**WARNING** Lock out / tag out the power source before proceeding to avoid unexpected starts. Failure to observe these precautions could result in bodily injury.

**WARNING** Coupling element may be thrown from the assembly with substantial force if subjected to a severe shock load.

**CAUTION** Check operating speed against Maximum RPM value in Table 1.

**WARNING:** Cancer - www.P65Warnings.ca.gov

For a basic installation overview, scan the QR code below:

Further component information available:
Specification sheets, 3D models ecatalog.TBWood.com
Coupling Selection Program www.TBWood.com/Select

### Installation / Alignment

Installation / Alignment Tools
- Hex key set
- Socket set
- Torque wrench
- Straight-edge
- Caliper
- Feeler gauge set

1. Inspect all coupling components and remove any protective coatings, lubricants, paint or rust from bores, mating surfaces and fasteners. Remove any existing burrs, etc. from the shafts.

2. Slide one hub onto each shaft using keys where required. (When using QD or Taper-Lock hubs, follow the instructions furnished with the Sure-Grip or Taper-Lock bushings.)

3. When high speed rings are to be used for spacer couplings, loosely install one ring on each half element.

4. Hold one half element on the hubs to determine the appropriate hub spacing. If using spacer elements with high speed rings, hold both half elements on hubs to make sure that the hubs do not interfere with the rings. The hub may be installed with the hub extension facing in or out. Make sure that the shaft extends into the hubs at least .8 times the shaft diameter.

5. Lightly fasten hubs to shafts to prevent them from moving during alignment.

6. Angular Alignment: Without rotating the coupling, run a caliper around the hub and set the caliper to the widest point. Find the narrowest point with the caliper and feeler gauges. Reposition equipment until this value is as small as possible; reference Table 2 for maximum value/degree.

7. Parallel Alignment: Using the misalignment value from the previous step, look up the maximum allowable parallel misalignment using Table 2 and Figure 1. Without rotating the shafts, run a straight-edge around the hub and find the maximum offset with feeler gauges. If necessary, realign the shafts. Recheck parallel alignment.
8. Tighten motor and driven equipment fasteners to manufacturer specifications; recheck parallel and angular alignment.

9. When parallel and angular alignment values are within service ratings, verify that all set screws, cap screws and other fasteners are tightened to values in Table 1. Recheck parallel and angular alignment after tightening.

10. Install coupling guard per applicable safety regulations.

11. Periodically check alignment, as settling will often change equipment position.

### Table 1 - Maximum RPM and Fastener Torque Values

<table>
<thead>
<tr>
<th>Coupling Size</th>
<th>Maximum RPM</th>
<th>Element &amp; Ring Cap Screws</th>
<th>BTS Hubs Set Screws</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Standard</td>
<td>Spacer*</td>
<td>Imperial Elements</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(HS Rings)</td>
<td>Screw Size</td>
</tr>
<tr>
<td>WE2/WES2</td>
<td>7500</td>
<td>7500</td>
<td>1/4-20</td>
</tr>
<tr>
<td>WE3/WES3</td>
<td></td>
<td></td>
<td>3/8-16</td>
</tr>
<tr>
<td>WE4/WES4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WE5/WES5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WE10/WES10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WE20/WES20</td>
<td>6600</td>
<td>4800(6600)</td>
<td></td>
</tr>
<tr>
<td>WE30/WES30</td>
<td>5800</td>
<td>4200(5800)</td>
<td></td>
</tr>
<tr>
<td>WE40/WES40</td>
<td>5000</td>
<td>3600(5000)</td>
<td></td>
</tr>
<tr>
<td>WE50/WES50</td>
<td>4200</td>
<td>3100(4200)</td>
<td></td>
</tr>
<tr>
<td>WE60/WES60</td>
<td>3800</td>
<td>2800(3800)</td>
<td></td>
</tr>
<tr>
<td>WE70/WES70</td>
<td>3600</td>
<td>2600(3600)</td>
<td></td>
</tr>
<tr>
<td>WE80/WES80</td>
<td>2000</td>
<td>1800(2000)</td>
<td></td>
</tr>
</tbody>
</table>

*Maximum spacer element RPM = Maximum standard element RPM if using high speed rings. HS rings come standard with sizes 2-10 and are available as an option for sizes 20-80.

**Metric elements and hubs use metric hardware and are denoted by "M" in the part number, e.g. WE2M, WES2M, WE2HM28MM.

### Table 2 - Angular Inch Gap

<table>
<thead>
<tr>
<th>Hub Size</th>
<th>Degrees</th>
<th>1º</th>
<th>2º</th>
<th>3º</th>
<th>4º</th>
</tr>
</thead>
<tbody>
<tr>
<td>WE2</td>
<td>in</td>
<td>0.03</td>
<td>0.07</td>
<td>0.10</td>
<td>0.13</td>
</tr>
<tr>
<td></td>
<td>mm</td>
<td>0.8</td>
<td>1.7</td>
<td>2.5</td>
<td>3.3</td>
</tr>
<tr>
<td>WE3</td>
<td>in</td>
<td>0.04</td>
<td>0.08</td>
<td>0.12</td>
<td>0.16</td>
</tr>
<tr>
<td></td>
<td>mm</td>
<td>1.0</td>
<td>2.1</td>
<td>3.1</td>
<td>4.1</td>
</tr>
<tr>
<td>WE4</td>
<td>in</td>
<td>0.05</td>
<td>0.09</td>
<td>0.14</td>
<td>0.18</td>
</tr>
<tr>
<td></td>
<td>mm</td>
<td>1.1</td>
<td>2.3</td>
<td>3.5</td>
<td>4.6</td>
</tr>
<tr>
<td>WE5</td>
<td>in</td>
<td>0.06</td>
<td>0.11</td>
<td>0.16</td>
<td>0.22</td>
</tr>
<tr>
<td></td>
<td>mm</td>
<td>1.4</td>
<td>2.8</td>
<td>4.2</td>
<td>5.5</td>
</tr>
<tr>
<td>WE10</td>
<td>in</td>
<td>0.06</td>
<td>0.13</td>
<td>0.19</td>
<td>0.22</td>
</tr>
<tr>
<td></td>
<td>mm</td>
<td>1.6</td>
<td>3.2</td>
<td>4.9</td>
<td>5.5</td>
</tr>
<tr>
<td>WE20</td>
<td>in</td>
<td>0.08</td>
<td>0.16</td>
<td>0.23</td>
<td></td>
</tr>
<tr>
<td></td>
<td>mm</td>
<td>2.0</td>
<td>4.0</td>
<td>5.9</td>
<td></td>
</tr>
<tr>
<td>WE30</td>
<td>in</td>
<td>0.10</td>
<td>0.19</td>
<td>0.28</td>
<td></td>
</tr>
<tr>
<td></td>
<td>mm</td>
<td>2.4</td>
<td>4.8</td>
<td>7.2</td>
<td></td>
</tr>
<tr>
<td>WE40</td>
<td>in</td>
<td>0.12</td>
<td>0.23</td>
<td>0.35</td>
<td></td>
</tr>
<tr>
<td></td>
<td>mm</td>
<td>2.9</td>
<td>5.9</td>
<td>8.8</td>
<td></td>
</tr>
<tr>
<td>WE50</td>
<td>in</td>
<td>0.14</td>
<td>0.28</td>
<td>0.43</td>
<td></td>
</tr>
<tr>
<td></td>
<td>mm</td>
<td>3.6</td>
<td>7.2</td>
<td>10.8</td>
<td></td>
</tr>
<tr>
<td>WE60</td>
<td>in</td>
<td>0.15</td>
<td>0.31</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>mm</td>
<td>3.9</td>
<td>7.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WE70</td>
<td>in</td>
<td>0.16</td>
<td>0.32</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>mm</td>
<td>4.1</td>
<td>8.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WE80</td>
<td>in</td>
<td>0.20</td>
<td>0.39</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>mm</td>
<td>5.0</td>
<td>10.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
TB Wood’s Facilities

North America

USA
440 North Fifth Avenue
Chambersburg, PA 17201 - USA
888-829-6637 * 717-264-7161
Belted Drives and Elastomeric Couplings

Customer Service
1-888-829-6637 (Press #5)

For Application Support
1-888-829-6637 (Press #7)

2000 Clovis Barker Road
San Marcos, TX 78666 - USA
1-888-449-9439
General Purpose Disc Couplings

Customer Service
1-888-449-9439

4970 Joule St
Reno, NV 89502 - USA
775-857-1800

Canada
9779 45 Ave NW
Edmonton, AB T6E 5V8 - Canada
+1 780-439-7979

6305 Danville Road
Mississauga, ON L5T 2H7 - Canada
1-800-929-6631

1073 Rue Bégin
Saint-Laurent, QC H4R 1V8 - Canada
+1 514-332-4812

Mexico
Comisión Federal de Electricidad 850,
Industrial San Luis,
San Luis, S.L.P., 78395 - Mexico
+52 444 137 1500

Europe

Merchant Drive, Hertford
Hertfordshire SG13 7BL - England
+44(0)1992 501000
Elastomeric Couplings

The Brands of Altra Motion

Couplings
Ameridrives
www.ameridrives.com

Bibby Turboflex
www.bibbyturboflex.com

Guardian Couplings
www.guardiancouplings.com

Huco
www.huco.com

Lamiflex Couplings
www.lamiflexcouplings.com

Stromag
www.stromag.com

TB Wood’s
www.tbwoods.com

Linear Systems
Thomson
www.thomsonlinear.com

Warner Linear
www.warnerlinear.com

Geared Cam Limit Switches
Stromag
www.stromag.com

Engineered Bearing Assemblies
Kilian
www.kilianbearings.com

Electric Clutches & Brakes
Matrix
www.matrix-international.com

Stromag
www.stromag.com

 Warner Electric
www.warnerelectric.com

Deltran
www.thomsonlinear.com

Belted Drives
TB Wood’s
www.tbwoods.com

Heavy Duty Clutches & Brakes
Twiflex
www.twiflex.com

Stromag
www.stromag.com

Svendborg Brakes
www.svendborg-brakes.com

Wichita Clutch
www.wichitACLutch.com

Gearing & Specialty Components
Bauer Gear Motor
www.bauergears.com

Boston Gear
www.bostongear.com

Delevan
www.delevan.com

Delroyd Worm Gear
www.delroyd.com

Nuttall Gear
www.nuttallgear.com

Engine Braking Systems
Jacobs Vehicle Systems
www.jacobsvehiclesystems.com

Precision Motors & Automation
Kollmorgen
www.kollmorgen.com

Miniature Motors
Portescap
www.portescap.com

Overrunning Clutches
Formsprag Clutch
www.formsprag.com

Marland Clutch
www.marland.com

Steiber
www.stieberclutch.com

Neither the accuracy nor completeness of the information contained in this publication is guaranteed by the company and may be subject to change in its sole discretion. The operating and performance characteristics of these products may vary depending on the application, installation, operating conditions and environmental factors. The company’s terms and conditions of sale can be viewed at http://www.altramotion.com/terms-and-conditions/sales-terms-and-conditions. These terms and conditions apply to any person who may buy, acquire or use a product referred to herein, including any person who buys from a licensed distributor of these branded products.

©2019 by TB Wood’s LLC. All rights reserved. All trademarks in this publication are the sole and exclusive property of TB Wood’s LLC or one of its affiliated companies.