Thanks for purchasing a Problem Solvers Handlebar Shim. This shim will add thickness to a smaller diameter handlebar and make it fit with a larger diameter clamping stem.

**WARNING:** CYCLING CAN BE DANGEROUS. BICYCLE PRODUCTS SHOULD BE INSTALLED AND SERVICED BY A PROFESSIONAL MECHANIC. NEVER MODIFY YOUR BICYCLE OR ACCESSORIES. READ AND FOLLOW ALL PRODUCT INSTRUCTIONS AND WARNINGS INCLUDING INFORMATION ON THE MANUFACTURER'S WEBSITE. INSPECT YOUR BICYCLE BEFORE EVERY RIDE. ALWAYS WEAR A HELMET.

For additional technical and safety information, visit: www.problemsolversbike.com/safety

### COMPATIBILITY

Problem Solvers handlebar shims are available in the following combinations:

<table>
<thead>
<tr>
<th>Part #</th>
<th>Handlebar Clamp Size</th>
<th>Stem Clamp Size</th>
<th>Shim Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM3002</td>
<td>22.2mm</td>
<td>25.4mm</td>
<td>38mm</td>
</tr>
<tr>
<td>SM1070</td>
<td>25.4</td>
<td>26.0</td>
<td>35</td>
</tr>
<tr>
<td>SM1071</td>
<td>25.4</td>
<td>26.0</td>
<td>45</td>
</tr>
<tr>
<td>SM5316</td>
<td>25.4</td>
<td>31.8</td>
<td>44</td>
</tr>
<tr>
<td>SM5317</td>
<td>26.0</td>
<td>31.8</td>
<td>44</td>
</tr>
<tr>
<td>SM5319</td>
<td>31.8</td>
<td>35.0</td>
<td>53</td>
</tr>
</tbody>
</table>

Problem Solvers handlebar shims are NOT compatible with carbon handlebars and/or stems. Check with handlebar and/or stem manufacturer for shim compatibility.

### TOOLS REQUIRED

- Allen and Torx wrenches (as required by the stem manufacturer)
- Torque wrench
- Grease

### INSTALLATION:

1. Loosen and remove the stem bolt(s) that tighten the stem clamp around the handlebar. For a stem with a removable faceplate, remove the faceplate.
2. Place the Problem Solvers handlebar shim over the handlebar’s clamping area in the middle of the handlebar.
3. The gaps between the two shim pieces top, bottom and sides must be evenly spaced for adequate clamping force. (figure 1)
4. Grease the threads of the stem clamping bolts and reinstall.
5. Tighten the bolts to the stem manufacturer’s torque specification.
6. Check to make sure the gaps at the top, bottom, and sides of the stem faceplate are evenly spaced.

### ONGOING MAINTENANCE

Periodically check to make sure all stem attachment bolts are properly torqued to the stem manufacturer’s specifications.

### A LIMITED 2-YEAR WARRANTY

PROBLEM SOLVERS™ warrants this new PROBLEM SOLVERS product against defects in materials and workmanship for two (2) years from the original date of retail purchase by the consumer. This limited warranty is expressly limited to the repair or replacement of the original product, at the option of PROBLEM SOLVERS, and is the sole remedy of the warranty. This limited warranty applies only to the original purchaser of the PROBLEM SOLVERS product and is not transferable.

In no event shall PROBLEM SOLVERS be liable for any loss, inconvenience or damage, whether direct, incidental or consequential or otherwise resulting from breach of any express or implied warranty or condition of merchantability, fitness for a particular purpose, or otherwise with respect to this product except as set forth herein. This warranty gives the consumer specific legal rights, and those rights and other rights may vary from state to state.

This warranty does not cover the following:

- Damage due to improper assembly or follow-up maintenance or lack of skill, competence or experience of the end user
- Products that have been modified, neglected, used in competition or for commercial purposes, misused or abused, involved in accidents or anything other than normal use
- Installation of components, parts, or accessories not originally intended for or compatible with Problem Solvers product
- Damage or deterioration to the surface finish, aesthetics or appearance of the product
- Normal wear and tear
- Labor required to remove and/or refit and re-adjust the product within the bicycle assembly

TO THE EXTENT NOT PROHIBITED BY LAW, THESE WARRANTIES ARE EXCLUSIVE AND THERE ARE NO OTHER EXPRESS OR IMPLIED WARRANTIES OR CONDITIONS INCLUDING WARRANTIES OR CONDITIONS OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

Figure 1