SCOPE:
The Blackmer System One back cover/seal chambers allow the use of an oversized seal chamber with a tangential flush on the Durco MKII GRPII. Obstruction distances from the back cover/seal chamber face for the 10” and 13” back covers vary because of tangential flush access. They are as follows:

<table>
<thead>
<tr>
<th>Obstruction</th>
<th>10”</th>
<th>13”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deflector</td>
<td>2.38</td>
<td>2.61</td>
</tr>
<tr>
<td>Labyrinth Seal</td>
<td>2.28</td>
<td>2.51</td>
</tr>
<tr>
<td>Frame Adapter</td>
<td>2.48</td>
<td>2.71</td>
</tr>
</tbody>
</table>

Part Numbers:

- **Back Cover/Seal Chamber Assembly**
  - 316SS 10” #99239
  - 316SS 13” #99240

- **Optional Throat Bushing Assembly**
  - Carbon #99247

- **Optional Labyrinth Seals**
  - Thrust End 1 1/8” #98775
  - Radial End 1 7/8” #98781

DISASSEMBLY:
1. Remove the existing casing, impeller and back cover.
2. If labyrinth seals are being installed, remove the frame adapter, thrust bearing cover, and radial and thrust lip seals.

ASSEMBLY:
1. If labyrinth seals are being used, break the sharp edges on the housing bores with a round file. Install the labyrinth seals using the instructions provided. Assemble the frame adapter back into place.
2. Refer to the mechanical seal installation instructions provided with the seal. Select the appropriate O-ring material and replace, if necessary.
3. Slide the seal onto the pump shaft.
4. If the carbon throat bushing is being used, install the compatible -149 o-ring on the O.D. and lubricate it. Slide the bushing into the impeller side of the back cover/seal chamber, and insert the retaining ring into its groove.
5. Assemble the back cover/seal chamber assembly to the frame adapter using the two (2) nuts provided.
6. Screw the impeller onto the pump shaft.
7. Check the impeller clearance between the impeller and back cover face. The clearance should .015” minimum, adjust if necessary. Assemble the thrust cover and recheck impeller clearance again.
8. Assemble the casing to the pump using the gasket provided.
9. Assemble the mechanical seal to the back cover/seal chamber using the mechanical seal installation instructions.