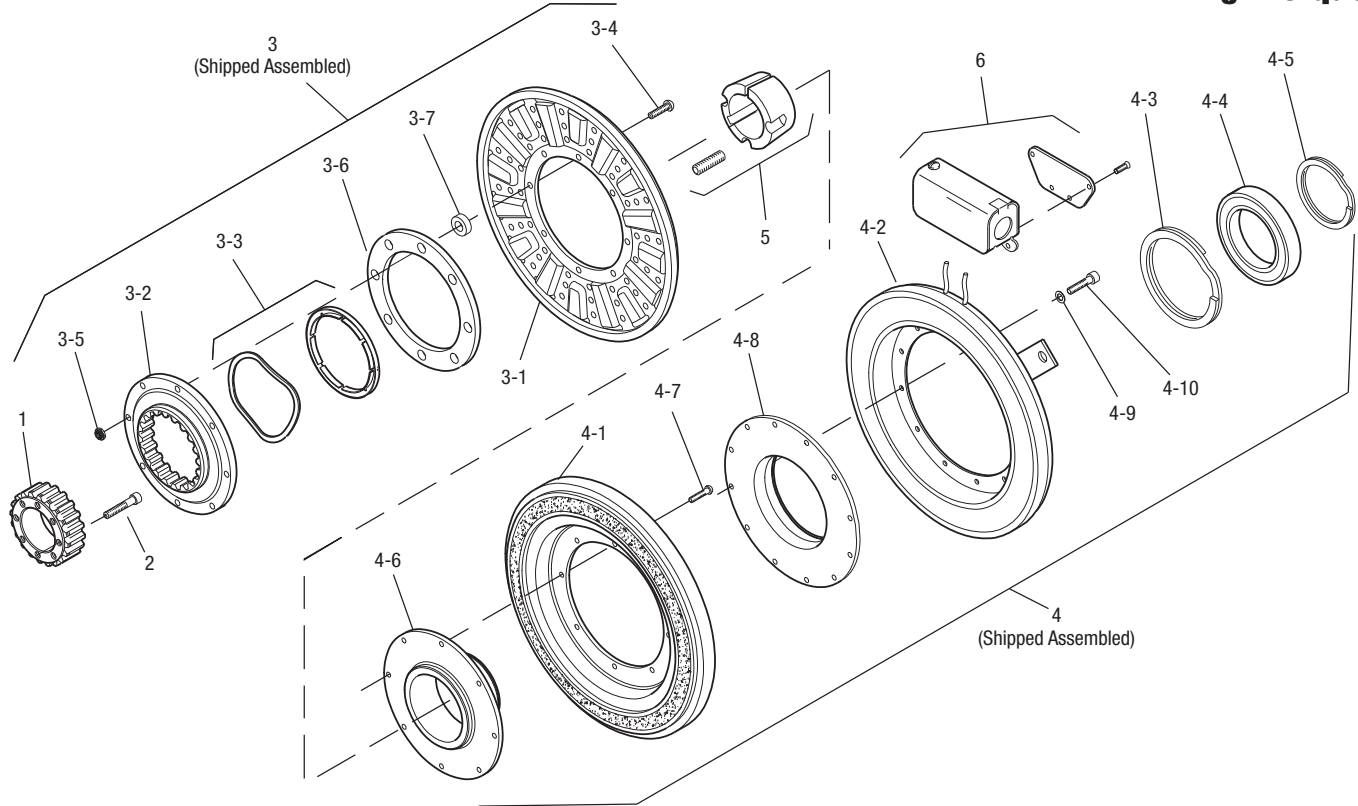
All dimensions are nominal unless otherwise noted.

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



Drawing I-25643

## SF-1525 HT Bearing Mounted High Torque



| Item | Description                 | Part Number  | Qty. |
|------|-----------------------------|--------------|------|
| 1    | Splined Hub                 | 540-0148     | 1    |
| 2    | Accessory, Mounting         | 5202-101-001 | 3    |
| 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-0215-WE