INTRODUCTION
The following instructions cover the disassembly and re-assembly of the ANR-210 Pinion Adjustment Assembly used in Sunnen® AN-Sytle Hone Heads.

TOOLS & MATERIALS
The following tools and materials are required for repairing the ANR-210:
- Hex Wrench (3/32)
- Mini-torch
- Small Pry Tool
- VIS-90 or other high pressure grease
- Loctite 242 or equivalent removable grade thread lock

DISASSEMBLY
Disassemble Pinion (ANR210) as follows:
1. Remove Pinion (ANR210) from Hone Head (see Figure 1).
2. Remove Thrust Disc (4) with Small Pry Tool (see Figure 2).
3. Remove Button Head Capscrew (5) as follows:
   - Heat screw to 400 degrees F max. Any more and this could cause other components to fail in use. (SUNNEN PRODUCTS COMPANY IS NOT RESPONSIBLE FOR FAILED COMPONENTS AFFECTED BY EXCESSIVE HEAT.)
   - Then remove Button Head Capscrew (4) using 3/32 Hex Wrench. Lay aside for reuse during re-assembly.
4. Remove Spring Washer (5) and Flatwashers (6 & 7). Lay aside for reuse during re-assembly.
5. Slide Adjusting Cam (2) off Ring & Pinion Gear Assembly (1).
6. Inspect items for signs of wear and / or damage and replace as required.

REASSEMBLY
Reassemble Pinion (ANR210) as follows (see Figure 3):
1. Clean and degrease Capscrew (4) and internal threads in shaft of Pinion Gear Assembly (1b).
2. Lubricate mating surfaces of Ring & Pinion Gear Assembly (1) and Adjusting Cam (2).
   - Then slide Adjusting Cam on to Ring & Pinion Gear Assembly; making sure not to get grease in the screw threads of Adjusting Cam.
3. Reinstall required Flatwashers (6 & 7) and Spring Washer (5), removed in step 4 above.
4. Place Loctite 242 on Capscrew (4) threads and install into assembly and tighten to 23 +/- 2 in-lb.
5. Reinstall Thrust Disc (4).

6. Check Dust Guard (AN3) and Body Gear (AN2) in AN Hone Head, for signs of wear or damage (see Figure 4). Replace as required.

**CAUTION**
AN210 Pinion and/or Hone Head may not function properly if Body Gear are worn or damaged.

7. Re-install Pinion (ANR210) in AN Hone Head.

**NOTICE**
When installed Pinion in AN Hone Head, torque to turn Adjusting Cam (2) should be between 4 & 10 in-lb.

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**ANR210 PINION ADJUSTMENT ASSEMBLY**

<table>
<thead>
<tr>
<th>ITEM #</th>
<th>PART #</th>
<th>QTY</th>
<th>DESCRIPTION</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>ANR210A</td>
<td>Ref.</td>
<td>Ring &amp; Pinion Gear Assembly includes</td>
</tr>
<tr>
<td>1a</td>
<td>AN12</td>
<td>1</td>
<td>Ring Gear Assembly</td>
</tr>
<tr>
<td>1b</td>
<td>ANR215</td>
<td>1</td>
<td>Pinion Gear Assembly</td>
</tr>
<tr>
<td>2</td>
<td>ANR218</td>
<td>1</td>
<td>Adjusting Cam</td>
</tr>
<tr>
<td>3</td>
<td>ANR219</td>
<td>1</td>
<td>Thrust Disc</td>
</tr>
<tr>
<td>4</td>
<td>PHS778</td>
<td>1</td>
<td>Screw (#8-32 x 1 1/4 BHCS)</td>
</tr>
<tr>
<td>5</td>
<td>PHW178</td>
<td>1</td>
<td>Spring Washer</td>
</tr>
<tr>
<td>6</td>
<td>PHW179</td>
<td>4</td>
<td>Flatwasher</td>
</tr>
<tr>
<td>7</td>
<td>PHW180</td>
<td>1</td>
<td>Flatwasher</td>
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</tbody>
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