## Parts List

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Size/Specifications</th>
<th>QTY/Post</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Bracket, Type AS4</td>
<td>6061-T6 Aluminum</td>
<td>2</td>
<td>SBMAS4**</td>
</tr>
<tr>
<td>2a</td>
<td>Bolt</td>
<td>12.7mm(1/2&quot;) x 15UNC x 184mm(7-1/4&quot;), Hex Head, ASTM A325, Galv. ASTM A153</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2b</td>
<td>Lock Washer</td>
<td>12.7mm(1/2&quot;), ANS1 B18-21-1, Galv. ASTM A153</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>2c</td>
<td>Nut</td>
<td>12.7mm(1/2&quot;) x 15UNC, Heavy Hex, ASTM A563 Gr. D, Galv. ASTM A153</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>3a</td>
<td>Special Bolt</td>
<td>15.9mm(5/8&quot;) - 11UNC, ASTM A449, Galv. ASTM A153/B695</td>
<td>4</td>
<td>SBS-CALP</td>
</tr>
<tr>
<td>3b</td>
<td>Coupling</td>
<td>15.9mm(5/8&quot;) - 11UNC, LP, AMS 6378D, Galv. ASTM A153, Polyester Coat</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>3c</td>
<td>Shim</td>
<td>15.9mm(5/8&quot;)</td>
<td>Horsehoe, 14 Gauge, Galv. Steel Sheet</td>
<td>2</td>
</tr>
<tr>
<td>3d</td>
<td>Shim</td>
<td>15.9mm(5/8&quot;)</td>
<td>Horsehoe, 18 Gauge, Galv. Steel Sheet</td>
<td>2</td>
</tr>
<tr>
<td>4a</td>
<td>Anchor</td>
<td>15.9mm(5/8&quot;) - 11UNC, 504 S.S. Ferrule, AISI 1038 Rod, AISI 1008 Coll</td>
<td>4</td>
<td>SBAAPK</td>
</tr>
</tbody>
</table>

*Complete assembly includes line items 1–3

## General Notes:


2. Break-Safe Model AS4 is designed to fit 89 mm (3-1/2") and 102 mm (4") steel or aluminum square tube signposts.

3. All hardware items are American Standard sizes, galvanized in accordance with ASTM A153 (hot dipped) or ASTM B695 (mechanically applied).

4. Fasteners, except for special bolt and coupling, are installed with lockwashers, and do not have specific torque requirements. Fasteners should be secured as tight as possible with conventional wrenches, unless noted otherwise.

5. Square-up and level individual components, particularly Anchors to minimize the need for shimminng between the Couplings and Anchors.

6. No more than two shims shall be placed under any one coupling. No more than three shims underneath any pair of couplings.

7. Refer to other side of page for complete installation instructions.
INSTALLATION INSTRUCTIONS

ANCHOR ASSEMBLY:

Note: Precise positioning of the anchors is critical to proper assembly of the system. It is recommended that actual posts be used to locate the correct position of the anchors.

1. Fabricate a flat, rigid template with four (4) 16mm (5/8") diameter holes located to match the specified anchor pattern of the Break-Safe Brackets attached to the signpost. See diagram below.

2. Attach four (4) Transpo Type A Female Anchors to the template using four (4) 16mm (5/8") diameter bolts. Ensure that each Anchor Washer is snug against the bottom of the template.

3. Lower Anchor Assembly into fresh concrete foundation, and vibrate into position such that the tops of the Anchor Washers are flush with the finished top surface of the foundation. Support the template such that all Anchors are level and in their proper locations.

4. Allow concrete to cure, and then remove the bolts and template from the top of the foundation.

BRACKET ASSEMBLY:

1. Drill eight (8) 14.3mm (9/16") diameter holes in the bottom end of the post section as shown.

2. Place Brackets squarely on outer surface of the post, and secure with bolts, lock washers, and nuts. Then, tighten all 1/2 turn beyond snug.

COUPLING ASSEMBLY:

1. Thread four (4) Break-Safe Couplings into Anchors. Do not tighten.

2. Suspend post assembly over foundation, insert Special Bolts through holes in the Brackets, and thread them snug into the Couplings.

3. If post is not plumb, insert Shims (14g and/or 18g) between the Couplings and Anchors, where needed.

4. Use lower wrench flats to tighten Couplings into Anchors as tight as possible using a conventional wrench. Do not use a pipe wrench. Couplings must be seated securely.

5. Tighten Special Bolts while holding Couplings by the upper wrench flats with an additional wrench to prevent an induced torque stress across the necked portion of the Coupling. All Special Bolts shall also be tightened as tight as possible using conventional wrenches.

SIGN PANEL ASSEMBLY:

1. After all signposts are secured in place, attach sign panel assembly to posts in accordance with the sign manufacturer's recommendations.

PLAN VIEW OF TYPICAL FOUNDATION

Direction of Traffic

- Anchor
- Post (Brackets not shown)
- Depth of Post + 94mm (3-11/16")

- 108mm (4-1/4")
- 54mm (2-1/8")

14.3mm (9/16")
17.7mm (11/16")
54.6mm (2-1/8")
54.6mm (2-1/8")
32.4mm (1-3/8")
102mm (4")
74mm (2-7/8")

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Break-Safe Model AS4
Breakaway Support System for Sign Posts

Patent Nos. 4,528,786 and 5,598,845

Scale: Not To Scale
Date: March 2013
Drawing No. BS-AS4-2
Sheet: 2 of 2

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