

# FS & FD Series Gear Coupling

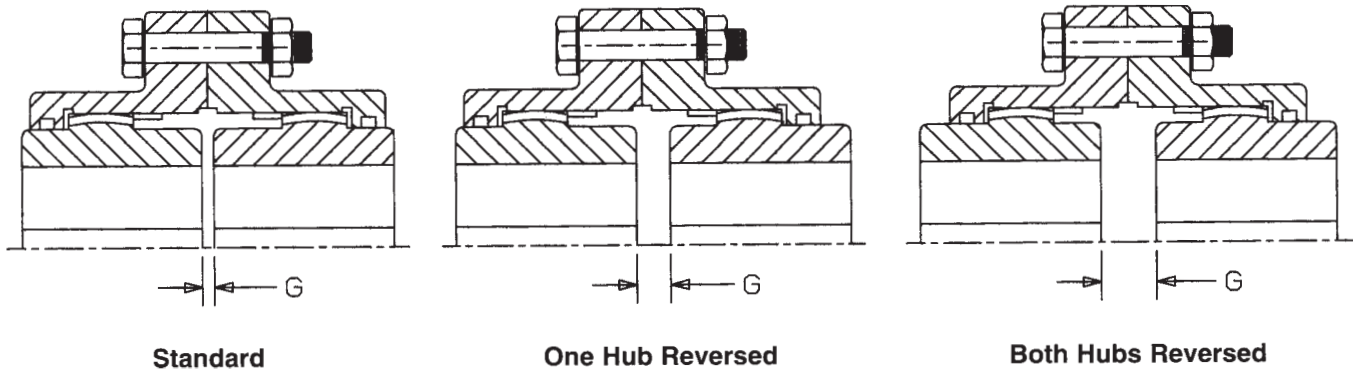
Service & Installation Instructions

P-8519-HD-IMPERIAL  
Form 1227



## Installation:

1. Be sure all components are present and free of burrs or chips.
2. Be certain the rubber seals are properly seated in the flanges. Coat these with a light film of grease.
3. Place the sleeves over the shaft ends. Care should be taken not to damage the rubber seals.
4. Install the hubs on the respective shafts. Interference fit hubs often require heating the hubs in hot oil or an oven to 320° F prior to installation. The hub faces should be flush with the shaft ends.
5. Locate the driver and driven machinery to maintain the G dimension between the driver and driven hub ends.
6. Using a dial indicator check the angular and parallel alignment of the hubs

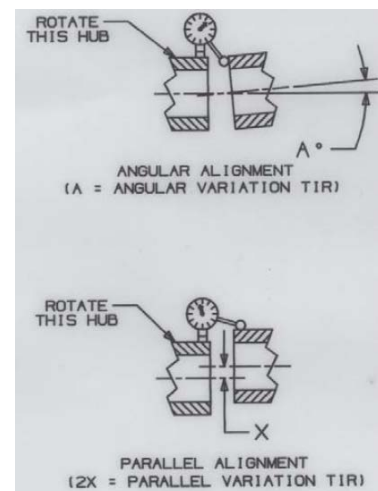


Coupling Size	1	1-1/2	2	2-1/2	3	3-1/2	4
"G" Dimension (in)							
Standard	0.13	0.13	0.13	0.19	0.19	0.25	0.25
One Hub Reversed	0.44	0.38	0.81	0.97	0.84	0.81	1.94
Both Hubs Reversed	0.75	0.63	1.50	1.75	1.50	1.38	1.63

Coupling Size	4-1/2	5	5-1/2	6	7	8	9
"G" Dimension (in)							
Standard	0.31	0.31	0.31	0.31	0.38	0.38	0.50
One Hub Reversed	1.53	1.72	1.53	1.72	1.69	1.13	1.25
Both Hubs Reversed	2.75	3.13	2.75	3.13	3.00	1.88	2.00

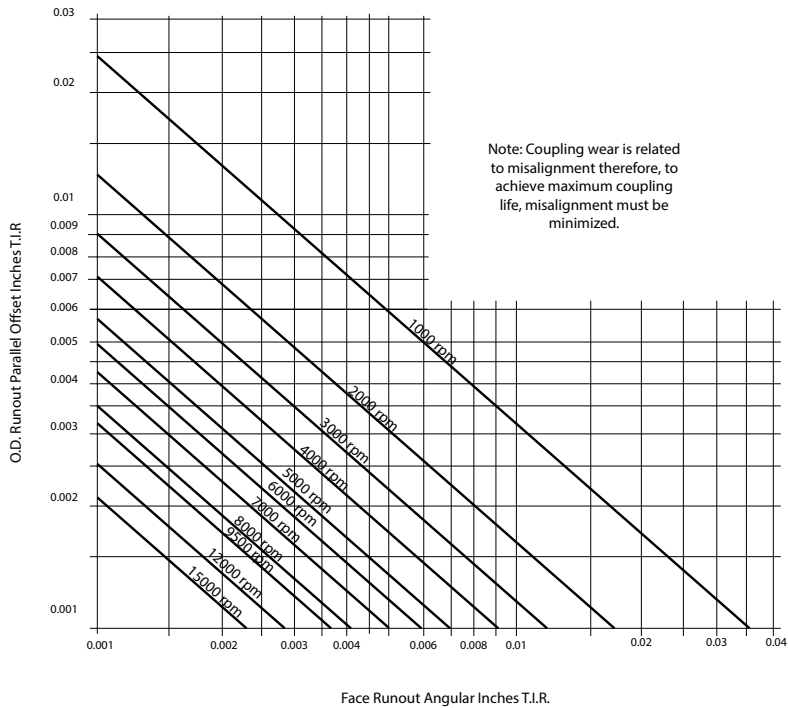
### Angular Method

Attach the dial indicator to the base of one hub and the indicator needle against the face of the other hub. Rotate the hub on which the indicator base is attached, check the dial at 90° intervals. All four points should be the same reading on the dial.



### Parallel Method

Attach the dial indicator to the base of one hub and the indicator needle against the OD of the other hub. Rotate the hub on which the indicator base is attached, check the dial at 90° intervals. All four points should be the same reading on the dial.



7. If the coupling is to be grease lubricated, coat all gear tooth areas with grease. We suggest a grease complying to AGMA9001-B97.
8. Install and progressively tighten the bolts with a torque wrench until the proper torque value is met.

Coupling Size	1	1-1/2	2	2-1/2	3	3-1/2	4
Torque (in-lbs)							
Exposed Bolt	130	425	940	1750	1750	2650	2650
Shrouded Bolt	130	425	425	940	940	1750	1750

Coupling Size	4-1/2	5	5-1/2	6	7	8	9
Torque (in-lbs)							
Exposed Bolt	2650	3650	3650	3650	4850	6300	8300
Shrouded Bolt	1750	2650	2650	*	*	*	*

9. Remove lubrication plugs in each sleeve, add grease until filled.  
**NOTE:** If RPM is below minimum, use SAE 90 oil in lieu of grease.

Coupling Size	1	1-1/2	2	2-1/2	3	3-1/2	4
Grease Cap (oz.)	2	3	5	9	14	18	28
Minimum RPM	529	463	411	380	348	321	301

Coupling Size	4-1/2	5	5-1/2	6	7	8	9
Grease Cap (oz.)	48	56	84	92	134	240	296
Minimum RPM	285	268	257	240	227	200	180

10. Install or refit a suitable coupling guard which complies to applicable Machine Safety and Health and Safety regulations.

**Maintenance:**

1. It is recommended that the coupling be completely flushed and relubricated after an initial break-in period of 3 million revolutions. (80 Hr @ 600 RPM)
2. Under normal industrial conditions the coupling should be disassembled, cleaned, and inspected every year. More severe applications may require more frequent inspection and relubrication.
3. During any inspection of the coupling when gear tooth wear is evident or the seal is leaking, it is recommended to replace the worn parts.
4. Upon reassembly after inspection always refer to the installation section for proper installation and wrench torques. Always regrease the coupling after inspection. Huco recommends the use of grease which complies with AGMA9001-B97.



All Customer Service phone numbers shown in bold

## Belted Drives and Sheaves

### TB Wood's

*Belted Drives*  
Chambersburg, PA - USA  
**1-888-829-6637** – Press #5

*For application assistance:*  
**1-888-829-6637** – Press #7

## Couplings

### Ameridrives

*Mill Spindles, Ameriflex, Ameridisc*

Erie, PA - USA  
**1-814-480-5000**

*Gear Couplings*

San Marcos, TX - USA  
**1-800-458-0887**

*Universal Joints, Drive Shafts, Mill Gear Couplings*

Erie, PA - USA  
**1-920-593-2444**

### Bibby Turboflex

*Disc, Gear, Grid Couplings, Overload Clutches*

Dewsbury, England  
**+44 (0) 1924 460801**

Boksburg, South Africa  
**+27(0) 11 918 4270**

### Guardian Couplings

*Engineered Flywheel Couplings, Engine Housings and Pump Mounts, Flexible Shaft Couplings*

Michigan City, IN - USA  
**1-219-874-5248**

### Huco

*Precision Couplings and Air Motors*

Hertford, England  
**+44 (0) 1992 501900**

Chambersburg, PA - USA  
**1-888-829-6637**

### Lamiflex Couplings

*Flexible Couplings, Bearing Isolators, and Coupling Guards*

Cotia, SP - Brasil  
**+55 (11) 4615-6300**

## Couplings Cont.

### TB Wood's

*Elastomeric Couplings*  
Chambersburg, PA - USA  
**1-888-829-6637** – Press #5

*For application assistance:*  
**1-888-829-6637** – Press #7

*General Purpose Disc Couplings*

San Marcos, TX - USA  
**1-888-449-9439**

## Electromagnetic Clutches and Brakes

### Inertia Dynamics

*Spring Set Brakes; Power On and Wrap Spring Clutch/Brakes*

New Hartford, CT - USA  
**1-800-800-6445**

### Matrix

*Electromagnetic Clutches and Brakes, Pressure Operated Clutches and Brakes*

Brechin, Scotland  
**+44 (0) 1356 602000**

New Hartford, CT - USA  
**1-800-825-6544**

### Warner Electric

*Electromagnetic Clutches and Brakes*

New Hartford, CT - USA  
**1-800-825-6544**

*For application assistance:*  
**1-800-825-9050**

Saint Barthélemy d'Anjou, France  
**+33 (0)2 41 21 24 24**

*Precision Electric Coils and Electromagnetic Clutches and Brakes*

Columbia City, IN - USA  
**1-260-244-6183**

## Engineered Bearing Assemblies

### Kilian

*Engineered Bearing Assemblies*

Syracuse, NY - USA  
**1-315-432-0700**

## Gearing

### Bauer Gear Motor

*Geared Motors*  
Esslingen, Germany  
**+49 (711) 3518-0**  
Middlesex, NJ - USA  
**1-732-469-8770**

### Boston Gear

*Enclosed and Open Gearing, Electrical and Mechanical P.T. Components*

Charlotte, NC - USA  
**1-800-825-6544**

*For application assistance:*  
**1-800-816-5608**

### Nuttall Gear and Delroyd Worm Gear

*Worm Gear and Helical Speed Reducers*

Niagara Falls, NY - USA  
**1-716-298-4100**

## Heavy Duty Clutches and Brakes

### Industrial Clutch

*Pneumatic and Oil Immersed Clutches and Brakes*

Waukesha, WI - USA  
**1-262-547-3357**

### Svendborg Brakes

*Industrial Brakes and Brake Systems*

Vejstrup, Denmark  
**+45 63 255 255**

### Twiflex

*Caliper Brakes and Thrusters*

Wichita Falls, TX - USA  
**1-844-723-3483**

Twickenham, England  
**+44 (0) 20 8894 1161**

### Wichita Clutch

*Pneumatic Clutches and Brakes*

Wichita Falls, TX - USA  
**1-800-964-3262**

Bedford, England  
**+44 (0) 1234 350311**

## Linear Products

### Warner Linear

*Linear Actuators*  
New Hartford, CT - USA  
**1-800-825-6544**

*For application assistance:*  
**1-800-825-9050**

Saint Barthélemy d'Anjou, France  
**+33 (0)2 41 21 24 24**

## Overrunning Clutches

### Formsprag Clutch

*Overrunning Clutches and Holdbacks*

Warren, MI - USA  
**1-800-348-0881** – Press #1

*For application assistance:*  
**1-800-348-0881** – Press #2

### Marland Clutch

*Roller Ramp and Sprag Type Overrunning Clutches and Backstops*

Warren, MI - USA  
**1-800-216-3515**

### Stieber Clutch

*Overrunning Clutches and Holdbacks*

Heidelberg, Germany  
**+49 (0) 6221-30470**

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[www.huco.com](http://www.huco.com)

Merchant Drive, Hertford  
Hertfordshire, SG13 7BL - England  
**+44 (0) 1992 501 900**