Surgical Technique
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1. Patient Positioning and Approach:
The patient is positioned supine with appropriate padding to protect pressure points and peripheral nerves. A bolster or lift may be placed beneath the mid-lumbar spine to increase lordosis, if desired. Fluoroscopy may be utilized to identify anatomical landmarks for precise placement of the abdominal incision.

2. Intervertebral Device Implanted:
Intervertebral device of choice is implanted in disc space. (Figure 1)

3. Buttress Plate Selection:
After discectomy and intervertebral device is implanted, the Buttress Plate height is determined intraoperatively. Once the Buttress Plate height is selected, attach the RCS Buttress Inserter Tool (22-9001) onto the Buttress Plate and insert onto the vertebral body. (Figure 2)

4. Awl Insertion:
The Awl (22-9002) is inserted through the Guide hole until the Awl bottoms out. (Figure 3 and 4)
5. Screw Insertion:
Attach Screw onto Screwdriver (22-9003) and insert the Screw through the Guide hole until the Screw is fully seated. (Figure 5 and 6)

6. Final Position:
See correct final positioning (Figure 7)

7. Plate Removal:
Attach Guide to Buttress Plate and insert Screwdriver (22-9003) through the Guide and back out Screw. Then pull Guide back and it will pull Plate out. (Figure 8)
**Description:**

The Precision Spine™ RCS™ Anterior Buttress Plate System is a temporary implant used to prevent allograft or autograft extrusion. The Precision Spine RCS Anterior Buttress Plate System consists of plates and bone screws. The Precision Spine RCS Anterior Buttress Plate System is also intended to provide stabilization and augment development of a solid spinal fusion. The Precision Spine RCS Anterior Buttress Plate System fixes to the anterior portion of the thoracolumbar vertebral body. The construct may be employed alone or with other anterior, anterolateral, or posterior spinal systems made of compatible materials. All components are made from medical grade titanium or titanium alloy described by such standards as ASTM F136 or ISO5832-3. The products are supplied clean and “NON-STERILE”. SINGLE USE ONLY.

**Indications:**

The Precision Spine RCS Anterior Buttress Plate System is intended to stabilize the allograft or autograft at one level (T1-S1) as an aid to spinal fusion and to provide temporary stabilization and augment development of a solid spinal fusion. It may be used alone or with other anterior, anterolateral, or posterior spinal systems made of compatible materials. This device is not intended for load bearing applications.

**Contraindications:**

The Precision Spine RCS Anterior Buttress Plate System contraindications include, but are not limited to:

1. Loss of proper spinal curvature, correction, height, and/or reduction
2. Infection
3. Nonunion or delayed union
4. Foreign body reaction to the implants
5. Hemorrhaging
6. Loss of neurological function, dural tear, pain, and/or discomfort
7. Bone graft fracture, vertebral body fracture or discontinued growth of fusion at, above and/or below the surgery level
8. Bending, loosening, fracture, disassembly, slippage and/or migration of the components
9. Pain or discomfort
10. Change in mental status
11. Bursitis
12. Bone loss and/or bone fracture due to stress shielding
13. Inability to resume normal daily activities
14. Revision surgery
15. Death

**Potential Adverse Affects:**

The following potential adverse affects associated with the procedure have been shown to occur with the use of similar spinal systems. All patients considered candidates for fusion should be informed concerning the pathogenesis of their spinal abnormality, the rationale for fusion with instrumentation, and the potential adverse affects. The following are potential adverse affects, but not limited to:

1. Loss of proper spinal curvature, correction, height, and/or reduction
2. Infection
3. Nonunion or delayed union
4. Foreign body reaction to the implants
5. Hemorrhaging
6. Loss of neurological function, dural tear, pain, and/or discomfort
7. Bone graft fracture, vertebral body fracture or discontinued growth of fusion at, above and/or below the surgery level
8. Bending, loosening, fracture, disassembly, slippage and/or migration of the components
9. Pain or discomfort
10. Change in mental status
11. Bursitis
12. Bone loss and/or bone fracture due to stress shielding
13. Inability to resume normal daily activities
14. Revision surgery
15. Death

**Precautions:**

The implantation of the Precision Spine RCS Anterior Buttress Plate System should be performed only by experienced spinal surgeons with specific training in the use of this device because this is a technically demanding procedure presenting a risk of serious injury to the patient. The Precision Spine RCS Anterior Buttress Plate has not been evaluated for safety and compatibility in the MR environment. The Precision Spine RCS Anterior Buttress Plate has not been tested for heating or migrations in the MR environment.
### Implants

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>22-1001-25</td>
<td>RCS Buttress Plate 25mm</td>
</tr>
<tr>
<td>22-1001-30</td>
<td>RCS Buttress Plate 30mm</td>
</tr>
<tr>
<td>22-5520</td>
<td>Self Drilling Screw 5.5mm x 20mm</td>
</tr>
<tr>
<td>22-5525</td>
<td>Self Drilling Screw 5.5mm x 25mm</td>
</tr>
<tr>
<td>22-5530</td>
<td>Self Drilling Screw 5.5mm x 30mm</td>
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<tr>
<td>22-5535</td>
<td>Self Drilling Screw 5.5mm x 35mm</td>
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</tbody>
</table>

### Instruments

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Description</th>
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<tbody>
<tr>
<td>21-1050</td>
<td>Sterilization Tray</td>
</tr>
<tr>
<td>22-9001</td>
<td>RCS Buttress Inserter Tool</td>
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<tr>
<td>22-9002</td>
<td>RCS Buttress Awl</td>
</tr>
<tr>
<td>22-9003</td>
<td>RCS Buttress Screwdriver Straight</td>
</tr>
<tr>
<td>PSSRS</td>
<td>Ratchet Straight (used with 22-9003)</td>
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