## BB86-OUT for SHIMANO PART LIST

<table>
<thead>
<tr>
<th>Item #</th>
<th>Part #</th>
<th>Description</th>
<th>QTY Included</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>BB86OUTSIDEA</td>
<td>RIGHT BB86-OUT CUP</td>
<td>1</td>
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<tr>
<td>2</td>
<td>BB86OUTSIDEB</td>
<td>LEFT BB86-OUT CUP</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>SB-24X37ACZ</td>
<td>24X37X7 ANGULAR CONTACT SEALED BEARING</td>
<td>1</td>
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<tr>
<td>4</td>
<td>24MMSEAL</td>
<td>24MM OUTER SILICONE SEAL</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>BB-24MM-0.5Z</td>
<td>0.5MM SHIM FOR 24MM BB SPINDLE</td>
<td>2</td>
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<tr>
<td></td>
<td>BB-24MM-1.0Z</td>
<td>1MM SHIM FOR 24MM BB SPINDLE</td>
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### TECHNICAL NOTES:

- **BB86-OUT for SHIMANO** — Angular Contact Bearings

### Recommended tools:

- PRESS-1 or PRESS-4
- One BB86-OB-24 drift and one 2437OB drift
- Outboard bottom bracket cup tool (16-notch BB tool - 48.5mm OD) - Park Tool BBT-29
- Grease
- PTFE (Carbon BB Shell)
- Anti-Seize Compound (Titanium BB Shell)
IMPORTANT: DO NOT use any brand bearing retaining compounds or epoxies during installation, use of which will void any warranty.

Thoroughly clean the bottom bracket shell. Apply a thin layer of high quality grease, PTFE or anti-seize compound to mating surfaces before installation. Use the correct compound for your BB shell material!

- Steel and aluminum BB shells - Grease
- Carbon BB Shell - PTFE (Teflon)
- Titanium BB Shell - Anti-Seize Compound

1. Thoroughly clean the bottom bracket shell. Do Not install cups dry. Apply a thin layer of high quality grease, PTFE or anti-seize compound to inside surface of the shell.

- Steel and Aluminum BB Shells - Grease
- Carbon BB Shell - PTFE (Teflon)
- Titanium BB Shell - Anti-Seize Compound

2. Apply a thin layer of high quality grease, PTFE or anti-seize compound to BB cup surface.

- Steel and Aluminum BB Shells - Grease
- Carbon BB Shell - PTFE (Teflon)
- Titanium BB Shell - Anti-Seize Compound

3. Insert drive side cup into frame.

4. Use PRESS-1 or PRESS-4 with one 2437 bearing drift (drive side) and one BB86-OB-24 drift (non-drive side) to press cup into frame. Fully tighten until cup is flush with the frame.

5. Apply grease to threads. Do not use thread locking compound, PTFE or anti-seize on the threads.

Applying a thin layer of grease, PTFE or anti-seize compound to non-drive side cup outer surface.

6. Insert non-drive side cup into frame by hand until threads begin to engage. Pay careful attention to not cross-thread cups.
**TECHNICAL NOTES: BB86-OUT for SHIMANO**

**Angular Contact Bearings**

7. Using 16 notch wrench (48.5mm), fully tighten cup. Approximate torque 35-50Nm.

8. Install right crank arm, making sure outer dust seal is installed.

9. Make sure outer dust seal is in place before installing left crank arm.

10. Install left crank arm, tighten crank to manufacturer specifications.

11. Add spacers as necessary to take up any play. Remove spacers as necessary if binding occurs.

**NOTE:** Due to the wide variety of frame manufacturers, Wheels Manufacturing cannot guarantee compatibility with all frames. Please consult with your specific frame manufacturer before installation. Wheels Manufacturing is not responsible for damage done to your frame as a result of installation or use of this product.

**IMPORTANT: Wheels Mfg Limited Warranty**

Wheels Mfg PressFit components, excluding Enduro bearings are warranted for a period of 2 years. Enduro warrants its 24x37 angular contact bearings and 24x37 ceramic bearings for a period of 1 year to be free of defects in workmanship or materials. Excessive exposure to environmental elements or improper installation or removal voids warranty. Do not wash the bottom bracket area with high-pressure jets of water. Do not remove or install bearings in or out of cups with a hammer! Do not install bearings in cups by pressing on inner bearing race, bearing damage will result. Failure to use proper installation and removal tools will damage bearings and greatly reduce bearing life.