



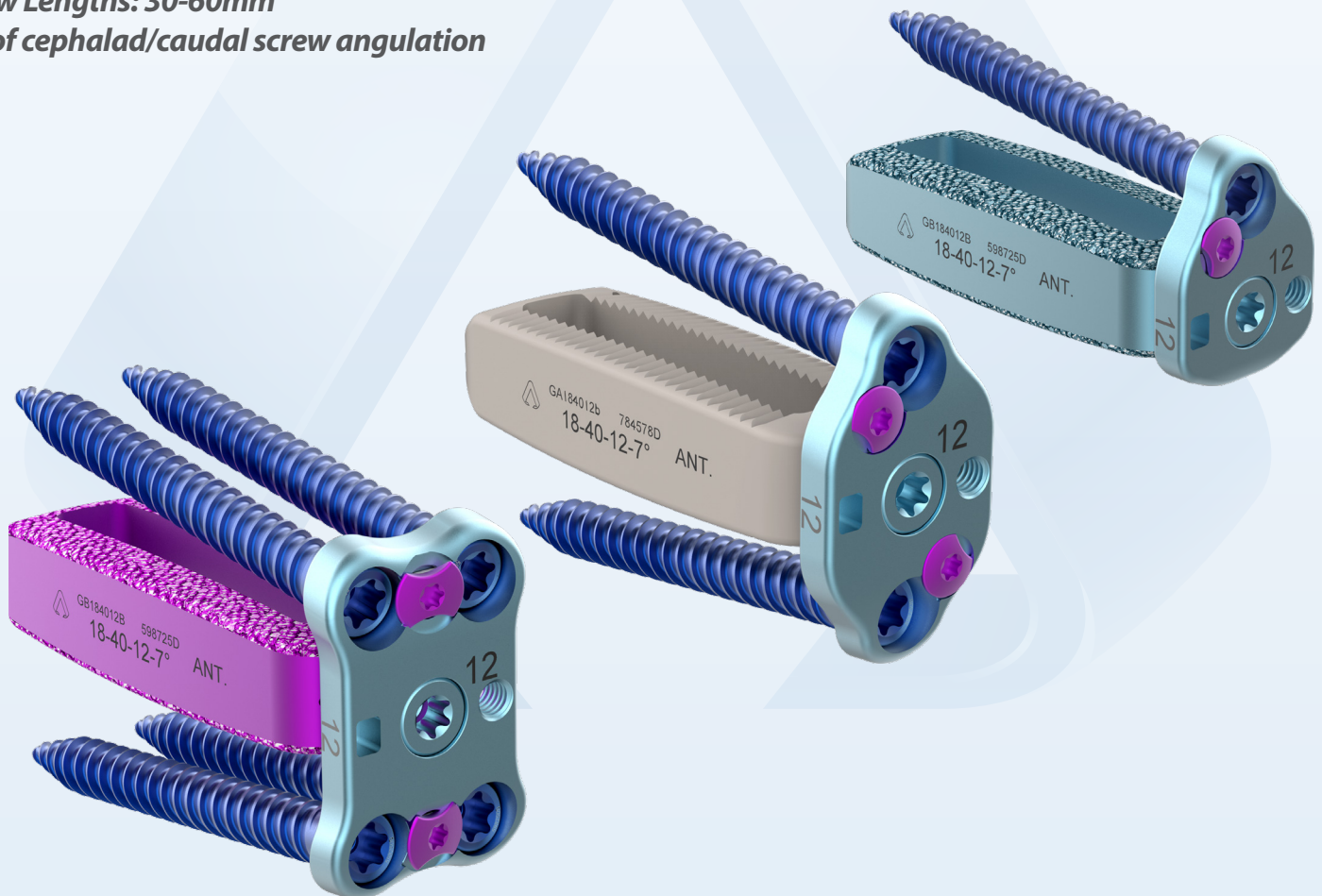
# SIRION

LATERAL LUMBAR INTERBODY FUSION



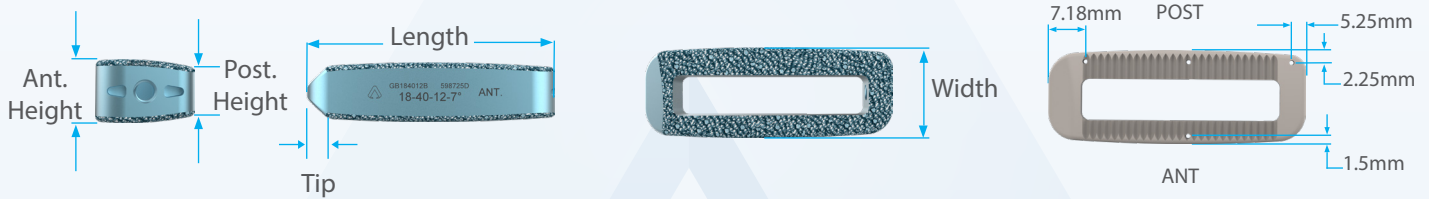
*The SIRION Lateral Lumbar Interbody Fusion System by ASTURA MEDICAL is a comprehensive system that provides a complete range of anatomic spacers and fixation options for rigid lateral stabilization. The intuitive design of the system provides the versatility to accommodate a wide array of anatomical challenges to ensure an efficient, streamlined procedural sequence.*

- All SIRION Spacers are available in Acid-Etched Titanium or HA PEEK
- Interchangeable plate and interbody spacer options
- One, Two, or Four Hole Plates
- 5.5 & 6.0mm Screws
- Screw Lengths: 30-60mm
- 15° of cephalad/caudal screw angulation



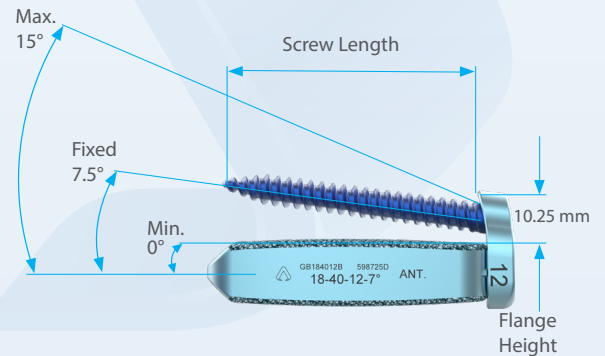
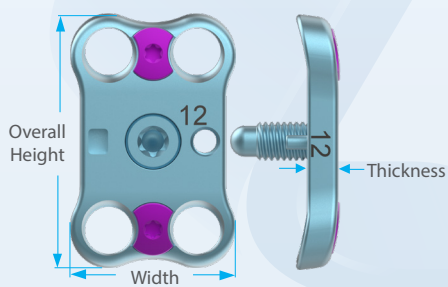
## SPACER SIZING

|                      | Width (mm) | Length (mm)    | Tip (mm) | Ant. Heights (mm) | Post. Heights (mm) | Lordosis      |
|----------------------|------------|----------------|----------|-------------------|--------------------|---------------|
| Standard Spacer      | 18 or 22   | 45, 50, 55, 60 | 5        | 7,8,10,12,14,16   |                    | 7° or 15°     |
| Hyperlordotic Spacer | 18 or 22   | 45, 50, 55, 60 | 5        |                   | 2,4,6,8,10         | 20°, 25°, 30° |



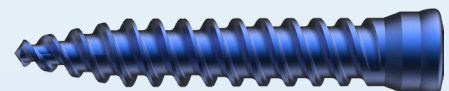
## PLATE TYPES AND SIZING

|        | Type     | Plate Size (mm)              | Overall Height (mm)                                                                          | Width (mm) | Thickness (mm) |
|--------|----------|------------------------------|----------------------------------------------------------------------------------------------|------------|----------------|
| 1 Hole | Attached | 8, 10, 12, 14, 16, 18, 20    | (8) 19.25, (10) 21.25, (12) 23.25, (14) 25.25, (16) 27.25, (18) 29.25, (20) 31.25            | 18.5       | 4              |
|        | Detached | 7, 8, 10, 12, 14, 16, 18, 20 | (7) 18.25, (8) 19.25, (10) 21.25, (12) 23.25, (14) 25.25, (16) 27.25, (18) 29.25, (20) 31.25 |            |                |
| 2 Hole | Attached | 8, 10, 12, 14, 16, 18, 20    | (8) 28.51, (10) 30.51, (12) 32.51, (14) 34.51, (16) 36.51, (18) 38.51, (20) 40.51            | 18.5       | 4              |
|        | Detached | 7, 8, 10, 12, 14, 16, 18, 20 | (7) 27.51, (8) 28.51, (10) 30.51, (12) 32.51, (14) 34.51, (16) 36.51, (18) 38.51, (20) 40.51 |            |                |
| 4 Hole | Attached | 8, 10, 12, 14, 16, 18, 20    | (8) 28.51, (10) 30.51, (12) 32.51, (14) 34.51, (16) 36.51, (18) 38.51, (20) 40.51            | 21         | 4              |
|        | Detached | 7, 8, 10, 12, 14, 16, 18, 20 | (7) 27.51, (8) 28.51, (10) 30.51, (12) 32.51, (14) 34.51, (16) 36.51, (18) 38.51, (20) 40.51 |            |                |



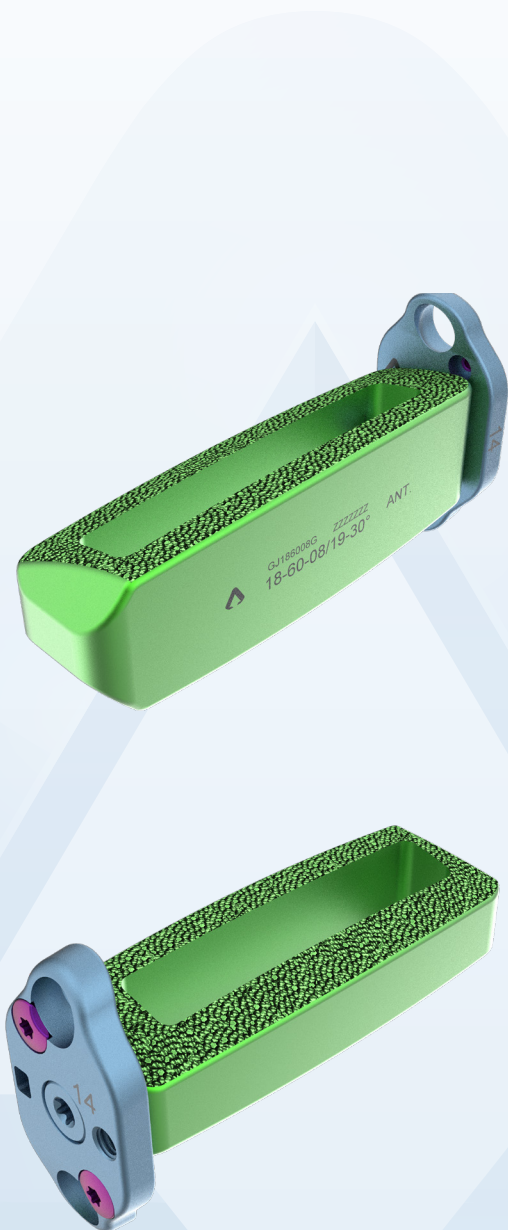
## SCREW TYPES AND SIZING

|               | Constraint | Diameters (mm) | Lengths (mm) |
|---------------|------------|----------------|--------------|
| Self-Drilling | Variable   | 5.5 or 6.0     | 30-60        |



| PLATE TYPES AND SIZING |            |        |        |
|------------------------|------------|--------|--------|
| Spacer Size            | Plate Size |        |        |
|                        | 1 HOLE     | 2 HOLE | 4 HOLE |
| 18 x 45 x 07 x 7°      | 07*        | 07*    | 07*    |
| 18 x 45 x 08 x 7°      | 08         | 08     | 08     |
| 18 x 45 x 10 x 7°      | 10         | 10     | 10     |
| 18 x 45 x 12 x 7°      | 12         | 12     | 12     |
| 18 x 45 x 14 x 7°      | 14         | 14     | 14     |
| 18 x 45 x 16 x 7°      | 16         | 16     | 16     |
| 18 x 50 x 07 x 7°      | 07*        | 07*    | 07*    |
| 18 x 50 x 08 x 7°      | 08         | 08     | 08     |
| 18 x 50 x 10 x 7°      | 10         | 10     | 10     |
| 18 x 50 x 12 x 7°      | 12         | 12     | 12     |
| 18 x 50 x 14 x 7°      | 14         | 14     | 14     |
| 18 x 50 x 16 x 7°      | 16         | 16     | 16     |
| 18 x 55 x 07 x 7°      | 07*        | 07*    | 07*    |
| 18 x 55 x 08 x 7°      | 08         | 08     | 08     |
| 18 x 55 x 10 x 7°      | 10         | 10     | 10     |
| 18 x 55 x 12 x 7°      | 12         | 12     | 12     |
| 18 x 55 x 14 x 7°      | 14         | 14     | 14     |
| 18 x 55 x 16 x 7°      | 16         | 16     | 16     |
| 18 x 60 x 07 x 7°      | 07*        | 07*    | 07*    |
| 18 x 60 x 08 x 7°      | 08         | 08     | 08     |
| 18 x 60 x 10 x 7°      | 10         | 10     | 10     |
| 18 x 60 x 12 x 7°      | 12         | 12     | 12     |
| 18 x 60 x 14 x 7°      | 14         | 14     | 14     |
| 18 x 60 x 16 x 7°      | 16         | 16     | 16     |
| 18 x 45 x 7 x 12°      | 07*        | 07*    | 07*    |
| 18 x 45 x 8 x 15°      | 08         | 08     | 08     |
| 18 x 45 x 10 x 15°     | 10         | 10     | 10     |
| 18 x 45 x 12 x 15°     | 12         | 12     | 12     |
| 18 x 45 x 14 x 15°     | 14         | 14     | 14     |
| 18 x 45 x 16 x 15°     | 16         | 16     | 16     |
| 18 x 50 x 7 x 12°      | 07*        | 07*    | 07*    |
| 18 x 50 x 8 x 15°      | 08         | 08     | 08     |
| 18 x 50 x 10 x 15°     | 10         | 10     | 10     |
| 18 x 50 x 12 x 15°     | 12         | 12     | 12     |
| 18 x 50 x 14 x 15°     | 14         | 14     | 14     |
| 18 x 50 x 16 x 15°     | 16         | 16     | 16     |
| 18 x 55 x 7 x 12°      | 07*        | 07*    | 07*    |
| 18 x 55 x 8 x 15°      | 08         | 08     | 08     |
| 18 x 55 x 10 x 15°     | 10         | 10     | 10     |
| 18 x 55 x 12 x 15°     | 12         | 12     | 12     |
| 18 x 55 x 14 x 15°     | 14         | 14     | 14     |
| 18 x 55 x 16 x 15°     | 16         | 16     | 16     |
| 18 x 60 x 7 x 12°      | 07*        | 07*    | 07*    |
| 18 x 60 x 8 x 15°      | 08         | 08     | 08     |
| 18 x 60 x 10 x 15°     | 10         | 10     | 10     |
| 18 x 60 x 12 x 15°     | 12         | 12     | 12     |
| 18 x 60 x 14 x 15°     | 14         | 14     | 14     |
| 18 x 60 x 16 x 15°     | 16         | 16     | 16     |

\* Detached Plate Only



| PLATE TYPES AND SIZING |            |        |        |
|------------------------|------------|--------|--------|
| Spacer Size            | Plate Size |        |        |
|                        | 1 HOLE     | 2 HOLE | 4 HOLE |
| 18 x 45 x 02/10 x 20°  | 08         | 08     | 10     |
| 18 x 45 x 02/11 x 25°  | 10         | 10     | 18     |
| 18 x 45 x 02/13 x 30°  | 10         | 10     | 12     |
| 18 x 45 x 04/12 x 20°  | 08         | 08     | 10     |
| 18 x 45 x 04/13 x 25°  | 10         | 10     | 12     |
| 18 x 45 x 04/15 x 30°  | 10         | 10     | 12     |
| 18 x 45 x 06/14 x 20°  | 10         | 10     | 12     |
| 18 x 45 x 06/15 x 25°  | 12         | 12     | 14     |
| 18 x 45 x 06/17 x 30°  | 12         | 12     | 14     |
| 18 x 45 x 08/16 x 20°  | 12         | 12     | 14     |
| 18 x 45 x 08/17 x 25°  | 14         | 14     | 16     |
| 18 x 45 x 08/19 x 30°  | 14         | 14     | 16     |
| 18 x 45 x 10/18 x 20°  | 14         | 14     | 16     |
| 18 x 45 x 10/19 x 25°  | 16         | 16     | 18     |
| 18 x 45 x 10/21 x 30°  | 16         | 16     | 18     |
| 18 x 50 x 02/10 x 20°  | 08         | 08     | 10     |
| 18 x 50 x 02/11 x 25°  | 10         | 10     | 18     |
| 18 x 50 x 02/13 x 30°  | 10         | 10     | 12     |
| 18 x 50 x 04/12 x 20°  | 08         | 08     | 10     |
| 18 x 50 x 04/13 x 25°  | 10         | 10     | 12     |
| 18 x 50 x 04/15 x 30°  | 10         | 10     | 12     |
| 18 x 50 x 06/14 x 20°  | 10         | 10     | 12     |
| 18 x 50 x 06/15 x 25°  | 12         | 12     | 14     |
| 18 x 50 x 06/17 x 30°  | 12         | 12     | 14     |
| 18 x 50 x 08/16 x 20°  | 12         | 12     | 14     |
| 18 x 50 x 08/17 x 25°  | 14         | 14     | 16     |
| 18 x 50 x 08/19 x 30°  | 14         | 14     | 16     |
| 18 x 50 x 10/18 x 20°  | 14         | 14     | 16     |
| 18 x 50 x 10/19 x 25°  | 16         | 16     | 18     |
| 18 x 50 x 10/21 x 30°  | 16         | 16     | 18     |
| 18 x 55 x 02/10 x 20°  | 08         | 08     | 10     |
| 18 x 55 x 02/11 x 25°  | 10         | 10     | 18     |
| 18 x 55 x 02/13 x 30°  | 10         | 10     | 12     |
| 18 x 55 x 04/12 x 20°  | 08         | 08     | 10     |
| 18 x 55 x 04/13 x 25°  | 10         | 10     | 12     |
| 18 x 55 x 04/15 x 30°  | 10         | 10     | 12     |
| 18 x 55 x 06/14 x 20°  | 10         | 10     | 12     |
| 18 x 55 x 06/15 x 25°  | 12         | 12     | 14     |
| 18 x 55 x 06/17 x 30°  | 12         | 12     | 14     |
| 18 x 55 x 08/16 x 20°  | 12         | 12     | 14     |
| 18 x 55 x 08/17 x 25°  | 14         | 14     | 16     |
| 18 x 55 x 08/19 x 30°  | 14         | 14     | 16     |
| 18 x 55 x 10/18 x 20°  | 14         | 14     | 16     |
| 18 x 55 x 10/19 x 25°  | 16         | 16     | 18     |
| 18 x 55 x 10/21 x 30°  | 16         | 16     | 18     |
| 18 x 60 x 02/10 x 20°  | 08         | 08     | 10     |
| 18 x 60 x 02/11 x 25°  | 10         | 10     | 18     |
| 18 x 60 x 02/13 x 30°  | 10         | 10     | 12     |
| 18 x 60 x 04/12 x 20°  | 08         | 08     | 10     |
| 18 x 60 x 04/13 x 25°  | 10         | 10     | 12     |
| 18 x 60 x 04/15 x 30°  | 10         | 10     | 12     |
| 18 x 60 x 06/14 x 20°  | 10         | 10     | 12     |
| 18 x 60 x 06/15 x 25°  | 12         | 12     | 14     |
| 18 x 60 x 06/17 x 30°  | 12         | 12     | 14     |
| 18 x 60 x 08/16 x 20°  | 12         | 12     | 14     |
| 18 x 60 x 08/17 x 25°  | 14         | 14     | 16     |
| 18 x 60 x 08/19 x 30°  | 14         | 14     | 16     |
| 18 x 60 x 10/18 x 20°  | 14         | 14     | 16     |
| 18 x 60 x 10/19 x 25°  | 16         | 16     | 18     |
| 18 x 60 x 10/21 x 30°  | 16         | 16     | 18     |

### PLATE TYPES AND SIZING

| Spacer Size        | Plate Size |        |        |
|--------------------|------------|--------|--------|
|                    | 1 HOLE     | 2 HOLE | 4 HOLE |
| 22 x 45 x 07 x 7°  | 07*        | 07*    | 07*    |
| 22 x 45 x 08 x 7°  | 08         | 08     | 08     |
| 22 x 45 x 10 x 7°  | 10         | 10     | 10     |
| 22 x 45 x 12 x 7°  | 12         | 12     | 12     |
| 22 x 45 x 14 x 7°  | 14         | 14     | 14     |
| 22 x 45 x 16 x 7°  | 16         | 16     | 16     |
| 22 x 50 x 07 x 7°  | 07*        | 07*    | 07*    |
| 22 x 50 x 08 x 7°  | 08         | 08     | 08     |
| 22 x 50 x 10 x 7°  | 10         | 10     | 10     |
| 22 x 50 x 12 x 7°  | 12         | 12     | 12     |
| 22 x 50 x 14 x 7°  | 14         | 14     | 14     |
| 22 x 50 x 16 x 7°  | 16         | 16     | 16     |
| 22 x 55 x 07 x 7°  | 07*        | 07*    | 07*    |
| 22 x 55 x 08 x 7°  | 08         | 08     | 08     |
| 22 x 55 x 10 x 7°  | 10         | 10     | 10     |
| 22 x 55 x 12 x 7°  | 12         | 12     | 12     |
| 22 x 55 x 14 x 7°  | 14         | 14     | 14     |
| 22 x 55 x 16 x 7°  | 16         | 16     | 16     |
| 22 x 60 x 07 x 7°  | 07*        | 07*    | 07*    |
| 22 x 60 x 08 x 7°  | 08         | 08     | 08     |
| 22 x 60 x 10 x 7°  | 10         | 10     | 10     |
| 22 x 60 x 12 x 7°  | 12         | 12     | 12     |
| 22 x 60 x 14 x 7°  | 14         | 14     | 14     |
| 22 x 60 x 16 x 7°  | 16         | 16     | 16     |
| 22 x 45 x 7 x 12°  | 07*        | 07*    | 07*    |
| 22 x 45 x 8 x 15°  | 08         | 08     | 08     |
| 22 x 45 x 10 x 15° | 10         | 10     | 10     |
| 22 x 45 x 12 x 15° | 12         | 12     | 12     |
| 22 x 45 x 14 x 15° | 14         | 14     | 14     |
| 22 x 45 x 16 x 15° | 16         | 16     | 16     |
| 22 x 50 x 7 x 12°  | 07*        | 07*    | 07*    |
| 22 x 50 x 8 x 15°  | 08         | 08     | 08     |
| 22 x 50 x 10 x 15° | 10         | 10     | 10     |
| 22 x 50 x 12 x 15° | 12         | 12     | 12     |
| 22 x 50 x 14 x 15° | 14         | 14     | 14     |
| 22 x 50 x 16 x 15° | 16         | 16     | 16     |
| 22 x 55 x 7 x 12°  | 07*        | 07*    | 07*    |
| 22 x 55 x 8 x 15°  | 08         | 08     | 08     |
| 22 x 55 x 10 x 15° | 10         | 10     | 10     |
| 22 x 55 x 12 x 15° | 12         | 12     | 12     |
| 22 x 55 x 14 x 15° | 14         | 14     | 14     |
| 22 x 55 x 16 x 15° | 16         | 16     | 16     |
| 22 x 60 x 7 x 12°  | 07*        | 07*    | 07*    |
| 22 x 60 x 8 x 15°  | 08         | 08     | 08     |
| 22 x 60 x 10 x 15° | 10         | 10     | 10     |
| 22 x 60 x 12 x 15° | 12         | 12     | 12     |
| 22 x 60 x 14 x 15° | 14         | 14     | 14     |
| 22 x 60 x 16 x 15° | 16         | 16     | 16     |

\* Detached Plate Only



### PLATE TYPES AND SIZING

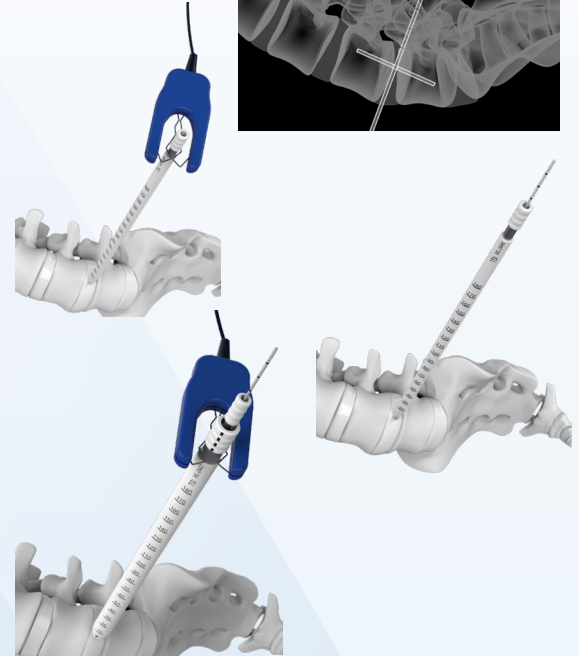
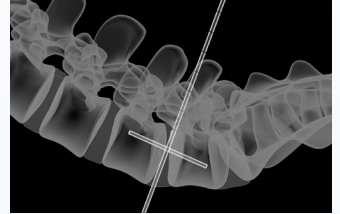
| Spacer Size           | Plate Size |        |        |
|-----------------------|------------|--------|--------|
|                       | 1 HOLE     | 2 HOLE | 4 HOLE |
| 22 x 45 x 02/11 x 20° | 10         | 10     | 10     |
| 22 x 45 x 02/13 x 25° | 10         | 10     | 12     |
| 22 x 45 x 02/15 x 30° | 10         | 10     | 12     |
| 22 x 45 x 04/13 x 20° | 10         | 10     | 12     |
| 22 x 45 x 04/15 x 25° | 12         | 12     | 14     |
| 22 x 45 x 04/17 x 30° | 12         | 12     | 14     |
| 22 x 45 x 06/15 x 20° | 12         | 12     | 14     |
| 22 x 45 x 06/17 x 25° | 14         | 14     | 16     |
| 22 x 45 x 06/19 x 30° | 14         | 14     | 16     |
| 22 x 45 x 08/17 x 20° | 14         | 14     | 16     |
| 22 x 45 x 08/19 x 25° | 16         | 16     | 18     |
| 22 x 45 x 08/21 x 30° | 16         | 16     | 18     |
| 22 x 45 x 10/19 x 20° | 16         | 16     | 18     |
| 22 x 45 x 10/21 x 25° | 18         | 18     | 20     |
| 22 x 45 x 10/23 x 30° | 18         | 18     | 20     |
| 22 x 50 x 02/11 x 20° | 10         | 10     | 10     |
| 22 x 50 x 02/13 x 25° | 10         | 10     | 12     |
| 22 x 50 x 02/15 x 30° | 10         | 10     | 12     |
| 22 x 50 x 04/13 x 20° | 10         | 10     | 12     |
| 22 x 50 x 04/15 x 25° | 12         | 12     | 14     |
| 22 x 50 x 04/17 x 30° | 12         | 12     | 14     |
| 22 x 50 x 06/15 x 20° | 12         | 12     | 14     |
| 22 x 50 x 06/17 x 25° | 14         | 14     | 16     |
| 22 x 50 x 06/19 x 30° | 14         | 14     | 16     |
| 22 x 50 x 08/17 x 20° | 14         | 14     | 16     |
| 22 x 50 x 08/19 x 25° | 16         | 16     | 18     |
| 22 x 50 x 08/21 x 30° | 16         | 16     | 18     |
| 22 x 50 x 10/19 x 20° | 16         | 16     | 18     |
| 22 x 50 x 10/21 x 25° | 18         | 18     | 20     |
| 22 x 50 x 10/23 x 30° | 18         | 18     | 20     |
| 22 x 55 x 02/11 x 20° | 10         | 10     | 10     |
| 22 x 55 x 02/13 x 25° | 10         | 10     | 12     |
| 22 x 55 x 02/15 x 30° | 10         | 10     | 12     |
| 22 x 55 x 04/13 x 20° | 10         | 10     | 12     |
| 22 x 55 x 04/15 x 25° | 12         | 12     | 14     |
| 22 x 55 x 04/17 x 30° | 12         | 12     | 14     |
| 22 x 55 x 06/15 x 20° | 12         | 12     | 14     |
| 22 x 55 x 06/17 x 25° | 14         | 14     | 16     |
| 22 x 55 x 06/19 x 30° | 14         | 14     | 16     |
| 22 x 55 x 08/17 x 20° | 14         | 14     | 16     |
| 22 x 55 x 08/19 x 25° | 16         | 16     | 18     |
| 22 x 55 x 08/21 x 30° | 16         | 16     | 18     |
| 22 x 55 x 10/19 x 20° | 16         | 16     | 18     |
| 22 x 55 x 10/21 x 25° | 18         | 18     | 20     |
| 22 x 55 x 10/23 x 30° | 18         | 18     | 20     |
| 22 x 60 x 02/11 x 20° | 10         | 10     | 10     |
| 22 x 60 x 02/13 x 25° | 10         | 10     | 12     |
| 22 x 60 x 02/15 x 30° | 10         | 10     | 12     |
| 22 x 60 x 04/13 x 20° | 10         | 10     | 12     |
| 22 x 60 x 04/15 x 25° | 12         | 12     | 14     |
| 22 x 60 x 04/17 x 30° | 12         | 12     | 14     |
| 22 x 60 x 06/15 x 20° | 12         | 12     | 14     |
| 22 x 60 x 06/17 x 25° | 14         | 14     | 16     |
| 22 x 60 x 06/19 x 30° | 14         | 14     | 16     |
| 22 x 60 x 08/17 x 20° | 14         | 14     | 16     |
| 22 x 60 x 08/19 x 25° | 16         | 16     | 18     |
| 22 x 60 x 08/21 x 30° | 16         | 16     | 18     |
| 22 x 60 x 10/19 x 20° | 16         | 16     | 18     |
| 22 x 60 x 10/21 x 25° | 18         | 18     | 20     |
| 22 x 60 x 10/23 x 30° | 18         | 18     | 20     |

### 1.0 PATIENT POSITIONING

- 1.1 Position the patient using the preferred lateral decubitus approach.

### 2.0 ACCESS

- 2.1 Using fluoroscopy, place the Incision Locator (GZA020000) over the surgical level, centered over the indicated disc space. Use a surgical marking pen to mark the desired skin incision.
- 2.2 Attach the Stimulating Clip (302775-200) onto the 8mm Dilator (ML-0440S), then guide the 8mm Dilator through the incision down to the disc space. Use fluoroscopic imaging to confirm location. To maintain distance from the x-ray field while imaging, grip the Dilator with the Dilator Holder (GZA050000).
- 2.3 Guide the Blunt Tip Guidewire (GZA030000) through the 8mm Dilator down to the disc space. Using fluoroscopic imaging to confirm location, penetrate the disc space using the Guidewire.
- 2.4 Disconnect the Stimulating Clip from the 8mm Dilator, then attach the Stimulating Clip to the 13mm Dilator ML-0440S. Repeat the advancing technique as described above. If using 22mm Blades (GZA11XXXX), continue to dilate using the 18mm and 22mm Dilator (ML-0441S, ML-0449S).

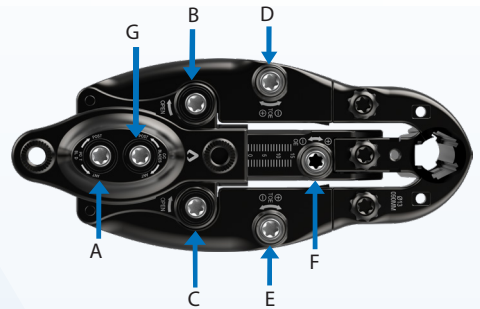


### 3.0 RETRACTOR ASSEMBLY / OPERATING INSTRUCTIONS

- 3.1 Thread the distal end of the Retractor Handle (GZA130000) into the distal docking location located on the Retractor (GZA060000), then securely tighten. Additional torque can be applied by using the Retractor Driver (GZA140000).
- 3.2 Choose the blade length based on the depth markings identified on the Dilator.
- 3.3 Clip the Posterior Blade (GZA08XXXX) onto the Retractor posterior arm, then use the Retractor Driver to thread the blade bolt into the posterior arm. Securely tighten, then confirm engagement by giving the blade a light tug.
- 3.4 Clip the Cranial/Caudal Blades (GZA07XXXX) onto the Retractor toe arms, then use the Retractor Driver to thread the blade bolt into the toe arm. Securely tighten, then confirm engagement by giving the blade a light tug.



3.5 Visually ensure that the blades are aligned and closed. If not, adjust the blade opening and blade toe by inserting the Retractor Driver (GZA140000) into the following adjustment sites. Turning the Retractor Driver in a clockwise direction distracts/opens the specific adjustment site. Turning the Retractor Driver in a counter-clockwise direction retracts/closes the specific adjustment site.



3.5.1 A: Posterior Blade

3.5.2 B: Cranial Blade

3.5.3 C: Caudal Blade

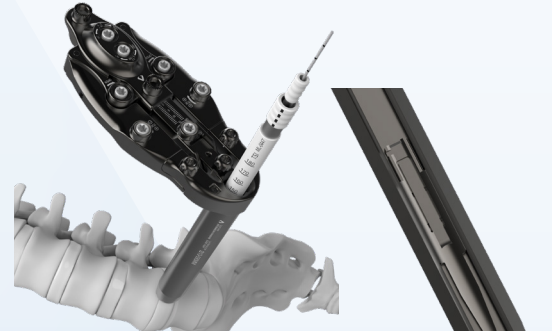
3.5.4 D: Cranial Toe

3.5.5 E: Caudal Toe

3.5.6 F: Posterior Blade Toe

3.5.7 G: Cranial/Caudal Blades (Anterior)

3.6 Pre-loading of the Posterior Blade Shim (GZA2300XX) into the Posterior Blade is achievable prior to Retractor insertion. Follow the steps listed in [Section 5, Retractor Stabilization](#), for Posterior Blade Shim assembly into the Posterior Blade.



## 4.0 RETRACTOR INSERTION

4.1 Slide the Retractor assembly over the 13mm Dilator (ML-0441S), then dock it on the disc / vertebral body. Use fluoroscopy to confirm location.

4.2 The Retractor Handle (GZA130000) may need to be removed to assemble the Table Fixation Arm (GZA150000) to the Retractor.

4.3 If desired, the Disc Shim can be deployed into the disc space with the Dilators in place using the Shim Tamp (GZA300000). Refer to Section 5.0 for further detail.

4.4 Locate the Table Fixation Clamp (5.750-N-VE) on the table rail.

4.5 Insert the Table Fixation Arm (GZA150000) into the Table Fixation Clamp, then provisionally tighten.

4.6 Turn the large knob on the Table Fixation Arm in a counter-clockwise direction to unlock movement, then thread the distal end of the Table Fixation Arm into the proximal docking location located on the Retractor. Additional torque can be applied by using the Retractor Driver (GZA140000).

4.7 Turn the large knob on the Table Fixation Arm in a clockwise direction to lock the movement.

4.8 Connect the Fiber Optic Cable to the light source using one of the provided Light Source Adapters, then attach the Bifurcated Surgical Illuminator (GZA160002) to the Fiber Optic Cable.

4.9 Insert the Bifurcated Surgical Illuminator into the desired blade channels.

4.10 Stimulate the exposed area with the Ball Tip Stimulating Probe (302430-000-200) to ensure the surgical field is free of neural elements.



## 5.0 RETRACTOR STABILIZATION

5.1 For increased Retractor (GZA060000) stability, utilize a Posterior Blade Shim (GZA2300XX).

5.1.1 Position the lever of the Shim Inserter (GZA220000) to “Unlocked”, then assemble the Posterior Blade Shim into the Shim Inserter and lock by positioning the lever of the Shim Inserter to “Locked”.

5.1.2 With the Posterior Blade Shim assembled to the Shim Inserter (GZA220000), insert the Posterior Blade Shim into the Posterior Blade channel, then position within the disc space. Use fluoroscopic imaging to confirm positioning.

5.1.3 Position Shim Inserter lever to “Unlocked” to release the Posterior Blade Shim.

5.1.4 If the Posterior Blade Shim was pre-loaded into the Posterior Blade (GZA0800XX) prior to Retractor Insertion, use the Shim Tamp (GZA300000) to position the Posterior Blade Shim in the disc space.

5.1.4.1 Turn the knob in the “OUT” direction to protrude out the lifter slide.

5.1.4.2 Insert the Shim Tamp into the Posterior Blade channel, then position the Posterior Blade Shim within the disc space. Use fluoroscopic imaging to confirm positioning.

5.1.4.3 Turn the knob in the “IN” direction to retract the lifter side and disengage the Posterior Blade Shim. Remove the Shim Tamp from the Posterior Blade channel.



5.2 For Retractor fixation to the vertebral body, utilize the Threaded Bone Pin Shim (GZA270000).

5.2.1 Insert the T20 Threaded Bone Pin Driver (GZA280000) into the Threaded Bone Pin Shim, then turn the proximal knob in a clockwise direction to thread ably engage with the screw. Confirm engagement by giving the Threaded Bone Pin Shim a light tug.

5.2.2 Insert the Threaded Bone Pin Shim into the Cranial and/or Caudal Blade channel. Drive the Threaded Bone Pin Shim into the vertebral body by turning the T20 Threaded Bone Pin Driver clockwise. Use fluoroscopic imaging to confirm positioning. Turn the T20 Threaded Bone Pin driver knob counter-clockwise to disengage the driver from the Threaded Bone Pin Shim.

5.2.2.1 If toeing of the Cranial/Caudal Blades is required, remove the Threaded Bone Pin Shim before toeing. Refer to section 14, Closure, for shim removal.

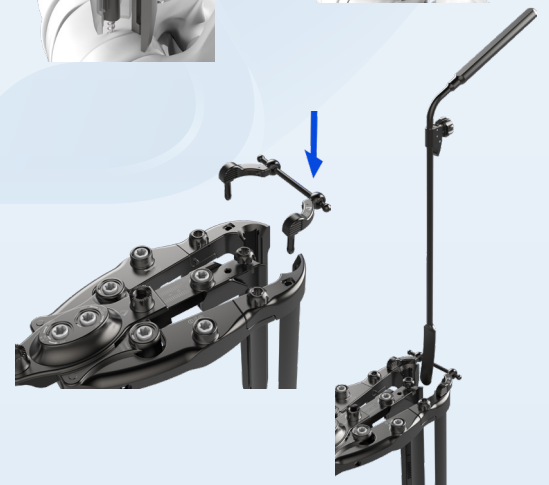


## 6.0 ANTERIOR BLADE OPTION

6.1 Anterior Blades (GZA0900XX) can be used to create a barrier during removal of Anterior Longitudinal Ligament (ALL). The Anterior Blades can only be utilized after the Cranial/Caudal Blades have been opened to allow the Anterior Blade to fit between them.

6.1.1 Choose the appropriate size Anterior Blade Mount (Narrow / Wide) (GZA1000XX), then attach it to the Cranial and Caudal Blades by inserting the pegs of the Anterior Blade Mount into the Cranial and Caudal Blade holes.

6.1.2 Choose the appropriate size and length Anterior Blade (Long 8mm, Long 12mm, Short 8mm, Short 12mm), then ensure the locking knob is unlocked by turning it in a counter-clockwise direction. Position the locking knob toward the top of the blade before use.



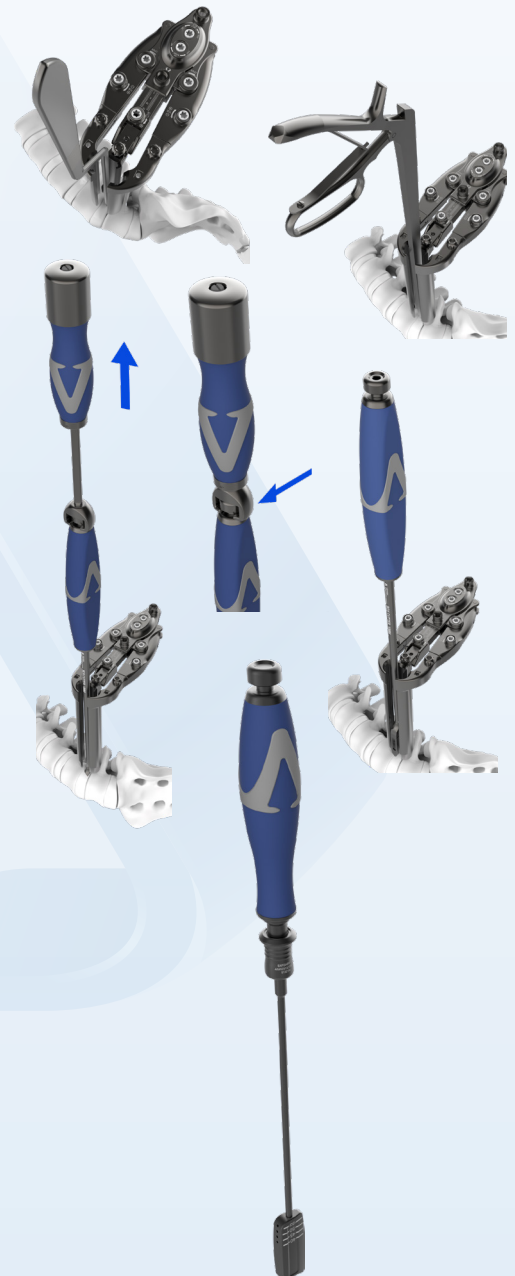
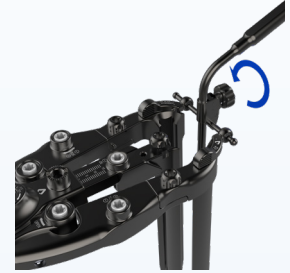
- 6.1.3 Insert the Anterior Blade into the working space, then position it up against the Anterior Blade Mount. Once in position, slide the locking knob down and engage the Anterior Blade Mount.
- 6.1.4 To lock the Anterior Blade position, thread the locking knob in a clockwise direction until finger tight.

### 7.0 DISC PREPARATION

- 7.1 Use a combination of the following instruments for access and preparation of the vertebral endplates:
  - 7.1.1 Push/Pull Penfield (GZB0400XX) or Woodson (GZB050000) for dissection of the surgical site.
  - 7.1.2 Suction (GZB030010) to clear fluid and debris from the surgical site.
  - 7.1.3 Annulotomy Knife (GZB060000) to create the incision.
  - 7.1.4 Straight and Angled (High & Low Offset) Instruments
    - 7.1.4.1 Pituitary (GZB11XXXX) to remove disc material from the disc space.
    - 7.1.4.2 Kerrison (GZB12SZXX) to assist in removing osteophytes or bone that prevents access to the disc space.
    - 7.1.4.3 Box Cutter (GZB24XXXX) to release the ipsilateral or contralateral annulus.
    - 7.1.4.4 Cobb (GZB09XXXX) to assist in removing cartilaginous endplates and/or release the annulus.
    - 7.1.4.5 Currettes (GZB13XXX / GZB15XXXX) and Rasps (GZB16XXXX) to complete the endplate preparation.
  - 7.1.5 Endplate Distractors (GZC025XXXX) can be used to mobilize and increase disc height during the discectomy process.
    - 7.1.5.1 Depth indications can be visualized under fluoroscopic imaging and may be used as a guide to determining the implant length. The grooves/holes are located at 40, 45, 50, and 55mm from the tip. The end of the Distractor is 60mm.
  - 7.1.7 Attach the Slap Hammer (GZC090000) to the proximal portion of the instrument to facilitate removal.

### 8.0 IMPLANT TRIALING, ASSEMBLY, AND INSERTION

- 8.1 Spacer Trialing
  - 8.1.1 Choose the appropriate size Trial (GZC01XXXX), then attach the Trial to a 1/4" SQ. quick-connect handle. Confirm engagement by giving the trial a light tug.
  - 8.1.2 Start with a Trial height less than the disc space height, then increase the Trial height until the desired fitment is achieved.
    - 8.1.2.1 Depth indications can be visualized under fluoroscopic imaging and may be used as a guide to determining the implant length. The holes are located at 40, 45, 50, and 55mm from the tip. The end of the Trial is 60mm.
  - 8.1.3 Attach the Slap Hammer to the proximal portion of the handle to facilitate removal of the Trial from the disc space.
- 8.2 Spacer Insertion
  - 8.2.1 Attach the Insertor (GZC040000) to a 1/4" SQ. quick-connect handle. Confirm engagement by giving the inserter a light tug.

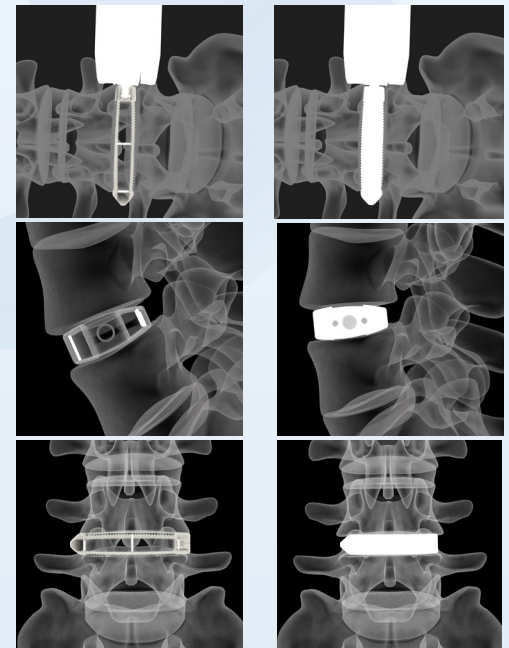


- 8.2.2 Select the Spacer that matches the best fitting Trial, then thread the Spacer onto the Inserter by turning the knob in a clockwise direction until the instrument is flush with the Spacer. Confirm engagement by giving the Spacer a light tug. The 7mm Inserter (GZC040007) must be used when using a 7mm height Spacer.
- 8.2.2.1 For an angled approach, utilize the Angled Inserter (GZC0400A0).
- 8.2.2.2 For an angled approach using a 7mm Spacer, utilize the 7mm Angled Inserter (GZC0400A7).
- 8.2.3 Pack the selected Spacer with morselized bone graft material.
- 8.2.4 Insert the distal end of the Graft Retention Shims (GZC060000) into the surgical site, then locate within the disc space.
- 8.2.5 Spread the Graft Retention Shims to allow passage of the Spacer and Inserter. Place the tip of the Spacer between the Graft Retention Shims, then slide down until it is against the opening of the disc space.
- 8.2.5.1 When using a lordotic Spacer, confirm the "Anterior" identified on the Spacer is facing anterior during insertion.
- 8.2.6 While monitoring the insertion under fluoroscopic imaging, tap the Inserter using the Mallet (GZC080000) to locate the Spacer within the disc space.
- 8.2.7 Remove the Inserter from the Spacer by turning the Inserter knob in a counter-clockwise direction while pressing and holding the spring loaded button.
- 8.2.8 Removal of the Graft Retention Shims can be facilitated with the use of the Slap Hammer.
- 8.2.9 Utilize the Tamp (GZC070000) or Angled Tamp (GZC120000) if final positioning of the Spacer is not achieved with the Inserter attached.



## 9.0 RADIOGRAPHIC VERIFICATION

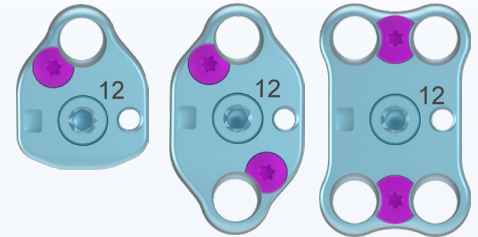
- 9.1 Proper placement of the Spacer is achieved when the primary body (minus the nose) is centered across the disc space on an A/P fluoroscopic view and between the anterior third and middle third of the disc space on a lateral fluoroscopic view.
- 9.1.1 **HA PEEK Spacer:** Radiographically, Spacer placement can be confirmed on a lateral view with the three vertical markers along the posterior edge aligned. Spacer placement on an A/P view can be confirmed with the two outer markers establishing the boundaries of the spacer and alignment of the two midline markers establishing orientation.
- 9.1.1.1 When a Plate is used with a Spacer, the Plate must rest against the vertebral body.



## 10.0 PLATE FIXATION

### 10.1 Plate to Spacer Assembly

- 10.1.1 Select the Spacer that matches the best fitting Trial. Select the desired Plate type (1 hole, 2 hole, or 4 hole) (1 hole plates are non-load bearing) and corresponding height to that of the chosen Spacer. (Refer to Spacer/Plate Size Selection Chart)
- 10.1.2 Thread the Plate onto the Plate Inserter (GZC040020) by turning the knob in a clockwise direction until the instrument is flush with the Plate.
- 10.1.2.1 For an angled approach, utilize the Angled Plate Inserter (GZC040030).
- 10.1.3 Attach the 15 in-lbs Torque Limiting Egg Handle to the Plate Inserter Torque Driver T15, then insert the driver into the Plate Inserter opening and engage the Plate Bolt. Confirm engagement by rotating the handle, then the Plate Bolt should rotate the same.
- 10.1.4 Position the Plate Bolt in the threaded hole of the Spacer and align the Plate peg with the Spacer alignment hole. Thread the Plate Bolt into the Spacer, then final tighten. Final tightening is achieved when the Torque Limiting Handle reaches 15 in-lbs and produces an audible click.



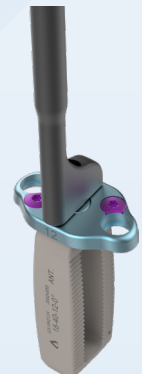
### 10.2 Plate Spacer Insertion

- 10.2.1 Attach the Plate Inserter to a 1/4" SQ. quick-connect handle. Confirm engagement by giving the inserter a light tug.
- 10.2.2 Pack the selected Spacer with morselized bone graft material.
- 10.2.3 Place the tip of the Spacer against the opening of the disc space. While monitoring the insertion using fluoroscopic imaging, tap the Inserter using the Mallet to locate the Spacer within the disc space.
- 10.2.4 Graft Retention Shims are not recommended for use when inserting a Plate-Spacer combo.
- 10.2.5 When using a lordotic Spacer, confirm the ANT (Anterior) identified on the Spacer is facing anterior during insertion.
- 10.2.6 Remove the Inserter from the Plate by turning the Inserter knob in a counter clockwise direction while pressing and holding the spring loaded button.



### 10.3 Plate Insertion (Post Spacer Insertion)

- 10.3.1 Attach the Plate Inserter to a 1/4 SQ. quick-connect handle. Confirm engagement by giving the inserter a light tug.
- 10.3.1.1 For an angled approach, utilize the Angled Plate Inserter.
- 10.3.2 Thread the Plate onto the Plate inserter by turning the knob in a clockwise direction until the instrument is flush with the Plate.
- 10.3.3 Attach Plate to Spacer
  - 10.3.3.1 Attach the Plate Inserter Torque Driver T15 to the Torque Limiting Handle (EDEC GA AZB), then insert the distal end of the driver into the central access hole of the Plate Inserter and engage with the Plate Bolt. Confirm engagement by rotating the handle. The Plate Bolt should rotate the same.
  - 10.3.3.2 Insert the Plate into the surgical site, then locate the Plate Bolt with the Spacer threaded hole. Turn the Torque Limiting Egg handle in a clockwise direction to engage the Plate to the Spacer. The Plate alignment peg must locate into the Spacer pocket. Use fluoroscopy to insure the Plate is flush with the Spacer before final torque.
  - 10.3.3.3 Final tightening is achieved when the Torque Limiting Handle reaches 15 in-lbs. and produces an audible click.



### 10.3.4 Detached Plate

- 10.3.4.1 Insert the Plate into the surgical site then locate the Plate centered over the Spacer. See below for selecting the Screw Preparation options.

### 11.0 SCREW PREPARATION

#### 11.1 Adjustable Drill

11.1.1 Set the Adjustable Drill (GZD020010) to the desired depth by pressing the locking button while threading the knurled knob in or out.

11.1.2 Attach the AO Egg Handle (EDDEATAAZ) or power drill to the Adjustable Drill, then locate the tip in the desired Plate screw hole and advance while rotating the handle in a clockwise direction. Confirm the depth and trajectory using fluoroscopy.

#### 11.2 Adjustable Awl

11.2.1 Set the Adjustable Awl (GZD030010) to the desired depth by pressing the locking button while threading the knurled knob in or out.

11.2.2 Locate the Adjustable Awl tip in the desired plate screw hole, then advance by impacting the proximal impact cap using the Mallet. Confirm depth and trajectory using fluoroscopy.

#### 11.3 Adjustable Tap

11.3.1 Set the Adjustable Tap 5.5mm (GZD040050) to the desired depth by pressing the locking button while threading the knurled knob in or out.

11.3.2 Attach the AO Egg Handle to the Adjustable Tap, then locate the Adjustable Tap tip in the desired plate screw hole. Then advance while rotating the handle in a clockwise direction. Confirm depth and trajectory using fluoroscopy.

#### 11.4 Angled Drill

11.4.1 Assemble the 20mm Fixed Angle Drill (GZD020020) Bit to the distal end of the Fixed Angled Driver (GZD090000) by threading together.

11.4.2 Attach the AO Egg Handle or power drill to the proximal end of the Fixed Angled Driver.

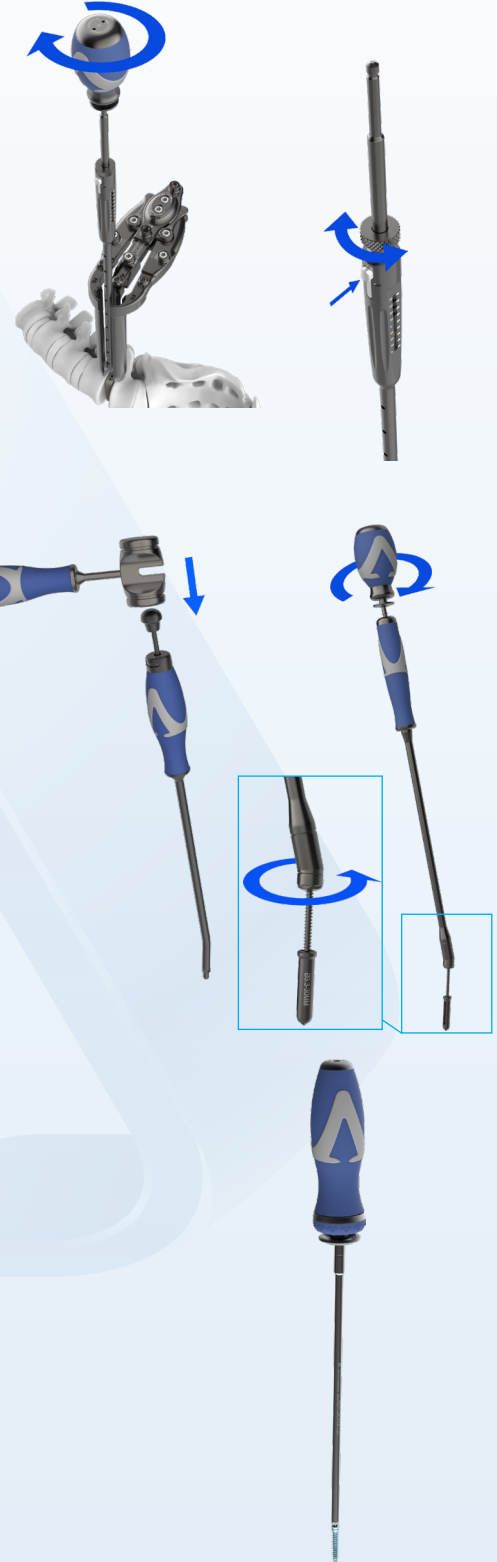
#### 11.5 Angled Tap

11.5.1 Assemble the Fixed Angle Tap Bit (GZD110050) to the distal end of the Fixed Angled Driver (GZD090000) by threading together.

11.6 Attach the AO Egg Handle to the proximal end of the Fixed Angled Driver.

#### 11.7 Angled Awl

11.7.1 Locate the Angled Awl tip in the desired plate screw hole, then advance to the desired depth. Confirm depth and trajectory using fluoroscopy.



### 12.0 SCREW INSERTION

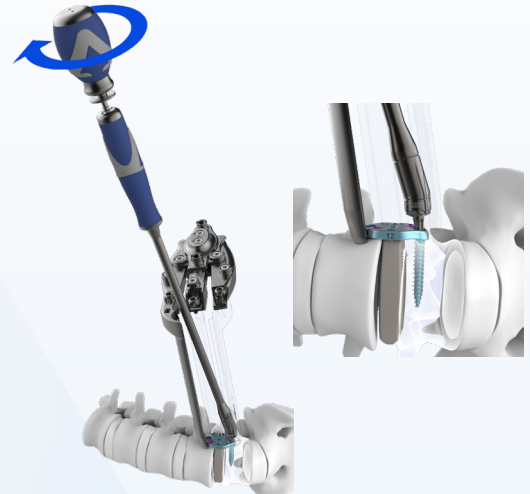
#### 12.1 Straight Screw Driver

12.1.1 Assemble the Axial 1/4" Sq. Ratcheting Handle (EAECDUBBZ) to the T25 Screwdriver (GZD050000) by inserting the proximal end of the T25 Screwdriver into the distal end of the handle. Confirm engagement by giving the driver a light tug.

12.1.2 Insert the distal end of the T25 Screwdriver into the Screw (GDDABXXXX), then apply downward force. The driver will stick into the Screw head. Confirm the Screw is properly attached to the driver by lightly tugging on the Screw.

### 12.2 Angled Screw Driver

- 12.2.1 Assemble the T25 Fixed Angle Screwdriver Bit (GZD120010) to the distal end of the Fixed Angled Driver by threading together.
- 12.2.2 Attach the AO Egg Handle (EDDEATAAZ) to the proximal end of the Fixed Angled Driver.
- 12.2.3 Insert the distal end of the T25 Fixed Angle Screw Driver Bit into the Screw, then apply downward force. The driver will stick into the Screw head. Confirm the Screw is properly attached to the driver by lightly tugging on the Screw.
- 12.3 Insert the Screw (GDDAXXXXX) into the prepared hole, then rotate clockwise until the head of the Screw engages with the plate screw hole. Use fluoroscopy to ensure appropriate Screw placement.



## 13.0 PLATE LOCKING

- 13.1 Assemble the Axial 1/4" SQ. Ratcheting handle to the T8 Lockdriver (GZD070000) by inserting the proximal end of the driver into the distal end of the handle. Confirm engagement by giving the driver a light tug. Insert the tip of the T8 Lockdriver (GZD070000) into the mating feature within the Plate locking mechanism, then rotate 90°. Visually verify that all Screws are covered by the locking mechanism.
- 13.2 For an angled approach, assemble the T8 Lockdriver Bit (GZD120020) to the distal end of the Fixed Angled Driver by threading together.
- 13.3 Attach the AO Egg Handle to the proximal end of the Fixed Angled Driver.
- 13.4 Approved supplemental fixation is required with use of the Sirion Lateral Interbody System.



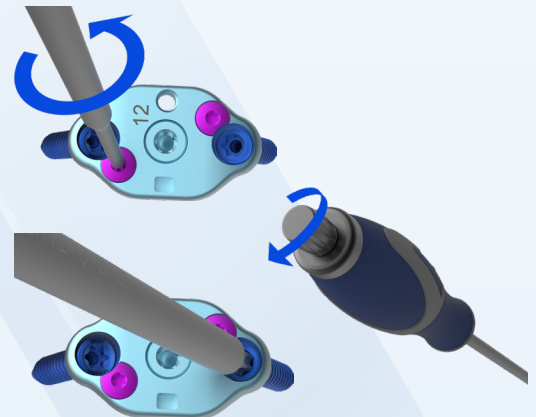


## 15.0 CLOSURE

- 15.1 Remove the Bifurcated Surgical Illuminator from the Blade.
- 15.2 Utilize the Shim Inserter to remove the Posterior Blade Shim and any Blade Extension Shims.
- 15.3 Utilize the T20 Threaded Bone Pin Driver to remove the Threaded Bone Pin Shim.
- 15.4 Unthread the Anterior Blade knob in a counter-clockwise direction, then press the knob to remove the Anterior Blade.
- 15.5 Remove the Anterior Blade Attachment.
- 15.6 Return the Retractor Blade toe to the zero position by turning the toe adjustment sites in a counter-clockwise direction.
- 15.7 Retract the Posterior and Cranial/Caudal Blades by turning the adjustment sites in a counter-clockwise direction.
- 15.8 Remove the Table Fixation Arm by loosening the large knob, then unthread the distal knob attached to the Retractor in a counter-clockwise direction.
- 15.9 Close the wound using standard closure techniques.

## 16.0 REVISION/REMOVAL

- 16.1 Insert the tip of the T8 Lockdriver into the mating feature within the Plate locking mechanism, then rotate 90°.
- 16.2 Insert the T25 Screw Remover Driver (GZD060000) into the head of the Screw. Once coupled to the Screw, rotate the knob on the proximal portion of the T25 Screw Remover Driver clockwise until resistance is achieved. Rotate the Screw Remover Driver counter-clockwise until the Screw is removed from the Plate. Repeat for all remaining screws.
- 16.3 Once all Screws have been removed, attach the Inserter or Angled Inserter to a 1/4" SQ. quick-connect handle with a slap hammer cap, then assemble the inserter to the Plate or Spacer and use the Slap Hammer to remove the Spacer and Plate.



## SIRION LATERAL LUMBAR INTERBODY FUSION HA PEEK OFFERING

### LLIF HA PEEK SPACERS

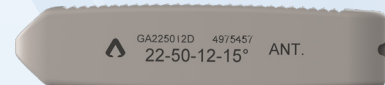
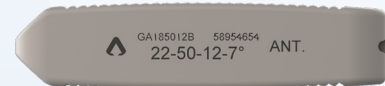
| Part Number | Description                                                 | Qty |
|-------------|-------------------------------------------------------------|-----|
| GA184507B   | LLIF Spacer, HA PEEK, 18mm x 45mm x 07mm x 7°, Non-Sterile  | 1   |
| GA184508B   | LLIF Spacer, HA PEEK, 18mm x 45mm x 08mm x 7°, Non-Sterile  | 2   |
| GA184510B   | LLIF Spacer, HA PEEK, 18mm x 45mm x 10mm x 7°, Non-Sterile  | 2   |
| GA184512B   | LLIF Spacer, HA PEEK, 18mm x 45mm x 12mm x 7°, Non-Sterile  | 2   |
| GA184514B   | LLIF Spacer, HA PEEK, 18mm x 45mm x 14mm x 7°, Non-Sterile  | 2   |
| GA184516B   | LLIF Spacer, HA PEEK, 18mm x 45mm x 16mm x 7°, Non-Sterile  | 1   |
| GA185007B   | LLIF Spacer, HA PEEK, 18mm x 50mm x 07mm x 7°, Non-Sterile  | 1   |
| GA185008B   | LLIF Spacer, HA PEEK, 18mm x 50mm x 08mm x 7°, Non-Sterile  | 2   |
| GA185010B   | LLIF Spacer, HA PEEK, 18mm x 50mm x 10mm x 7°, Non-Sterile  | 2   |
| GA185012B   | LLIF Spacer, HA PEEK, 18mm x 50mm x 12mm x 7°, Non-Sterile  | 2   |
| GA185014B   | LLIF Spacer, HA PEEK, 18mm x 50mm x 14mm x 7°, Non-Sterile  | 2   |
| GA185016B   | LLIF Spacer, HA PEEK, 18mm x 50mm x 16mm x 7°, Non-Sterile  | 1   |
| GA185507B   | LLIF Spacer, HA PEEK, 18mm x 55mm x 07mm x 7°, Non-Sterile  | 1   |
| GA185508B   | LLIF Spacer, HA PEEK, 18mm x 55mm x 08mm x 7°, Non-Sterile  | 2   |
| GA185510B   | LLIF Spacer, HA PEEK, 18mm x 55mm x 10mm x 7°, Non-Sterile  | 2   |
| GA185512B   | LLIF Spacer, HA PEEK, 18mm x 55mm x 12mm x 7°, Non-Sterile  | 2   |
| GA185514B   | LLIF Spacer, HA PEEK, 18mm x 55mm x 14mm x 7°, Non-Sterile  | 2   |
| GA185516B   | LLIF Spacer, HA PEEK, 18mm x 55mm x 16mm x 7°, Non-Sterile  | 1   |
| GA186007B   | LLIF Spacer, HA PEEK, 18mm x 60mm x 07mm x 7°, Non-Sterile  | 1   |
| GA186008B   | LLIF Spacer, HA PEEK, 18mm x 60mm x 08mm x 7°, Non-Sterile  | 2   |
| GA186010B   | LLIF Spacer, HA PEEK, 18mm x 60mm x 10mm x 7°, Non-Sterile  | 2   |
| GA186012B   | LLIF Spacer, HA PEEK, 18mm x 60mm x 12mm x 7°, Non-Sterile  | 2   |
| GA186014B   | LLIF Spacer, HA PEEK, 18mm x 60mm x 14mm x 7°, Non-Sterile  | 2   |
| GA186016B   | LLIF Spacer, HA PEEK, 18mm x 60mm x 16mm x 7°, Non-Sterile  | 1   |
| GA184507C   | LLIF Spacer, HA PEEK, 18mm x 45mm x 07mm x 12°, Non-Sterile | 1   |
| GA184508D   | LLIF Spacer, HA PEEK, 18mm x 45mm x 08mm x 15°, Non-Sterile | 2   |
| GA184510D   | LLIF Spacer, HA PEEK, 18mm x 45mm x 10mm x 15°, Non-Sterile | 2   |
| GA184512D   | LLIF Spacer, HA PEEK, 18mm x 45mm x 12mm x 15°, Non-Sterile | 2   |
| GA184514D   | LLIF Spacer, HA PEEK, 18mm x 45mm x 14mm x 15°, Non-Sterile | 2   |
| GA184516D   | LLIF Spacer, HA PEEK, 18mm x 45mm x 16mm x 15°, Non-Sterile | 1   |
| GA185007C   | LLIF Spacer, HA PEEK, 18mm x 50mm x 07mm x 12°, Non-Sterile | 1   |
| GA185008D   | LLIF Spacer, HA PEEK, 18mm x 50mm x 08mm x 15°, Non-Sterile | 2   |
| GA185010D   | LLIF Spacer, HA PEEK, 18mm x 50mm x 10mm x 15°, Non-Sterile | 2   |
| GA185012D   | LLIF Spacer, HA PEEK, 18mm x 50mm x 12mm x 15°, Non-Sterile | 2   |
| GA185014D   | LLIF Spacer, HA PEEK, 18mm x 50mm x 14mm x 15°, Non-Sterile | 2   |
| GA185016D   | LLIF Spacer, HA PEEK, 18mm x 50mm x 16mm x 15°, Non-Sterile | 1   |
| GA185507C   | LLIF Spacer, HA PEEK, 18mm x 55mm x 07mm x 12°, Non-Sterile | 1   |
| GA185508D   | LLIF Spacer, HA PEEK, 18mm x 55mm x 08mm x 15°, Non-Sterile | 2   |
| GA185510D   | LLIF Spacer, HA PEEK, 18mm x 55mm x 10mm x 15°, Non-Sterile | 2   |
| GA185512D   | LLIF Spacer, HA PEEK, 18mm x 55mm x 12mm x 15°, Non-Sterile | 2   |
| GA185514D   | LLIF Spacer, HA PEEK, 18mm x 55mm x 14mm x 15°, Non-Sterile | 2   |
| GA185516D   | LLIF Spacer, HA PEEK, 18mm x 55mm x 16mm x 15°, Non-Sterile | 1   |
| GA186007C   | LLIF Spacer, HA PEEK, 18mm x 60mm x 07mm x 12°, Non-Sterile | 1   |
| GA186008D   | LLIF Spacer, HA PEEK, 18mm x 60mm x 08mm x 15°, Non-Sterile | 2   |
| GA186010D   | LLIF Spacer, HA PEEK, 18mm x 60mm x 10mm x 15°, Non-Sterile | 2   |
| GA186012D   | LLIF Spacer, HA PEEK, 18mm x 60mm x 12mm x 15°, Non-Sterile | 2   |
| GA186014D   | LLIF Spacer, HA PEEK, 18mm x 60mm x 14mm x 15°, Non-Sterile | 2   |
| GA186016D   | LLIF Spacer, HA PEEK, 18mm x 60mm x 16mm x 15°, Non-Sterile | 1   |



## SIRION LATERAL LUMBAR INTERBODY FUSION HA PEEK OFFERING

### LLIF HA PEEK SPACERS

| Part Number | Description                                                 | Qty |
|-------------|-------------------------------------------------------------|-----|
| GA224507B   | LLIF Spacer, HA PEEK, 22mm x 45mm x 07mm x 7°, Non-Sterile  | 1   |
| GA224508B   | LLIF Spacer, HA PEEK, 22mm x 45mm x 08mm x 7°, Non-Sterile  | 2   |
| GA224510B   | LLIF Spacer, HA PEEK, 22mm x 45mm x 10mm x 7°, Non-Sterile  | 2   |
| GA224512B   | LLIF Spacer, HA PEEK, 22mm x 45mm x 12mm x 7°, Non-Sterile  | 2   |
| GA224514B   | LLIF Spacer, HA PEEK, 22mm x 45mm x 14mm x 7°, Non-Sterile  | 2   |
| GA224516B   | LLIF Spacer, HA PEEK, 22mm x 45mm x 16mm x 7°, Non-Sterile  | 1   |
| GA225007B   | LLIF Spacer, HA PEEK, 22mm x 50mm x 07mm x 7°, Non-Sterile  | 1   |
| GA225008B   | LLIF Spacer, HA PEEK, 22mm x 50mm x 08mm x 7°, Non-Sterile  | 2   |
| GA225010B   | LLIF Spacer, HA PEEK, 22mm x 50mm x 10mm x 7°, Non-Sterile  | 2   |
| GA225012B   | LLIF Spacer, HA PEEK, 22mm x 50mm x 12mm x 7°, Non-Sterile  | 2   |
| GA225014B   | LLIF Spacer, HA PEEK, 22mm x 50mm x 14mm x 7°, Non-Sterile  | 2   |
| GA225016B   | LLIF Spacer, HA PEEK, 22mm x 50mm x 16mm x 7°, Non-Sterile  | 1   |
| GA225507B   | LLIF Spacer, HA PEEK, 22mm x 55mm x 07mm x 7°, Non-Sterile  | 1   |
| GA225508B   | LLIF Spacer, HA PEEK, 22mm x 55mm x 08mm x 7°, Non-Sterile  | 2   |
| GA225510B   | LLIF Spacer, HA PEEK, 22mm x 55mm x 10mm x 7°, Non-Sterile  | 2   |
| GA225512B   | LLIF Spacer, HA PEEK, 22mm x 55mm x 12mm x 7°, Non-Sterile  | 2   |
| GA225514B   | LLIF Spacer, HA PEEK, 22mm x 55mm x 14mm x 7°, Non-Sterile  | 2   |
| GA225516B   | LLIF Spacer, HA PEEK, 22mm x 55mm x 16mm x 7°, Non-Sterile  | 1   |
| GA226007B   | LLIF Spacer, HA PEEK, 22mm x 60mm x 07mm x 7°, Non-Sterile  | 1   |
| GA226008B   | LLIF Spacer, HA PEEK, 22mm x 60mm x 08mm x 7°, Non-Sterile  | 2   |
| GA226010B   | LLIF Spacer, HA PEEK, 22mm x 60mm x 10mm x 7°, Non-Sterile  | 2   |
| GA226012B   | LLIF Spacer, HA PEEK, 22mm x 60mm x 12mm x 7°, Non-Sterile  | 2   |
| GA226014B   | LLIF Spacer, HA PEEK, 22mm x 60mm x 14mm x 7°, Non-Sterile  | 2   |
| GA226016B   | LLIF Spacer, HA PEEK, 22mm x 60mm x 16mm x 7°, Non-Sterile  | 1   |
|             |                                                             |     |
| GA224507C   | LLIF Spacer, HA PEEK, 22mm x 50mm x 07mm x 12°, Non-Sterile | 1   |
| GA224508D   | LLIF Spacer, HA PEEK, 22mm x 50mm x 08mm x 15°, Non-Sterile | 2   |
| GA224510D   | LLIF Spacer, HA PEEK, 22mm x 50mm x 10mm x 15°, Non-Sterile | 2   |
| GA224512D   | LLIF Spacer, HA PEEK, 22mm x 50mm x 12mm x 15°, Non-Sterile | 2   |
| GA224514D   | LLIF Spacer, HA PEEK, 22mm x 50mm x 14mm x 15°, Non-Sterile | 2   |
| GA224516D   | LLIF Spacer, HA PEEK, 22mm x 50mm x 16mm x 15°, Non-Sterile | 1   |
| GA225507C   | LLIF Spacer, HA PEEK, 22mm x 55mm x 07mm x 12°, Non-Sterile | 1   |
| GA225508D   | LLIF Spacer, HA PEEK, 22mm x 55mm x 08mm x 15°, Non-Sterile | 2   |
| GA225510D   | LLIF Spacer, HA PEEK, 22mm x 55mm x 10mm x 15°, Non-Sterile | 2   |
| GA225512D   | LLIF Spacer, HA PEEK, 22mm x 55mm x 12mm x 15°, Non-Sterile | 2   |
| GA225514D   | LLIF Spacer, HA PEEK, 22mm x 55mm x 14mm x 15°, Non-Sterile | 2   |
| GA225516D   | LLIF Spacer, HA PEEK, 22mm x 55mm x 16mm x 15°, Non-Sterile | 1   |
| GA226007C   | LLIF Spacer, HA PEEK, 22mm x 60mm x 07mm x 12°, Non-Sterile | 1   |
| GA226008D   | LLIF Spacer, HA PEEK, 22mm x 60mm x 08mm x 15°, Non-Sterile | 2   |
| GA226010D   | LLIF Spacer, HA PEEK, 22mm x 60mm x 10mm x 15°, Non-Sterile | 2   |
| GA226012D   | LLIF Spacer, HA PEEK, 22mm x 60mm x 12mm x 15°, Non-Sterile | 2   |
| GA226014D   | LLIF Spacer, HA PEEK, 22mm x 60mm x 14mm x 15°, Non-Sterile | 2   |
| GA226016D   | LLIF Spacer, HA PEEK, 22mm x 60mm x 16mm x 15°, Non-Sterile | 1   |



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### Description

Qtv

GH224508E ZZZZZZZ  
22-45-08/17-20° ANT.

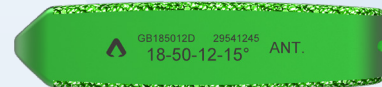
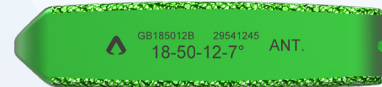
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22-60-10/20-30° ANT.



## SIRION LATERAL LUMBAR INTERBODY FUSION ACID-ETCHED TITANIUM OFFERING

### LLIF ACID-ETCHED TITANIUM SPACERS

| Part Number | Description                                                              | Qty |
|-------------|--------------------------------------------------------------------------|-----|
| GB184507B   | LLIF Spacer, Acid-etched Titanium, 18mm x 45mm x 07mm x 7°, Non-Sterile  | 1   |
| GB184508B   | LLIF Spacer, Acid-etched Titanium, 18mm x 45mm x 08mm x 7°, Non-Sterile  | 2   |
| GB184510B   | LLIF Spacer, Acid-etched Titanium, 18mm x 45mm x 10mm x 7°, Non-Sterile  | 2   |
| GB184512B   | LLIF Spacer, Acid-etched Titanium, 18mm x 45mm x 12mm x 7°, Non-Sterile  | 2   |
| GB184514B   | LLIF Spacer, Acid-etched Titanium, 18mm x 45mm x 14mm x 7°, Non-Sterile  | 2   |
| GB184516B   | LLIF Spacer, Acid-etched Titanium, 18mm x 45mm x 16mm x 7°, Non-Sterile  | 1   |
| GB185007B   | LLIF Spacer, Acid-etched Titanium, 18mm x 50mm x 07mm x 7°, Non-Sterile  | 1   |
| GB185008B   | LLIF Spacer, Acid-etched Titanium, 18mm x 50mm x 08mm x 7°, Non-Sterile  | 2   |
| GB185010B   | LLIF Spacer, Acid-etched Titanium, 18mm x 50mm x 10mm x 7°, Non-Sterile  | 2   |
| GB185012B   | LLIF Spacer, Acid-etched Titanium, 18mm x 50mm x 12mm x 7°, Non-Sterile  | 2   |
| GB185014B   | LLIF Spacer, Acid-etched Titanium, 18mm x 50mm x 14mm x 7°, Non-Sterile  | 2   |
| GB185016B   | LLIF Spacer, Acid-etched Titanium, 18mm x 50mm x 16mm x 7°, Non-Sterile  | 1   |
| GB185507B   | LLIF Spacer, Acid-etched Titanium, 18mm x 55mm x 07mm x 7°, Non-Sterile  | 1   |
| GB185508B   | LLIF Spacer, Acid-etched Titanium, 18mm x 55mm x 08mm x 7°, Non-Sterile  | 2   |
| GB185510B   | LLIF Spacer, Acid-etched Titanium, 18mm x 55mm x 10mm x 7°, Non-Sterile  | 2   |
| GB185512B   | LLIF Spacer, Acid-etched Titanium, 18mm x 55mm x 12mm x 7°, Non-Sterile  | 2   |
| GB185514B   | LLIF Spacer, Acid-etched Titanium, 18mm x 55mm x 14mm x 7°, Non-Sterile  | 2   |
| GB185516B   | LLIF Spacer, Acid-etched Titanium, 18mm x 55mm x 16mm x 7°, Non-Sterile  | 1   |
| GB186007B   | LLIF Spacer, Acid-etched Titanium, 18mm x 60mm x 07mm x 7°, Non-Sterile  | 1   |
| GB186008B   | LLIF Spacer, Acid-etched Titanium, 18mm x 60mm x 08mm x 7°, Non-Sterile  | 2   |
| GB186010B   | LLIF Spacer, Acid-etched Titanium, 18mm x 60mm x 10mm x 7°, Non-Sterile  | 2   |
| GB186012B   | LLIF Spacer, Acid-etched Titanium, 18mm x 60mm x 12mm x 7°, Non-Sterile  | 2   |
| GB186014B   | LLIF Spacer, Acid-etched Titanium, 18mm x 60mm x 14mm x 7°, Non-Sterile  | 2   |
| GB186016B   | LLIF Spacer, Acid-etched Titanium, 18mm x 60mm x 16mm x 7°, Non-Sterile  | 1   |
| GB184507C   | LLIF Spacer, Acid-etched Titanium, 18mm x 45mm x 07mm x 12°, Non-Sterile | 1   |
| GB184508D   | LLIF Spacer, Acid-etched Titanium, 18mm x 45mm x 08mm x 15°, Non-Sterile | 2   |
| GB184510D   | LLIF Spacer, Acid-etched Titanium, 18mm x 45mm x 10mm x 15°, Non-Sterile | 2   |
| GB184512D   | LLIF Spacer, Acid-etched Titanium, 18mm x 45mm x 12mm x 15°, Non-Sterile | 2   |
| GB184514D   | LLIF Spacer, Acid-etched Titanium, 18mm x 45mm x 14mm x 15°, Non-Sterile | 2   |
| GB184516D   | LLIF Spacer, Acid-etched Titanium, 18mm x 45mm x 16mm x 15°, Non-Sterile | 1   |
| GB185007C   | LLIF Spacer, Acid-etched Titanium, 18mm x 50mm x 07mm x 12°, Non-Sterile | 1   |
| GB185008D   | LLIF Spacer, Acid-etched Titanium, 18mm x 50mm x 08mm x 15°, Non-Sterile | 2   |
| GB185010D   | LLIF Spacer, Acid-etched Titanium, 18mm x 50mm x 10mm x 15°, Non-Sterile | 2   |
| GB185012D   | LLIF Spacer, Acid-etched Titanium, 18mm x 50mm x 12mm x 15°, Non-Sterile | 2   |
| GB185014D   | LLIF Spacer, Acid-etched Titanium, 18mm x 50mm x 14mm x 15°, Non-Sterile | 2   |
| GB185016D   | LLIF Spacer, Acid-etched Titanium, 18mm x 50mm x 16mm x 15°, Non-Sterile | 1   |
| GB185507C   | LLIF Spacer, Acid-etched Titanium, 18mm x 55mm x 07mm x 12°, Non-Sterile | 1   |
| GB185508D   | LLIF Spacer, Acid-etched Titanium, 18mm x 55mm x 08mm x 15°, Non-Sterile | 2   |
| GB185510D   | LLIF Spacer, Acid-etched Titanium, 18mm x 55mm x 10mm x 15°, Non-Sterile | 2   |
| GB185512D   | LLIF Spacer, Acid-etched Titanium, 18mm x 55mm x 12mm x 15°, Non-Sterile | 2   |
| GB185514D   | LLIF Spacer, Acid-etched Titanium, 18mm x 55mm x 14mm x 15°, Non-Sterile | 2   |
| GB185516D   | LLIF Spacer, Acid-etched Titanium, 18mm x 55mm x 16mm x 15°, Non-Sterile | 1   |
| GB186007C   | LLIF Spacer, Acid-etched Titanium, 18mm x 60mm x 07mm x 12°, Non-Sterile | 1   |
| GB186008D   | LLIF Spacer, Acid-etched Titanium, 18mm x 60mm x 08mm x 15°, Non-Sterile | 2   |
| GB186010D   | LLIF Spacer, Acid-etched Titanium, 18mm x 60mm x 10mm x 15°, Non-Sterile | 2   |
| GB186012D   | LLIF Spacer, Acid-etched Titanium, 18mm x 60mm x 12mm x 15°, Non-Sterile | 2   |
| GB186014D   | LLIF Spacer, Acid-etched Titanium, 18mm x 60mm x 14mm x 15°, Non-Sterile | 2   |
| GB186016D   | LLIF Spacer, Acid-etched Titanium, 18mm x 60mm x 16mm x 15°, Non-Sterile | 1   |
| GB224507B   | LLIF Spacer, Acid-etched Titanium, 22mm x 45mm x 07mm x 7°, Non-Sterile  | 1   |
| GB224508B   | LLIF Spacer, Acid-etched Titanium, 22mm x 45mm x 08mm x 7°, Non-Sterile  | 2   |
| GB224510B   | LLIF Spacer, Acid-etched Titanium, 22mm x 45mm x 10mm x 7°, Non-Sterile  | 2   |
| GB224512B   | LLIF Spacer, Acid-etched Titanium, 22mm x 45mm x 12mm x 7°, Non-Sterile  | 2   |
| GB224514B   | LLIF Spacer, Acid-etched Titanium, 22mm x 45mm x 14mm x 7°, Non-Sterile  | 2   |
| GB224516B   | LLIF Spacer, Acid-etched Titanium, 22mm x 45mm x 16mm x 7°, Non-Sterile  | 1   |

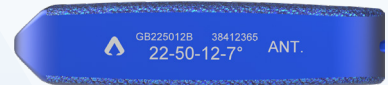




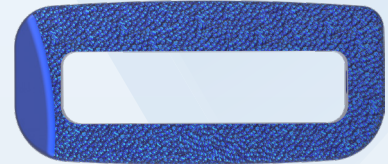
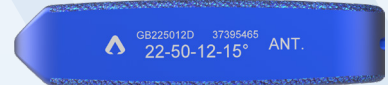
## SIRION LATERAL LUMBAR INTERBODY FUSION ACID-ETCHED TITANIUM OFFERING

### LLIF ACID-ETCHED TITANIUM SPACERS

| Part Number | Description                                                             | Qty |
|-------------|-------------------------------------------------------------------------|-----|
| GB225007B   | LLIF Spacer, Acid-etched Titanium, 22mm x 50mm x 07mm x 7°, Non-Sterile | 1   |
| GB225008B   | LLIF Spacer, Acid-etched Titanium, 22mm x 50mm x 08mm x 7°, Non-Sterile | 2   |
| GB225010B   | LLIF Spacer, Acid-etched Titanium, 22mm x 50mm x 10mm x 7°, Non-Sterile | 2   |
| GB225012B   | LLIF Spacer, Acid-etched Titanium, 22mm x 50mm x 12mm x 7°, Non-Sterile | 2   |
| GB225014B   | LLIF Spacer, Acid-etched Titanium, 22mm x 50mm x 14mm x 7°, Non-Sterile | 2   |
| GB225016B   | LLIF Spacer, Acid-etched Titanium, 22mm x 50mm x 16mm x 7°, Non-Sterile | 1   |
| GB225507B   | LLIF Spacer, Acid-etched Titanium, 22mm x 55mm x 07mm x 7°, Non-Sterile | 1   |
| GB225508B   | LLIF Spacer, Acid-etched Titanium, 22mm x 55mm x 08mm x 7°, Non-Sterile | 2   |
| GB225510B   | LLIF Spacer, Acid-etched Titanium, 22mm x 55mm x 10mm x 7°, Non-Sterile | 2   |
| GB225512B   | LLIF Spacer, Acid-etched Titanium, 22mm x 55mm x 12mm x 7°, Non-Sterile | 2   |
| GB225514B   | LLIF Spacer, Acid-etched Titanium, 22mm x 55mm x 14mm x 7°, Non-Sterile | 2   |
| GB225516B   | LLIF Spacer, Acid-etched Titanium, 22mm x 55mm x 16mm x 7°, Non-Sterile | 1   |
| GB226007B   | LLIF Spacer, Acid-etched Titanium, 22mm x 60mm x 07mm x 7°, Non-Sterile | 1   |
| GB226008B   | LLIF Spacer, Acid-etched Titanium, 22mm x 60mm x 08mm x 7°, Non-Sterile | 2   |
| GB226010B   | LLIF Spacer, Acid-etched Titanium, 22mm x 60mm x 10mm x 7°, Non-Sterile | 2   |
| GB226012B   | LLIF Spacer, Acid-etched Titanium, 22mm x 60mm x 12mm x 7°, Non-Sterile | 2   |
| GB226014B   | LLIF Spacer, Acid-etched Titanium, 22mm x 60mm x 14mm x 7°, Non-Sterile | 2   |
| GB226016B   | LLIF Spacer, Acid-etched Titanium, 22mm x 60mm x 16mm x 7°, Non-Sterile | 1   |



|           |                                                                          |   |
|-----------|--------------------------------------------------------------------------|---|
| GB224507C | LLIF Spacer, Acid-etched Titanium, 22mm x 45mm x 07mm x 12°, Non-Sterile | 1 |
| GB224508D | LLIF Spacer, Acid-etched Titanium, 22mm x 45mm x 08mm x 15°, Non-Sterile | 2 |
| GB224510D | LLIF Spacer, Acid-etched Titanium, 22mm x 45mm x 10mm x 15°, Non-Sterile | 2 |
| GB224512D | LLIF Spacer, Acid-etched Titanium, 22mm x 45mm x 12mm x 15°, Non-Sterile | 2 |
| GB224514D | LLIF Spacer, Acid-etched Titanium, 22mm x 45mm x 14mm x 15°, Non-Sterile | 2 |
| GB224516D | LLIF Spacer, Acid-etched Titanium, 22mm x 45mm x 16mm x 15°, Non-Sterile | 1 |
| GB225007C | LLIF Spacer, Acid-etched Titanium, 22mm x 50mm x 07mm x 12°, Non-Sterile | 1 |
| GB225008D | LLIF Spacer, Acid-etched Titanium, 22mm x 50mm x 08mm x 15°, Non-Sterile | 2 |
| GB225010D | LLIF Spacer, Acid-etched Titanium, 22mm x 50mm x 10mm x 15°, Non-Sterile | 2 |
| GB225012D | LLIF Spacer, Acid-etched Titanium, 22mm x 50mm x 12mm x 15°, Non-Sterile | 2 |
| GB225014D | LLIF Spacer, Acid-etched Titanium, 22mm x 50mm x 14mm x 15°, Non-Sterile | 2 |
| GB225016D | LLIF Spacer, Acid-etched Titanium, 22mm x 50mm x 16mm x 15°, Non-Sterile | 1 |
| GB225507C | LLIF Spacer, Acid-etched Titanium, 22mm x 55mm x 07mm x 12°, Non-Sterile | 1 |
| GB225508D | LLIF Spacer, Acid-etched Titanium, 22mm x 55mm x 08mm x 15°, Non-Sterile | 2 |
| GB225510D | LLIF Spacer, Acid-etched Titanium, 22mm x 55mm x 10mm x 15°, Non-Sterile | 2 |
| GB225512D | LLIF Spacer, Acid-etched Titanium, 22mm x 55mm x 12mm x 15°, Non-Sterile | 2 |
| GB225514D | LLIF Spacer, Acid-etched Titanium, 22mm x 55mm x 14mm x 15°, Non-Sterile | 2 |
| GB225516D | LLIF Spacer, Acid-etched Titanium, 22mm x 55mm x 16mm x 15°, Non-Sterile | 1 |
| GB226007C | LLIF Spacer, Acid-etched Titanium, 22mm x 60mm x 07mm x 12°, Non-Sterile | 1 |
| GB226008D | LLIF Spacer, Acid-etched Titanium, 22mm x 60mm x 08mm x 15°, Non-Sterile | 2 |
| GB226010D | LLIF Spacer, Acid-etched Titanium, 22mm x 60mm x 10mm x 15°, Non-Sterile | 2 |
| GB226012D | LLIF Spacer, Acid-etched Titanium, 22mm x 60mm x 12mm x 15°, Non-Sterile | 2 |
| GB226014D | LLIF Spacer, Acid-etched Titanium, 22mm x 60mm x 14mm x 15°, Non-Sterile | 2 |
| GB226016D | LLIF Spacer, Acid-etched Titanium, 22mm x 60mm x 16mm x 15°, Non-Sterile | 1 |



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## SIRION LATERAL LUMBAR INTERBODY FUSION PLATE OFFERING

### LATERAL PLATE, ATTACHED, 1 HOLE

| Part Number | Description                           | Qty      |
|-------------|---------------------------------------|----------|
| GCDAAZZ08   | Lateral Plate, Attached, 1 Hole, 8mm  | 2        |
| GCDAAZZ10   | Lateral Plate, Attached, 1 Hole, 10mm | 2        |
| GCDAAZZ12   | Lateral Plate, Attached, 1 Hole, 12mm | 2        |
| GCDAAZZ14   | Lateral Plate, Attached, 1 Hole, 14mm | 2        |
| GCDAAZZ16   | Lateral Plate, Attached, 1 Hole, 16mm | 2        |
| GCDAAZZ18   | Lateral Plate, Attached, 1 Hole, 18mm | 2 / Opt. |
| GCDAAZZ20   | Lateral Plate, Attached, 1 Hole, 20mm | 2 / Opt. |

### LATERAL PLATE, ATTACHED, 2 HOLE

| Part Number | Description                           | Qty      |
|-------------|---------------------------------------|----------|
| GCDBAZZ08   | Lateral Plate, Attached, 2 Hole, 8mm  | 2        |
| GCDBAZZ10   | Lateral Plate, Attached, 2 Hole, 10mm | 2        |
| GCDBAZZ12   | Lateral Plate, Attached, 2 Hole, 12mm | 2        |
| GCDBAZZ14   | Lateral Plate, Attached, 2 Hole, 14mm | 2        |
| GCDBAZZ16   | Lateral Plate, Attached, 2 Hole, 16mm | 2        |
| GCDBAZZ18   | Lateral Plate, Attached, 2 Hole, 18mm | 2 / Opt. |
| GCDBAZZ20   | Lateral Plate, Attached, 2 Hole, 20mm | 2 / Opt. |

### LATERAL PLATE, ATTACHED, 4 HOLE

| Part Number | Description                           | Qty      |
|-------------|---------------------------------------|----------|
| GCDCAZZ08   | Lateral Plate, Attached, 4 Hole, 8mm  | 2        |
| GCDCAZZ10   | Lateral Plate, Attached, 4 Hole, 10mm | 2        |
| GCDCAZZ12   | Lateral Plate, Attached, 4 Hole, 12mm | 2        |
| GCDCAZZ14   | Lateral Plate, Attached, 4 Hole, 14mm | 2        |
| GCDCAZZ16   | Lateral Plate, Attached, 4 Hole, 16mm | 2        |
| GCDCAZZ18   | Lateral Plate, Attached, 4 Hole, 18mm | 2 / Opt. |
| GCDCAZZ20   | Lateral Plate, Attached, 4 Hole, 20mm | 2 / Opt. |

### LATERAL PLATE, DETACHED, 1 HOLE

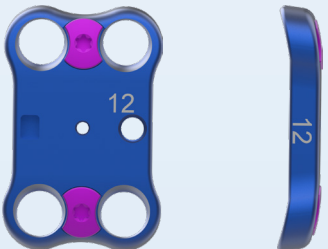
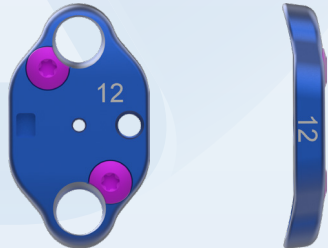
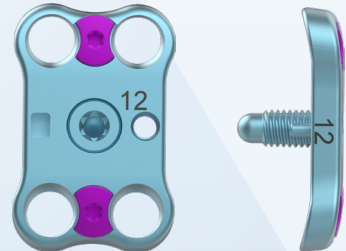
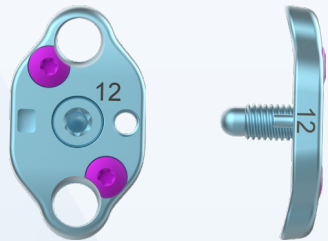
| Part Number | Description                           | Qty      |
|-------------|---------------------------------------|----------|
| GCDABZZ07   | Lateral Plate, Detached, 1 Hole, 7mm  | 2        |
| GCDABZZ08   | Lateral Plate, Detached, 1 Hole, 8mm  | 2        |
| GCDABZZ10   | Lateral Plate, Detached, 1 Hole, 10mm | 2        |
| GCDABZZ12   | Lateral Plate, Detached, 1 Hole, 12mm | 2        |
| GCDABZZ14   | Lateral Plate, Detached, 1 Hole, 14mm | 2        |
| GCDABZZ16   | Lateral Plate, Detached, 1 Hole, 16mm | 2        |
| GCDABZZ18   | Lateral Plate, Detached, 1 Hole, 18mm | 2 / Opt. |
| GCDABZZ20   | Lateral Plate, Detached, 1 Hole, 20mm | 2 / Opt. |

### LATERAL PLATE, DETACHED, 2 HOLE

| Part Number | Description                           | Qty      |
|-------------|---------------------------------------|----------|
| GCDBBZZ07   | Lateral Plate, Detached, 2 Hole, 7mm  | 2        |
| GCDBBZZ08   | Lateral Plate, Detached, 2 Hole, 8mm  | 2        |
| GCDBBZZ10   | Lateral Plate, Detached, 2 Hole, 10mm | 2        |
| GCDBBZZ12   | Lateral Plate, Detached, 2 Hole, 12mm | 2        |
| GCDBBZZ14   | Lateral Plate, Detached, 2 Hole, 14mm | 2        |
| GCDBBZZ16   | Lateral Plate, Detached, 2 Hole, 16mm | 2        |
| GCDBBZZ18   | Lateral Plate, Detached, 2 Hole, 18mm | 2 / Opt. |
| GCDBBZZ20   | Lateral Plate, Detached, 2 Hole, 22mm | 2 / Opt. |

### LATERAL PLATE, DETACHED, 4 HOLE

| Part Number | Description                           | Qty      |
|-------------|---------------------------------------|----------|
| GCDCBZZ07   | Lateral Plate, Detached, 4 Hole, 7mm  | 2        |
| GCDCBZZ08   | Lateral Plate, Detached, 4 Hole, 8mm  | 2        |
| GCDCBZZ10   | Lateral Plate, Detached, 4 Hole, 10mm | 2        |
| GCDCBZZ12   | Lateral Plate, Detached, 4 Hole, 12mm | 2        |
| GCDCBZZ14   | Lateral Plate, Detached, 4 Hole, 14mm | 2        |
| GCDCBZZ16   | Lateral Plate, Detached, 4 Hole, 16mm | 2        |
| GCDCBZZ18   | Lateral Plate, Detached, 4 Hole, 18mm | 2 / Opt. |
| GCDCBZZ20   | Lateral Plate, Detached, 4 Hole, 20mm | 2 / Opt. |





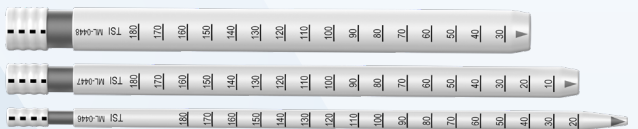
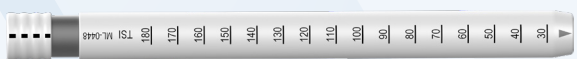
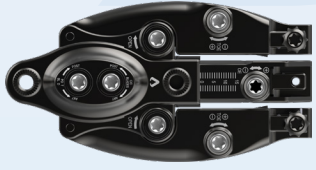
## SIRION LATERAL LUMBAR INTERBODY FUSION PLATE SCREWS OFFERING

### LATERAL PLATE SCREW SELF-DRILLING

| Part Number | Description                                                       | Qty |
|-------------|-------------------------------------------------------------------|-----|
| GDDAB5530   | Lateral Plate, Screw, 5.5mm x 30mm, Self Drilling, Variable Angle | 8   |
| GDDAB5535   | Lateral Plate, Screw, 5.5mm x 35mm, Self Drilling, Variable Angle | 8   |
| GDDAB5540   | Lateral Plate, Screw, 5.5mm x 40mm, Self Drilling, Variable Angle | 8   |
| GDDAB5545   | Lateral Plate, Screw, 5.5mm x 45mm, Self Drilling, Variable Angle | 8   |
| GDDAB5550   | Lateral Plate, Screw, 5.5mm x 50mm, Self Drilling, Variable Angle | 8   |
| GDDAB5555   | Lateral Plate, Screw, 5.5mm x 55mm, Self Drilling, Variable Angle | 8   |
| GDDAB5560   | Lateral Plate, Screw, 5.5mm x 60mm, Self Drilling, Variable Angle | 8   |
| GDDAB6030   | Lateral Plate, Screw, 6.0mm x 30mm, Self Drilling, Variable Angle | 4   |
| GDDAB6035   | Lateral Plate, Screw, 6.0mm x 35mm, Self Drilling, Variable Angle | 4   |
| GDDAB6040   | Lateral Plate, Screw, 6.0mm x 40mm, Self Drilling, Variable Angle | 4   |
| GDDAB6045   | Lateral Plate, Screw, 6.0mm x 45mm, Self Drilling, Variable Angle | 4   |
| GDDAB6050   | Lateral Plate, Screw, 6.0mm x 50mm, Self Drilling, Variable Angle | 4   |
| GDDAB6055   | Lateral Plate, Screw, 6.0mm x 55mm, Self Drilling, Variable Angle | 4   |
| GDDAB6060   | Lateral Plate, Screw, 6.0mm x 60mm, Self Drilling, Variable Angle | 4   |



| Part Number | Description | Qty |
|-------------|-------------|-----|
|-------------|-------------|-----|

|                |                             |         |                                                                                      |
|----------------|-----------------------------|---------|--------------------------------------------------------------------------------------|
| GZA020000      | Incision Locator            | 1       |    |
| ML-0440S       | Dilator, 8mm / 13mm         | 1       |    |
| ML-0441S       | Dilator, 8mm / 13mm, 18mm   | 1 / OPT |    |
| ML-0449S       | Dilator, 22mm               | 1 / OPT |    |
| GZA050000      | Dilator Holder              | 1       |   |
| 302430-000-200 | Ball Tip Stimulating Probe  | 1       |  |
| 302775-200     | Stimulation Clip            | 1       |  |
| GZA060000      | Retractor                   | 1       |  |
| 1587-09        | Disposable Annulotomy Knife | 1       |  |

## RETRACTOR INSTRUMENTS

| Part Number | Description | Qty |
|-------------|-------------|-----|
|-------------|-------------|-----|

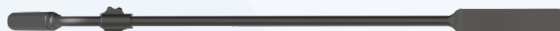
|           |                            |   |
|-----------|----------------------------|---|
| GZA090010 | Anterior Blade, Short, 8mm | 1 |
|-----------|----------------------------|---|



|           |                           |   |
|-----------|---------------------------|---|
| GZA090020 | Anterior Blade, Long, 8mm | 1 |
|-----------|---------------------------|---|



|           |                             |   |
|-----------|-----------------------------|---|
| GZA090030 | Anterior Blade, Short, 12mm | 1 |
|-----------|-----------------------------|---|



|           |                            |   |
|-----------|----------------------------|---|
| GZA090040 | Anterior Blade, Long, 12mm | 1 |
|-----------|----------------------------|---|



|           |                   |   |
|-----------|-------------------|---|
| GZA130000 | Retractor, Handle | 1 |
|-----------|-------------------|---|



|           |                   |   |
|-----------|-------------------|---|
| GZA140000 | Retractor, Driver | 2 |
|-----------|-------------------|---|



|           |                               |   |
|-----------|-------------------------------|---|
| GZA150000 | Retractor, Table Fixation Arm | 1 |
|-----------|-------------------------------|---|



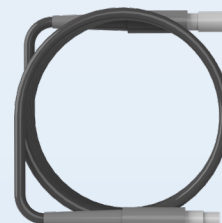
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|------------|------------------------|---|
| 5.750-N-VE | Universal Radial Clamp | 1 |
|------------|------------------------|---|

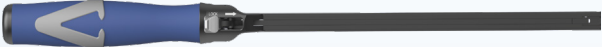
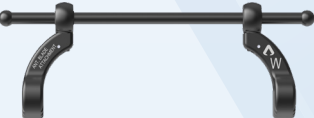


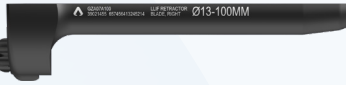
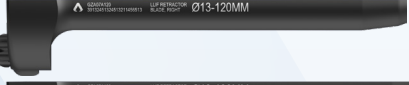
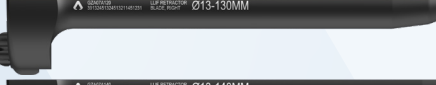
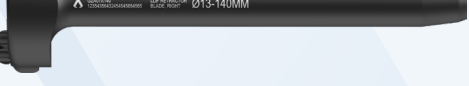
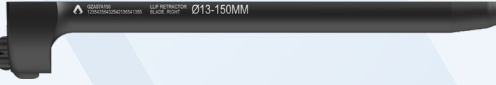
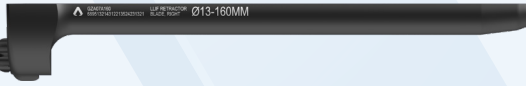
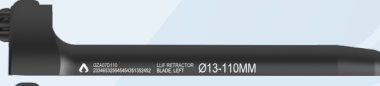
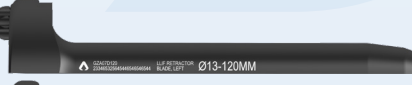
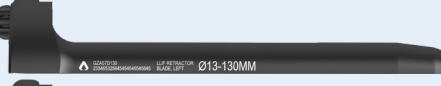
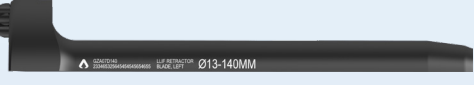
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| GZA160002 | Bifurcated Surgical Illuminator | 1 |
|-----------|---------------------------------|---|

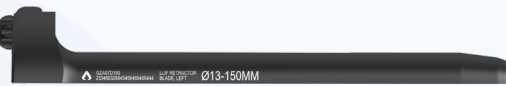
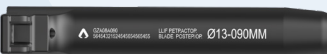
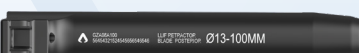
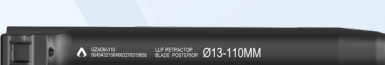
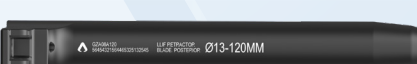
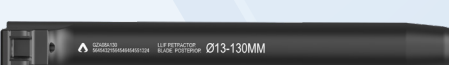
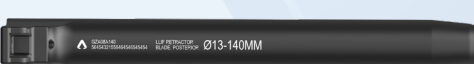
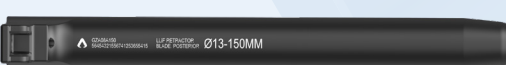
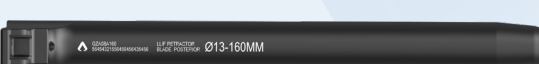
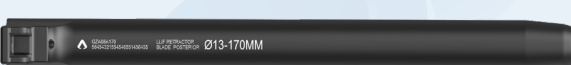


|       |                                           |   |
|-------|-------------------------------------------|---|
| 12139 | Lumitex Fiber Optic Cable - 4mm Universal | 1 |
|-------|-------------------------------------------|---|



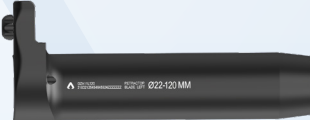
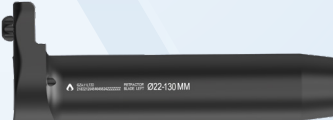
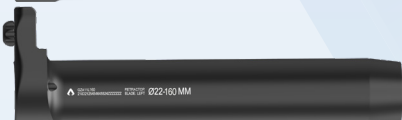
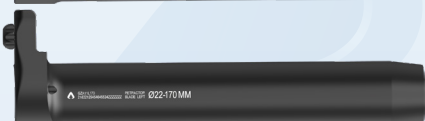
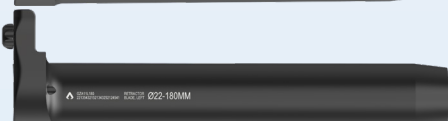
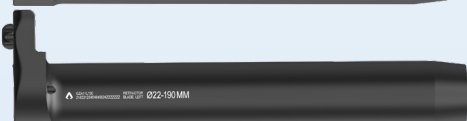
| Part Number | Description                                          | Qty |                                                                                      |
|-------------|------------------------------------------------------|-----|--------------------------------------------------------------------------------------|
| GZA220000   | Retractor, Blade, Shim Inserter                      | 1   |    |
| GZA280000   | Retractor, Blade, Threaded Bone Pin, Driver          | 1   |    |
| GZA290000   | Retractor, Posterior Blade Handle                    | 1   |    |
| GZA300000   | Retractor, Blade, Shim Tamp                          | 1   |    |
| GZA030000   | Guidewire, Blunt Tip, 1.4mm X 320mm                  | 10  |    |
| 12140       | Light Source Adapter, Acmi                           | 1   |    |
| 12143       | Light Source Adapter, Wolf                           | 1   |    |
| 12141       | Light Source Adapter, Olympus                        | 1   |   |
| 12142       | Light Source Adapter, Storz                          | 1   |   |
| GZA100010   | Retractor, Anterior Blade Mount, Narrow              | 1   |  |
| GZA100020   | Retractor, Anterior Blade Mount, Wide                | 1   |  |
| GZA230025   | Retractor, Posterior Blade Shim, 25mm                | 1   |  |
| GZA230035   | Retractor, Posterior Blade Shim, 35mm                | 1   |  |
| GZA240013   | Retractor, Blade, Blade Extension Shim, Ø13          | 2   |  |
| GZA250013   | Retractor, Blade, Lateral Extension Shim, Ø13        | 1   |  |
| GZA26013L   | Retractor, Blade, Lateral Extension Shim, Left, Ø13  | 1   |  |
| GZA26013R   | Retractor, Blade, Lateral Extension Shim, Right, Ø13 | 1   |  |
| GZA270020   | Retractor, Blade, Threaded Bone Pin, 20mm            | 2   |  |

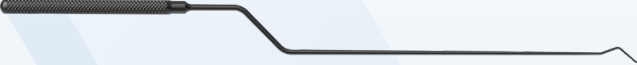
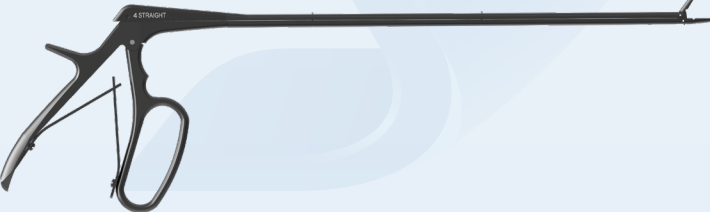
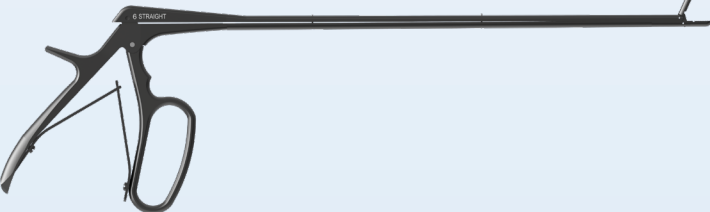
| Part Number | Description                            | Qty |                                                                                      |
|-------------|----------------------------------------|-----|--------------------------------------------------------------------------------------|
| GZA07A090   | Retractor, Blades, Right, 13mm x 90mm  | 1   |    |
| GZA07A100   | Retractor, Blades, Right, 13mm x 100mm | 1   |    |
| GZA07A110   | Retractor, Blades, Right, 13mm x 110mm | 1   |    |
| GZA07A120   | Retractor, Blades, Right, 13mm x 120mm | 1   |    |
| GZA07A130   | Retractor, Blades, Right, 13mm x 130mm | 1   |    |
| GZA07A140   | Retractor, Blades, Right, 13mm x 140mm | 1   |    |
| GZA07A150   | Retractor, Blades, Right, 13mm x 150mm | 1   |   |
| GZA07A160   | Retractor, Blades, Right, 13mm x 160mm | 1   |  |
| GZA07A170   | Retractor, Blades, Right, 13mm x 170mm | 1   |  |
| GZA07A180   | Retractor, Blades, Right, 13mm x 180mm | 1   |  |
| GZA07A190   | Retractor, Blades, Right, 13mm x 190mm | 1   |  |
| GZA07D090   | Retractor, Blades, Left, 13mm x 90mm   | 1   |  |
| GZA07D100   | Retractor, Blades, Left, 13mm x 100mm  | 1   |  |
| GZA07D110   | Retractor, Blades, Left, 13mm x 110mm  | 1   |  |
| GZA07D120   | Retractor, Blades, Left, 13mm x 120mm  | 1   |  |
| GZA07D130   | Retractor, Blades, Left, 13mm x 130mm  | 1   |  |
| GZA07D140   | Retractor, Blades, Left, 13mm x 140mm  | 1   |  |

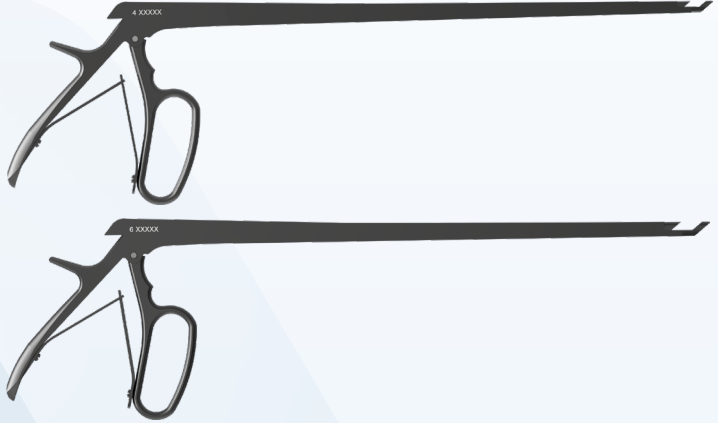
| Part Number | Description                             | Qty |                                                                                      |
|-------------|-----------------------------------------|-----|--------------------------------------------------------------------------------------|
| GZA07D150   | Retractor, Blades, Left, 13mm x 150mm   | 1   |    |
| GZA07D160   | Retractor, Blades, Left, 13mm x 160mm   | 1   |    |
| GZA07D170   | Retractor, Blades, Left, 13mm x 170mm   | 1   |    |
| GZA07D180   | Retractor, Blades, Left, 13mm x 180mm   | 1   |    |
| GZA07D190   | Retractor, Blades, Left, 13mm x 190mm   | 1   |    |
| GZA08A090   | Retractor, Blade, Posterior, 13 x 90mm  | 1   |    |
| GZA08A100   | Retractor, Blade, Posterior, 13 x 100mm | 1   |   |
| GZA08A110   | Retractor, Blade, Posterior, 13 x 110mm | 1   |  |
| GZA08A120   | Retractor, Blade, Posterior, 13 x 120mm | 1   |  |
| GZA08A130   | Retractor, Blade, Posterior, 13 x 130mm | 1   |  |
| GZA08A140   | Retractor, Blade, Posterior, 13 x 140mm | 1   |  |
| GZA08A150   | Retractor, Blade, Posterior, 13 x 150mm | 1   |  |
| GZA08A160   | Retractor, Blade, Posterior, 13 x 160mm | 1   |  |
| GZA08A170   | Retractor, Blade, Posterior, 13 x 170mm | 1   |  |
| GZA08A180   | Retractor, Blade, Posterior, 13 x 180mm | 1   |  |
| GZA08A190   | Retractor, Blade, Posterior, 13 x 190mm | 1   |  |

| Part Number | Description                            | Qty |
|-------------|----------------------------------------|-----|
| GZA11R090   | Retractor, Blades, Right, 22mm x 90mm  | 1   |
| GZA11R095   | Retractor, Blades, Right, 22mm x 95mm  | 1   |
| GZA11R100   | Retractor, Blades, Right, 22mm x 100mm | 1   |
| GZA11R110   | Retractor, Blades, Right, 22mm x 110mm | 1   |
| GZA11R120   | Retractor, Blades, Right, 22mm x 120mm | 1   |
| GZA11R130   | Retractor, Blades, Right, 22mm x 130mm | 1   |
| GZA11R140   | Retractor, Blades, Right, 22mm x 140mm | 1   |
| GZA11R150   | Retractor, Blades, Right, 22mm x 150mm | 1   |
| GZA11R160   | Retractor, Blades, Right, 22mm x 160mm | 1   |
| GZA11R170   | Retractor, Blades, Right, 22mm x 170mm | 1   |
| GZA11R180   | Retractor, Blades, Right, 22mm x 180mm | 1   |
| GZA11R190   | Retractor, Blades, Right, 22mm x 190mm | 1   |

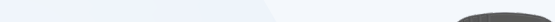
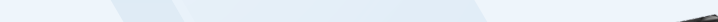
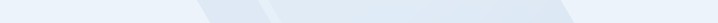
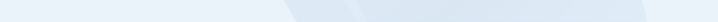
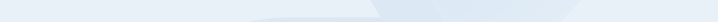
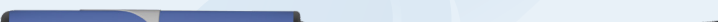
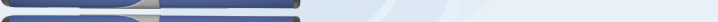
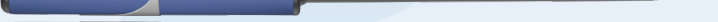


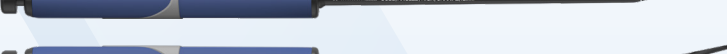
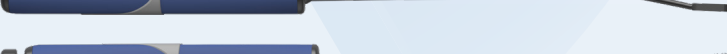
| Part Number | Description                           | Qty |                                                                                      |
|-------------|---------------------------------------|-----|--------------------------------------------------------------------------------------|
| GZA11L090   | Retractor, Blades, Left, 22mm x 90mm  | 1   |    |
| GZA11L095   | Retractor, Blades, Left, 22mm x 95mm  | 1   |    |
| GZA11L100   | Retractor, Blades, Left, 22mm x 100mm | 1   |    |
| GZA11L110   | Retractor, Blades, Left, 22mm x 110mm | 1   |    |
| GZA11L120   | Retractor, Blades, Left, 22mm x 120mm | 1   |   |
| GZA11L130   | Retractor, Blades, Left, 22mm x 130mm | 1   |  |
| GZA11L140   | Retractor, Blades, Left, 22mm x 140mm | 1   |  |
| GZA11L150   | Retractor, Blades, Left, 22mm x 150mm | 1   |  |
| GZA11L160   | Retractor, Blades, Left, 22mm x 160mm | 1   |  |
| GZA11L170   | Retractor, Blades, Left, 22mm x 170mm | 1   |  |
| GZA11L180   | Retractor, Blades, Left, 22mm x 180mm | 1   |  |
| GZA11L190   | Retractor, Blades, Left, 22mm x 190mm | 1   |  |

| Part Number  | Description                       | Qty |                                                                                      |
|--------------|-----------------------------------|-----|--------------------------------------------------------------------------------------|
| AST-KIRWAN09 | Bipolar                           | 1   |    |
| GZB030010    | Suction, 12fr, 200mm              | 1   |    |
| GZB040010    | Penfield Push, #4                 | 1   |    |
| GZB040020    | Penfield Pull, #4                 | 1   |    |
| GZB050000    | Woodson                           | 1   |    |
| GZB060000    | Annulotomy Knife                  | 1   |   |
| GZB09SZ12    | Cobb, 12mm                        | 1   |  |
| GZB09SZ18    | Cobb, 18mm                        | 1   |  |
| GZB24SZ04    | Box Cutter, Modular, 4mm          | 1   |  |
| GZB24SZ06    | Box Cutter, Modular, 6mm          | 1   |  |
| GZB24SZ08    | Box Cutter, Modular, 8mm          | 1   |  |
| GZB11SQ04    | Pituitary, Straight, Serrated, #4 | 1   |  |
| GZB11SQ06    | Pituitary, Straight, Serrated, #6 | 1   |  |

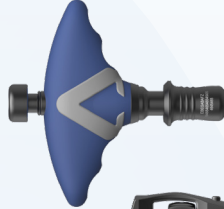
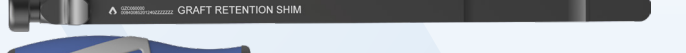
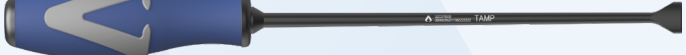
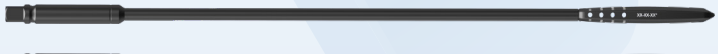
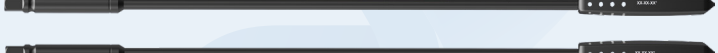
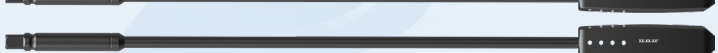
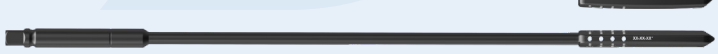
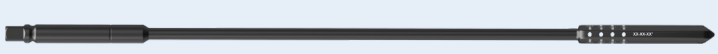
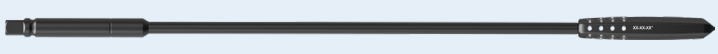
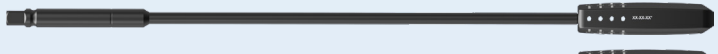
| Part Number | Description                          | Qty |                                                                                      |
|-------------|--------------------------------------|-----|--------------------------------------------------------------------------------------|
| GZB12SZ04   | Kerrison, Straight, #4               | 1   |    |
| GZB12SZ06   | Kerrison, Straight, #6               | 1   |                                                                                      |
| GZB13S104   | Cup Curette, Up, 10°, Serrated, #4   | 1   |  |
| GZB13S106   | Cup Curette, Up, 10°, Serrated, #6   | 1   |                                                                                      |
| GZB13SQ04   | Cup Curette, Serrated, #4            | 1   |                                                                                      |
| GZB13SQ06   | Cup Curette, Serrated, #6            | 1   |                                                                                      |
| GZB13SV04   | Cup Curette, Down, 90°, Serrated, #4 | 1   |                                                                                      |
| GZB13SV06   | Cup Curette, Down, 90°, Serrated, #6 | 1   |                                                                                      |
| GZB13SY04   | Cup Curette, Up, 90°, Serrated, #4   | 1   |                                                                                      |
| GZB13SY06   | Cup Curette, Up, 90°, Serrated, #6   | 1   |                                                                                      |
| GZB15SZ06   | Stirrup Curette, #6                  | 1   |                                                                                      |
| GZB16SR12   | Rasp, Double Sided, 12mm             | 1   |                                                                                      |
| GZB16SR18   | Rasp, Double Sided, 18mm             | 1   |                                                                                      |

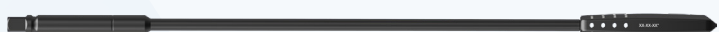
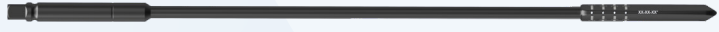
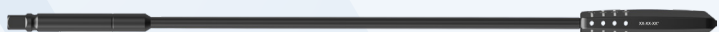
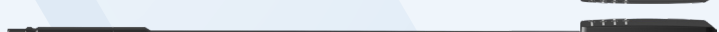
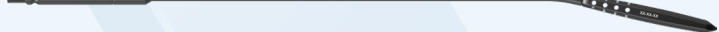
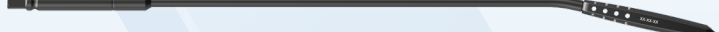
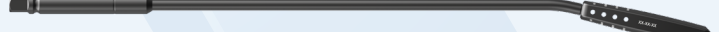
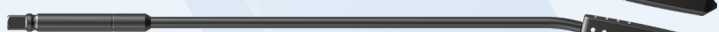
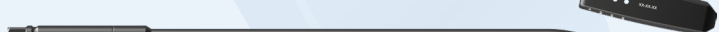
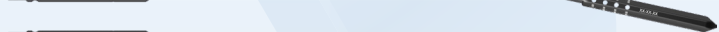
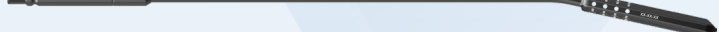
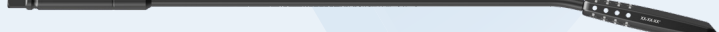
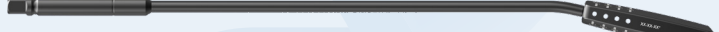
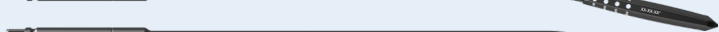
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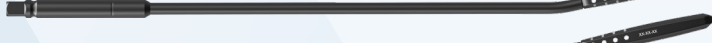
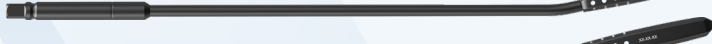
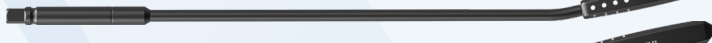
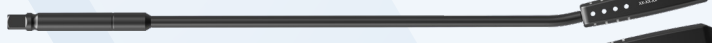
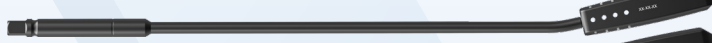
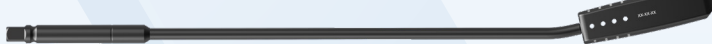
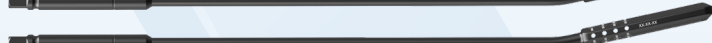
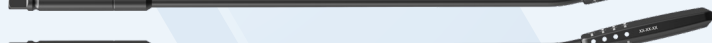
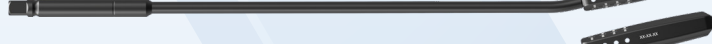
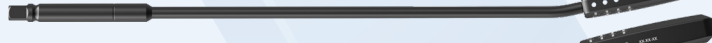
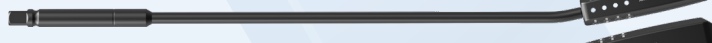
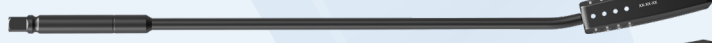
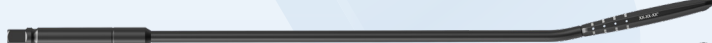
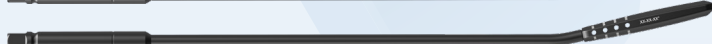
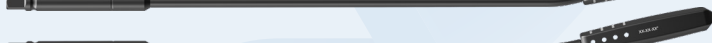
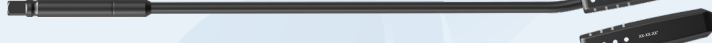
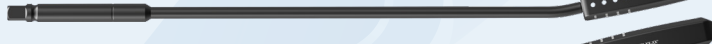
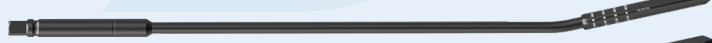
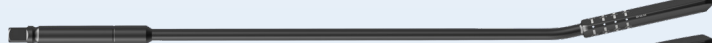
| Part Number | Description                                      | Qty |                                                                                      |
|-------------|--------------------------------------------------|-----|--------------------------------------------------------------------------------------|
| GZB25SZ01   | Distractor, Modular, 4mm x 16mm                  | 1   |    |
| GZB25SZ02   | Distractor, Modular, 6mm x 18mm                  | 1   |    |
| GZB25SZ03   | Distractor, Modular, 8mm x 18mm                  | 1   |    |
| GZB25SZ05   | Distractor, Modular, 8mm x 22mm                  | 1   |    |
| GZB25SZ08   | Distractor, Modular, 10mm x 22mm                 | 1   |    |
| GZB11AM04   | Pituitary, Angled, High, Left, Serrated, #4      | 1   |    |
| GZB11AM06   | Pituitary, Angled, High, Left, Serrated, #6      | 1   |  |
| GZB11AN04   | Pituitary, Angled, High, Right, Serrated, #4     | 1   |  |
| GZB11AN06   | Pituitary, Angled, High, Right, Serrated, #6     | 1   |  |
| GZB13AK04   | Cup Curette, Angled, Low, Cranial, Serrated, #4  | 1   |  |
| GZB13AK06   | Cup Curette, Angled, Low, Cranial, Serrated, #6  | 1   |  |
| GZB13AL04   | Cup Curette, Angled, Low, Caudal, Serrated, #4   | 1   |  |
| GZB13AL06   | Cup Curette, Angled, Low, Caudal, Serrated, #6   | 1   |  |
| GZB13AM04   | Cup Curette, Angled, High, Cranial, Serrated, #4 | 1   |  |
| GZB13AM06   | Cup Curette, Angled, High, Cranial, Serrated, #6 | 1   |  |
| GZB13AN04   | Cup Curette, Angled, High, Caudal, Serrated, #4  | 1   |  |
| GZB13AN06   | Cup Curette, Angled, High, Caudal, Serrated, #6  | 1   |  |

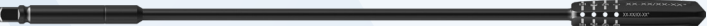
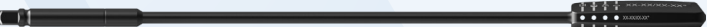
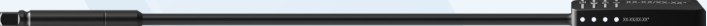
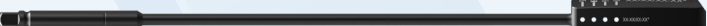
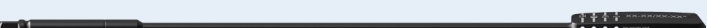
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|-------------|--------------------------------------------|-----|--------------------------------------------------------------------------------------|
| GZB24AB04   | Box Cutter, Modular, Angled, 4mm           | 1   |    |
| GZB24AB06   | Box Cutter, Modular, Angled, 6mm           | 1   |    |
| GZB24AB08   | Box Cutter, Modular, Angled, 8mm           | 1   |    |
| GZB09AC12   | Cobb, Angled, Low, Cranial, 12mm           | 1   |    |
| GZB09AC18   | Cobb, Angled, Low, Cranial, 18mm           | 1   |    |
| GZB09AD12   | Cobb, Angled, Low, Caudal, 12mm            | 1   |    |
| GZB09AD18   | Cobb, Angled, Low, Caudal, 18mm            | 1   |    |
| GZB09AE12   | Cobb, Angled, High, Cranial, 12mm          | 1   |    |
| GZB09AE18   | Cobb, Angled, High, Cranial, 18mm          | 1   |    |
| GZB09AF12   | Cobb, Angled, High, Caudal, 12mm           | 1   |   |
| GZB09AF18   | Cobb, Angled, High, Caudal, 18mm           | 1   |  |
| GZB15AC06   | Stirrup Curette, Angled, Low, Cranial, #6  | 1   |  |
| GZB15AD06   | Stirrup Curette, Angled, Low, Caudal, #6   | 1   |  |
| GZB15AE06   | Stirrup Curette, Angled, High, Cranial, #6 | 1   |  |
| GZB15AF06   | Stirrup Curette, Angled, High, Caudal, #6  | 1   |  |
| GZB16AA18   | Rasp, Angled, Low, Double Sided, 18mm      | 1   |  |
| GZB16AB18   | Rasp, Angled, High, Double Sided, 18mm     | 1   |  |
| GZB25AB01   | Distractor, Modular, Angled, 4mm X 16mm    | 1   |  |
| GZB25AB02   | Distractor, Modular, Angled, 6mm X 18mm    | 1   |  |
| GZB25AB03   | Distractor, Modular, Angled, 8mm X 18mm    | 1   |  |
| GZB25AB05   | Distractor, Modular, Angled, 8mm X 22mm    | 1   |  |
| GZB25AB08   | Distractor, Modular, Angled, 10mm X 22mm   | 1   |  |

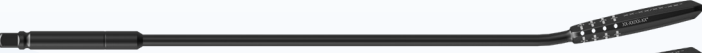
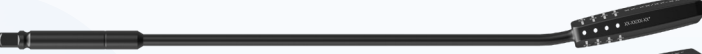
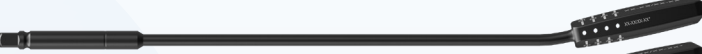
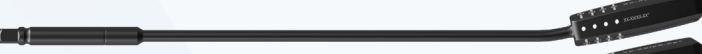
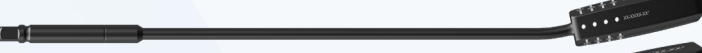
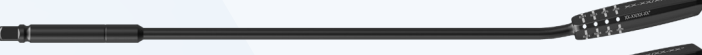
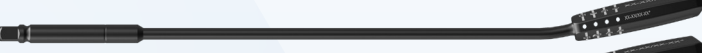
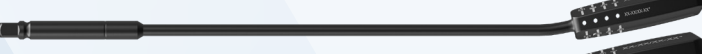
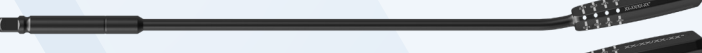
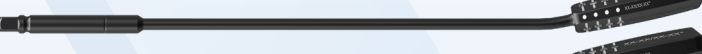
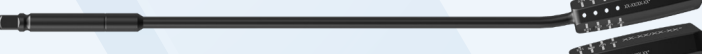
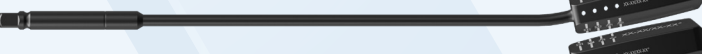
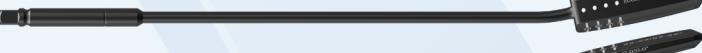
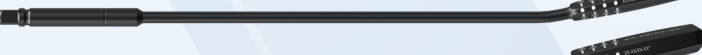
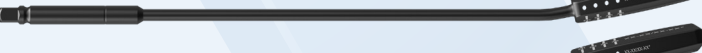
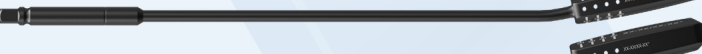
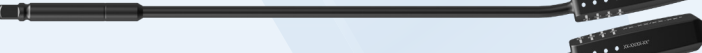
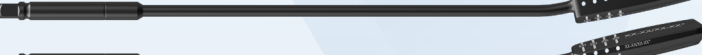
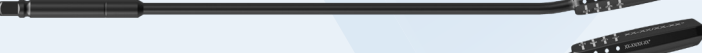
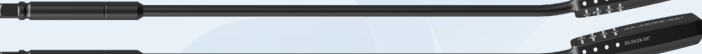
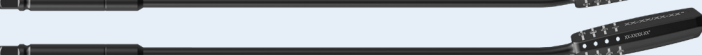
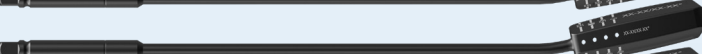
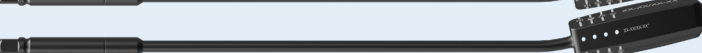
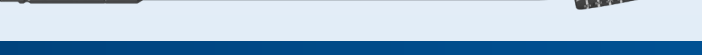
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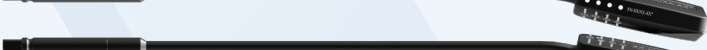
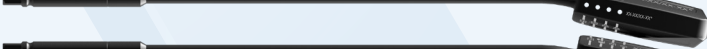
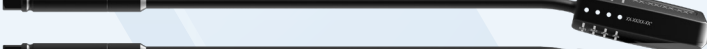
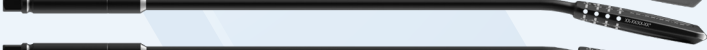
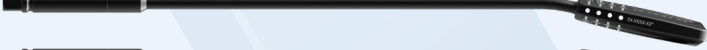
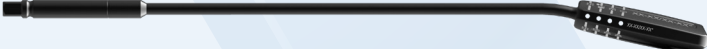
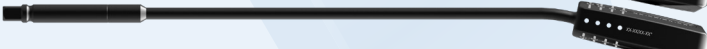
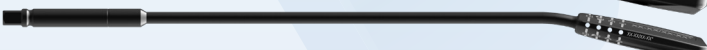
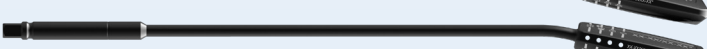
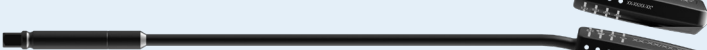
| Part Number | Description                                                   | Qty     |                                                                                      |
|-------------|---------------------------------------------------------------|---------|--------------------------------------------------------------------------------------|
| EAFGABXFZ   | Axial, Medium Long, Advanced Ext 1/4" Sq, S/L Slap Hammer Cap | 2       |    |
| EBEGABAFZ   | T Handle, Advanced Ext 1/4" Sq, S/L Slap Hammer Cap           | 1       |    |
| GZC040000   | Insertor, Straight                                            | 2       |    |
| GZC040007   | Insertor, Straight, 7mm                                       | 1       |    |
| GZC040010   | Insertor, Angled                                              | 1       |    |
| GZC0400A7   | Insertor, Angled, 7mm                                         | 1       |    |
| GZC060000   | Graft Retention Shim                                          | 2       |    |
| GZC070000   | Tamp                                                          | 1       |   |
| GZC120000   | Tamp, Angled                                                  | 1       |  |
| GZC080000   | Mallet                                                        | 1       |  |
| GZC090000   | Slaphammer                                                    | 1       |  |
| GZC01A07B   | Trial, Modular, 18mm X 7mm X 7°                               | 1 / OPT |  |
| GZC01A08B   | Trial, Modular, 18mm X 8mm X 7°                               | 1 / OPT |  |
| GZC01A10B   | Trial, Modular, 18mm X 10mm X 7°                              | 1 / OPT |  |
| GZC01A12B   | Trial, Modular, 18mm X 12mm X 7°                              | 1 / OPT |  |
| GZC01A14B   | Trial, Modular, 18mm X 14mm X 7°                              | 1 / OPT |  |
| GZC01A16B   | Trial, Modular, 18mm X 16mm X 7°                              | 1 / OPT |  |
| GZC01A07C   | Trial, Modular, 18mm X 7mm X 12°                              | 1 / OPT |  |
| GZC01A08D   | Trial, Modular, 18mm X 8mm X 15°                              | 1 / OPT |  |
| GZC01A10D   | Trial, Modular, 18mm X 10mm X 15°                             | 1 / OPT |  |
| GZC01A12D   | Trial, Modular, 18mm X 12mm X 15°                             | 1 / OPT |  |
| GZC01A14D   | Trial, Modular, 18mm X 14mm X 15°                             | 1 / OPT |  |
| GZC01A16D   | Trial, Modular, 18mm X 16mm X 15°                             | 1 / OPT |  |

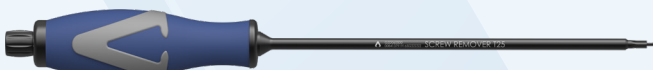
| Part Number | Description                                     | Qty     |                                                                                      |
|-------------|-------------------------------------------------|---------|--------------------------------------------------------------------------------------|
| GZC01C07B   | Trial, Modular, 22mm x 7mm x 7°                 | 1 / OPT |    |
| GZC01C08B   | Trial, Modular, 22mm x 8mm x 7°                 | 1 / OPT |    |
| GZC01C10B   | Trial, Modular, 22mm x 10mm x 7°                | 1 / OPT |    |
| GZC01C12B   | Trial, Modular, 22mm x 12mm x 7°                | 1 / OPT |    |
| GZC01C14B   | Trial, Modular, 22mm x 14mm x 7°                | 1 / OPT |    |
| GZC01C16B   | Trial, Modular, 22mm x 16mm x 7°                | 1 / OPT |    |
| GZC01C07C   | Trial, Modular, 22mm x 7mm x 12°                | 1 / OPT |    |
| GZC01C08D   | Trial, Modular, 22mm x 8mm x 15°                | 1 / OPT |    |
| GZC01C10D   | Trial, Modular, 22mm x 10mm x 15°               | 1 / OPT |    |
| GZC01C12D   | Trial, Modular, 22mm x 12mm x 15°               | 1 / OPT |    |
| GZC01C14D   | Trial, Modular, 22mm x 14mm x 15°               | 1 / OPT |    |
| GZC01C16D   | Trial, Modular, 22mm x 16mm x 15°               | 1 / OPT |    |
| GZC11A07B   | Trial, Modular, Angled Right, 18mm x 7mm x 7°   | 1 / OPT |   |
| GZC11A08B   | Trial, Modular, Angled Right, 18mm x 8mm x 7°   | 1 / OPT |  |
| GZC11A10B   | Trial, Modular, Angled Right, 18mm x 10mm x 7°  | 1 / OPT |  |
| GZC11A12B   | Trial, Modular, Angled Right, 18mm x 12mm x 7°  | 1 / OPT |  |
| GZC11A14B   | Trial, Modular, Angled Right, 18mm x 14mm x 7°  | 1 / OPT |  |
| GZC11A16B   | Trial, Modular, Angled Right, 18mm x 16mm x 7°  | 1 / OPT |  |
| GZC11A07C   | Trial, Modular, Angled Right, 18mm x 7mm x 12°  | 1 / OPT |  |
| GZC11A08D   | Trial, Modular, Angled Right, 18mm x 8mm x 15°  | 1 / OPT |  |
| GZC11A10D   | Trial, Modular, Angled Right, 18mm x 10mm x 15° | 1 / OPT |  |
| GZC11A12D   | Trial, Modular, Angled Right, 18mm x 12mm x 15° | 1 / OPT |  |
| GZC11A14D   | Trial, Modular, Angled Right, 18mm x 14mm x 15° | 1 / OPT |  |
| GZC11A16D   | Trial, Modular, Angled Right, 18mm x 16mm x 15° | 1 / OPT |  |
| GZC11C07B   | Trial, Modular, Angled Right, 22mm x 7mm x 7°   | 1 / OPT |  |
| GZC11C08B   | Trial, Modular, Angled Right, 22mm x 8mm x 7°   | 1 / OPT |  |
| GZC11C10B   | Trial, Modular, Angled Right, 22mm x 10mm x 7°  | 1 / OPT |  |
| GZC11C12B   | Trial, Modular, Angled Right, 22mm x 12mm x 7°  | 1 / OPT |  |
| GZC11C14B   | Trial, Modular, Angled Right, 22mm x 14mm x 7°  | 1 / OPT |  |
| GZC11C16B   | Trial, Modular, Angled Right, 22mm x 16mm x 7°  | 1 / OPT |  |

| Part Number | Description                                     | Qty     |                                                                                      |
|-------------|-------------------------------------------------|---------|--------------------------------------------------------------------------------------|
| GZC11C07C   | Trial, Modular, Angled Right, 22mm x 7mm x 12°  | 1 / OPT |    |
| GZC11C08D   | Trial, Modular, Angled Right, 22mm x 8mm x 15°  | 1 / OPT |    |
| GZC11C10D   | Trial, Modular, Angled Right, 22mm x 10mm x 15° | 1 / OPT |    |
| GZC11C12D   | Trial, Modular, Angled Right, 22mm x 12mm x 15° | 1 / OPT |    |
| GZC11C14D   | Trial, Modular, Angled Right, 22mm x 14mm x 15° | 1 / OPT |    |
| GZC11C16D   | Trial, Modular, Angled Right, 22mm x 16mm x 15° | 1 / OPT |    |
| GZC10A07B   | Trial, Modular, Angled Left, 18mm x 7mm x 7°    | 1 / OPT |    |
| GZC10A08B   | Trial, Modular, Angled Left, 18mm x 8mm x 7°    | 1 / OPT |    |
| GZC10A10B   | Trial, Modular, Angled Left, 18mm x 10mm x 7°   | 1 / OPT |    |
| GZC10A12B   | Trial, Modular, Angled Left, 18mm x 12mm x 7°   | 1 / OPT |    |
| GZC10A14B   | Trial, Modular, Angled Left, 18mm x 14mm x 7°   | 1 / OPT |    |
| GZC10A16B   | Trial, Modular, Angled Left, 18mm x 16mm x 7°   | 1 / OPT |    |
| GZC10A07C   | Trial, Modular, Angled Left, 18mm x 7mm x 12°   | 1 / OPT |   |
| GZC10A08D   | Trial, Modular, Angled Left, 18mm x 8mm x 15°   | 1 / OPT |  |
| GZC10A10D   | Trial, Modular, Angled Left, 18mm x 10mm x 15°  | 1 / OPT |  |
| GZC10A12D   | Trial, Modular, Angled Left, 18mm x 12mm x 15°  | 1 / OPT |  |
| GZC10A14D   | Trial, Modular, Angled Left, 18mm x 14mm x 15°  | 1 / OPT |  |
| GZC10A16D   | Trial, Modular, Angled Left, 18mm x 16mm x 15°  | 1 / OPT |  |
| GZC10C07B   | Trial, Modular, Angled Left, 22mm x 7mm x 7°    | 1 / OPT |  |
| GZC10C08B   | Trial, Modular, Angled Left, 22mm x 8mm x 7°    | 1 / OPT |  |
| GZC10C10B   | Trial, Modular, Angled Left, 22mm x 10mm x 7°   | 1 / OPT |  |
| GZC10C12B   | Trial, Modular, Angled Left, 22mm x 12mm x 7°   | 1 / OPT |  |
| GZC10C14B   | Trial, Modular, Angled Left, 22mm x 14mm x 7°   | 1 / OPT |  |
| GZC10C16B   | Trial, Modular, Angled Left, 22mm x 16mm x 7°   | 1 / OPT |  |
| GZC10C07C   | Trial, Modular, Angled Left, 22mm x 7mm x 12°   | 1 / OPT |  |
| GZC10C08D   | Trial, Modular, Angled Left, 22mm x 8mm x 15°   | 1 / OPT |  |
| GZC10C10D   | Trial, Modular, Angled Left, 22mm x 10mm x 15°  | 1 / OPT |  |
| GZC10C12D   | Trial, Modular, Angled Left, 22mm x 12mm x 15°  | 1 / OPT |  |
| GZC10C14D   | Trial, Modular, Angled Left, 22mm x 14mm x 15°  | 1 / OPT |  |
| GZC10C16D   | Trial, Modular, Angled Left, 22mm x 16mm x 15°  | 1 / OPT |  |

| Part Number | Description                                      | Qty     |                                                                                      |
|-------------|--------------------------------------------------|---------|--------------------------------------------------------------------------------------|
| GZC01A02E   | TRIAL, MODULAR, STRAIGHT, 18MM X 02MM/10MM X 20° | 1 / OPT |    |
| GZC01A04E   | TRIAL, MODULAR, STRAIGHT, 18MM X 04MM/12MM X 20° | 1 / OPT |    |
| GZC01A06E   | TRIAL, MODULAR, STRAIGHT, 18MM X 06MM/14MM X 20° | 1 / OPT |    |
| GZC01A08E   | TRIAL, MODULAR, STRAIGHT, 18MM X 08MM/16MM X 20° | 1 / OPT |    |
| GZC01A10E   | TRIAL, MODULAR, STRAIGHT, 18MM X 10MM/18MM X 20° | 1 / OPT |    |
| GZC01A02F   | TRIAL, MODULAR, STRAIGHT, 18MM X 02MM/11MM X 25° | 1 / OPT |    |
| GZC01A04F   | TRIAL, MODULAR, STRAIGHT, 18MM X 04MM/13MM X 25° | 1 / OPT |    |
| GZC01A06F   | TRIAL, MODULAR, STRAIGHT, 18MM X 06MM/15MM X 25° | 1 / OPT |    |
| GZC01A08F   | TRIAL, MODULAR, STRAIGHT, 18MM X 08MM/17MM X 25° | 1 / OPT |    |
| GZC01A10F   | TRIAL, MODULAR, STRAIGHT, 18MM X 10MM/19MM X 25° | 1 / OPT |    |
| GZC01A02G   | TRIAL, MODULAR, STRAIGHT, 18MM X 02MM/13MM X 30° | 1 / OPT |    |
| GZC01A04G   | TRIAL, MODULAR, STRAIGHT, 18MM X 04MM/15MM X 30° | 1 / OPT |   |
| GZC01A06G   | TRIAL, MODULAR, STRAIGHT, 18MM X 06MM/17MM X 30° | 1 / OPT |  |
| GZC01A08G   | TRIAL, MODULAR, STRAIGHT, 18MM X 08MM/19MM X 30° | 1 / OPT |  |
| GZC01A10G   | TRIAL, MODULAR, STRAIGHT, 18MM X 10MM/21MM X 30° | 1 / OPT |  |
| GZC01C02E   | TRIAL, MODULAR, STRAIGHT, 22MM X 02MM/11MM X 20° | 1 / OPT |  |
| GZC01C04E   | TRIAL, MODULAR, STRAIGHT, 22MM X 04MM/13MM X 20° | 1 / OPT |  |
| GZC01C06E   | TRIAL, MODULAR, STRAIGHT, 22MM X 06MM/15MM X 20° | 1 / OPT |  |
| GZC01C08E   | TRIAL, MODULAR, STRAIGHT, 22MM X 08MM/17MM X 20° | 1 / OPT |  |
| GZC01C10E   | TRIAL, MODULAR, STRAIGHT, 22MM X 10MM/19MM X 20° | 1 / OPT |  |
| GZC01C02F   | TRIAL, MODULAR, STRAIGHT, 22MM X 02MM/13MM X 25° | 1 / OPT |  |
| GZC01C04F   | TRIAL, MODULAR, STRAIGHT, 22MM X 04MM/15MM X 25° | 1 / OPT |  |
| GZC01C06F   | TRIAL, MODULAR, STRAIGHT, 22MM X 06MM/17MM X 25° | 1 / OPT |  |
| GZC01C08F   | TRIAL, MODULAR, STRAIGHT, 22MM X 08MM/19MM X 25° | 1 / OPT |  |
| GZC01C10F   | TRIAL, MODULAR, STRAIGHT, 22MM X 10MM/21MM X 25° | 1 / OPT |  |
| GZC01C02G   | TRIAL, MODULAR, STRAIGHT, 22MM X 02MM/15MM X 30° | 1 / OPT |  |
| GZC01C04G   | TRIAL, MODULAR, STRAIGHT, 22MM X 04MM/17MM X 30° | 1 / OPT |  |
| GZC01C06G   | TRIAL, MODULAR, STRAIGHT, 22MM X 06MM/19MM X 30° | 1 / OPT |  |
| GZC01C08G   | TRIAL, MODULAR, STRAIGHT, 22MM X 08MM/21MM X 30° | 1 / OPT |  |
| GZC01C10G   | TRIAL, MODULAR, STRAIGHT, 22MM X 10MM/23MM X 30° | 1 / OPT |  |

| Part Number | Description                                         | Qty     |                                                                                      |
|-------------|-----------------------------------------------------|---------|--------------------------------------------------------------------------------------|
| GZC10A02E   | TRIAL, MODULAR, ANGLED LEFT, 18MM X 02MM/10MM X 20° | 1 / OPT |    |
| GZC10A04E   | TRIAL, MODULAR, ANGLED LEFT, 18MM X 04MM/12MM X 20° | 1 / OPT |    |
| GZC10A06E   | TRIAL, MODULAR, ANGLED LEFT, 18MM X 06MM/14MM X 20° | 1 / OPT |    |
| GZC10A08E   | TRIAL, MODULAR, ANGLED LEFT, 18MM X 08MM/16MM X 20° | 1 / OPT |    |
| GZC10A10E   | TRIAL, MODULAR, ANGLED LEFT, 18MM X 10MM/18MM X 20° | 1 / OPT |    |
| GZC10A02F   | TRIAL, MODULAR, ANGLED LEFT, 18MM X 02MM/11MM X 25° | 1 / OPT |    |
| GZC10A04F   | TRIAL, MODULAR, ANGLED LEFT, 18MM X 04MM/13MM X 25° | 1 / OPT |    |
| GZC10A06F   | TRIAL, MODULAR, ANGLED LEFT, 18MM X 06MM/15MM X 25° | 1 / OPT |    |
| GZC10A08F   | TRIAL, MODULAR, ANGLED LEFT, 18MM X 08MM/17MM X 25° | 1 / OPT |    |
| GZC10A10F   | TRIAL, MODULAR, ANGLED LEFT, 18MM X 10MM/19MM X 25° | 1 / OPT |    |
| GZC10A02G   | TRIAL, MODULAR, ANGLED LEFT, 18MM X 02MM/13MM X 30° | 1 / OPT |    |
| GZC10A04G   | TRIAL, MODULAR, ANGLED LEFT, 18MM X 04MM/15MM X 30° | 1 / OPT |   |
| GZC10A06G   | TRIAL, MODULAR, ANGLED LEFT, 18MM X 06MM/17MM X 30° | 1 / OPT |  |
| GZC10A08G   | TRIAL, MODULAR, ANGLED LEFT, 18MM X 08MM/19MM X 30° | 1 / OPT |  |
| GZC10A10G   | TRIAL, MODULAR, ANGLED LEFT, 18MM X 10MM/21MM X 30° | 1 / OPT |  |
| GZC10C02E   | TRIAL, MODULAR, ANGLED LEFT, 22MM X 02MM/11MM X 20° | 1 / OPT |  |
| GZC10C04E   | TRIAL, MODULAR, ANGLED LEFT, 22MM X 04MM/13MM X 20° | 1 / OPT |  |
| GZC10C06E   | TRIAL, MODULAR, ANGLED LEFT, 22MM X 06MM/15MM X 20° | 1 / OPT |  |
| GZC10C08E   | TRIAL, MODULAR, ANGLED LEFT, 22MM X 08MM/17MM X 20° | 1 / OPT |  |
| GZC10C10E   | TRIAL, MODULAR, ANGLED LEFT, 22MM X 10MM/19MM X 20° | 1 / OPT |  |
| GZC10C02F   | TRIAL, MODULAR, ANGLED LEFT, 22MM X 02MM/13MM X 25° | 1 / OPT |  |
| GZC10C04F   | TRIAL, MODULAR, ANGLED LEFT, 22MM X 04MM/15MM X 25° | 1 / OPT |  |
| GZC10C06F   | TRIAL, MODULAR, ANGLED LEFT, 22MM X 06MM/17MM X 25° | 1 / OPT |  |
| GZC10C08F   | TRIAL, MODULAR, ANGLED LEFT, 22MM X 08MM/19MM X 25° | 1 / OPT |  |
| GZC10C10F   | TRIAL, MODULAR, ANGLED LEFT, 22MM X 10MM/21MM X 25° | 1 / OPT |  |
| GZC10C02G   | TRIAL, MODULAR, ANGLED LEFT, 22MM X 02MM/15MM X 30° | 1 / OPT |  |
| GZC10C04G   | TRIAL, MODULAR, ANGLED LEFT, 22MM X 04MM/17MM X 30° | 1 / OPT |  |
| GZC10C06G   | TRIAL, MODULAR, ANGLED LEFT, 22MM X 06MM/19MM X 30° | 1 / OPT |  |
| GZC10C08G   | TRIAL, MODULAR, ANGLED LEFT, 22MM X 08MM/21MM X 30° | 1 / OPT |  |
| GZC10C10G   | TRIAL, MODULAR, ANGLED LEFT, 22MM X 10MM/23MM X 30° | 1 / OPT |  |

| Part Number | Description                                          | Qty     |                                                                                      |
|-------------|------------------------------------------------------|---------|--------------------------------------------------------------------------------------|
| GZC11A02E   | TRIAL, MODULAR, ANGLED RIGHT, 18MM X 02MM/10MM X 20° | 1 / OPT |    |
| GZC11A04E   | TRIAL, MODULAR, ANGLED RIGHT, 18MM X 04MM/12MM X 20° | 1 / OPT |    |
| GZC11A06E   | TRIAL, MODULAR, ANGLED RIGHT, 18MM X 06MM/14MM X 20° | 1 / OPT |    |
| GZC11A08E   | TRIAL, MODULAR, ANGLED RIGHT, 18MM X 08MM/16MM X 20° | 1 / OPT |    |
| GZC11A10E   | TRIAL, MODULAR, ANGLED RIGHT, 18MM X 10MM/18MM X 20° | 1 / OPT |    |
| GZC11A02F   | TRIAL, MODULAR, ANGLED RIGHT, 18MM X 02MM/11MM X 25° | 1 / OPT |    |
| GZC11A04F   | TRIAL, MODULAR, ANGLED RIGHT, 18MM X 04MM/13MM X 25° | 1 / OPT |    |
| GZC11A06F   | TRIAL, MODULAR, ANGLED RIGHT, 18MM X 06MM/15MM X 25° | 1 / OPT |    |
| GZC11A08F   | TRIAL, MODULAR, ANGLED RIGHT, 18MM X 08MM/17MM X 25° | 1 / OPT |    |
| GZC11A10F   | TRIAL, MODULAR, ANGLED RIGHT, 18MM X 10MM/19MM X 25° | 1 / OPT |    |
| GZC11A02G   | TRIAL, MODULAR, ANGLED RIGHT, 18MM X 02MM/13MM X 30° | 1 / OPT |    |
| GZC11A04G   | TRIAL, MODULAR, ANGLED RIGHT, 18MM X 04MM/15MM X 30° | 1 / OPT |    |
| GZC11A06G   | TRIAL, MODULAR, ANGLED RIGHT, 18MM X 06MM/17MM X 30° | 1 / OPT |   |
| GZC11A08G   | TRIAL, MODULAR, ANGLED RIGHT, 18MM X 08MM/19MM X 30° | 1 / OPT |  |
| GZC11A10G   | TRIAL, MODULAR, ANGLED RIGHT, 18MM X 10MM/21MM X 30° | 1 / OPT |  |
| GZC11C02E   | TRIAL, MODULAR, ANGLED RIGHT, 22MM X 02MM/11MM X 20° | 1 / OPT |  |
| GZC11C04E   | TRIAL, MODULAR, ANGLED RIGHT, 22MM X 04MM/13MM X 20° | 1 / OPT |  |
| GZC11C06E   | TRIAL, MODULAR, ANGLED RIGHT, 22MM X 06MM/15MM X 20° | 1 / OPT |  |
| GZC11C08E   | TRIAL, MODULAR, ANGLED RIGHT, 22MM X 08MM/17MM X 20° | 1 / OPT |  |
| GZC11C10E   | TRIAL, MODULAR, ANGLED RIGHT, 22MM X 10MM/19MM X 20° | 1 / OPT |  |
| GZC11C02F   | TRIAL, MODULAR, ANGLED RIGHT, 22MM X 02MM/13MM X 25° | 1 / OPT |  |
| GZC11C04F   | TRIAL, MODULAR, ANGLED RIGHT, 22MM X 04MM/15MM X 25° | 1 / OPT |  |
| GZC11C06F   | TRIAL, MODULAR, ANGLED RIGHT, 22MM X 06MM/17MM X 25° | 1 / OPT |  |
| GZC11C08F   | TRIAL, MODULAR, ANGLED RIGHT, 22MM X 08MM/19MM X 25° | 1 / OPT |  |
| GZC11C10F   | TRIAL, MODULAR, ANGLED RIGHT, 22MM X 10MM/21MM X 25° | 1 / OPT |  |
| GZC11C02G   | TRIAL, MODULAR, ANGLED RIGHT, 22MM X 02MM/15MM X 30° | 1 / OPT |  |
| GZC11C04G   | TRIAL, MODULAR, ANGLED RIGHT, 22MM X 04MM/17MM X 30° | 1 / OPT |  |
| GZC11C06G   | TRIAL, MODULAR, ANGLED RIGHT, 22MM X 06MM/19MM X 30° | 1 / OPT |  |
| GZC11C08G   | TRIAL, MODULAR, ANGLED RIGHT, 22MM X 08MM/21MM X 30° | 1 / OPT |  |
| GZC11C10G   | TRIAL, MODULAR, ANGLED RIGHT, 22MM X 10MM/23MM X 30° | 1 / OPT |  |

| Part Number  | Description                                 | Qty |                                                                                      |
|--------------|---------------------------------------------|-----|--------------------------------------------------------------------------------------|
| EAECDUBBZ    | Axial, Large, 1/4" Sq. Ratchet              | 2   |    |
| EDDEATAAZ    | Egg Handle, AO                              | 1   |    |
| GZC040020    | Plate Inserter                              | 1   |    |
| GZC040030    | Angled Plate Inserter                       | 1   |    |
| GZC040020-05 | Plate Inserter, Torque Driver, T15          | 2   |    |
| GZD020010    | Variable Angle Adjustable Depth Drill       | 1   |    |
| GZD030010    | Variable Angle Adjustable Depth Awl         | 1   |    |
| GZD040050    | Variable Angle Adjustable Depth Tap, Ø5.5mm | 1   |   |
| GZD050000    | Screwdriver, T25                            | 2   |  |
| GZD060000    | Screw Remover, T25                          | 1   |  |
| GZD070000    | Lock Driver, T8                             | 2   |  |
| GZD080000    | Plate Bolt Torque Driver, T15               | 2   |  |
| GZD090000    | Fixed Angle Driver                          | 1   |  |
| GZD130000    | Angled Spring Loaded Awl                    | 1   |  |
| EDECGAAZB    | Torque-Limiting Handle                      | 1   |  |
| GZD100020    | Fixed Angle Drill, Bit 20mm                 | 1   |  |
| GZD110050    | Fixed Angle Tap, 5.5mm                      | 1   |  |
| GZD120010    | Fixed Angle Screwdriver, Bit, T25           | 2   |   |
| GZD120020    | Fixed Angle Lock Driver, Bit, T8            | 2   |  |



# INSTRUCTIONS FOR USE

## INSTRUCTIONS FOR USE

**1.0 DESCRIPTION:** The SIRION intervertebral body fusion device is used to maintain disc space distraction in skeletally mature adults requiring an intervertebral body fusion. It is designed to be used in conjunction with supplemental spinal fixation instrumentation. The implant is available in a range of footprints and heights to suit each individual's pathology and anatomical conditions of the patient. The implant has a hollow center to allow placement of autogenous bone graft to promote intervertebral body fusion. Ridges on the superior and inferior surfaces of the device help to grip the endplates and prevent implant migration and/or expulsion.

**2.0 MATERIALS:** PEEK-OPTIMA LT120HA (PEEK-OPTIMA HA Enhanced), Ti-6AL-4V ELI (ASTM F136), Tantalum (ASTM F560), Nitinol #1 (ASTM F2063).

**3.0 CAUTION:** Federal law (USA) restricts this device to sale and use by, or on the order of a physician. All implants are intended for single use only. The SIRION SYSTEM must not be reused under any circumstances. The SIRION SYSTEM is not a stand-alone device and must be utilized in conjunction with supplemental posterior fixation. These instructions for use are designed to assist in use of the SIRION SYSTEM and are not a reference for surgical techniques.

**4.0 INDICATIONS:** The SIRION Lateral Lumbar Interbody System Spacer, either used individually or assembled to the SIRION plate, is indicated for intervertebral body fusion procedures in skeletally mature patients with degenerative disc disease (DDD) of the lumbar spine at one or two contiguous levels from L1-L2 to L5-S1. DDD is defined as discogenic pain with degeneration of the disc confirmed by history and radiographic studies. These DDD patients may also have up to Grade I spondylolisthesis or retrolisthesis at the involved level(s). SIRION Spacers are to be used with autogenous bone graft and supplemental fixation. Approved supplemental fixation includes the Olympic Posterior Spinal Fixation System. Patients should have at least six (6) months of non-operative treatment prior to treatment with an intervertebral cage.

The SIRION Lateral Lumbar Interbody System Plate, in 2-hole and 4-hole configurations, is indicated for use via a lateral or anterolateral surgical approach above the bifurcation of the great vessels in the treatment of thoracic and thoracolumbar (T1-L5) spine instability or via the anterior surgical approach, below the bifurcation of the great vessels in the treatment of lumbar and lumbosacral (L1-S1) spine instability as a result of: fracture (including dislocation and subluxation), tumor, degenerative disc disease (defined as back pain of discogenic origin with degeneration of the disc confirmed by patient history and radiographic studies), scoliosis, kyphosis, lordosis, spinal stenosis, or a failed previous spine surgery.

The SIRION Lateral Lumbar Interbody System Plate, 1-hole buttress configuration is intended for use in conjunction with traditional supplemental fixation to maintain the relative position of interbody spacers during spinal fusion. The 1-hole plate is not intended for use in load-bearing applications.

## 5.0 CONTRAINDICATIONS:

- 5.1 Acute or chronic infectious diseases of any etiology and localization
- 5.2 Signs of local inflammation
- 5.3 Fever or leukocytosis
- 5.4 Morbid obesity
- 5.5 Pregnancy
- 5.6 Metal/polymer sensitivity/allergies to the implant materials
- 5.7 Mental illness, alcoholism, drug abuse
- 5.8 Medical or surgical conditions, which would preclude the potential, benefit of spinal implant surgery
- 5.9 Grossly distorted anatomy due to congenital abnormalities
- 5.10 Rapid joint disease, bone absorption, osteopenia, and/or osteoporosis. Osteoporosis is a relative contraindication since this condition may limit the degree of obtainable correction, the amount of mechanical fixation, and/or the quality of the bone graft.
- 5.11 Any medical or surgical condition which would preclude the potential benefit of spinal implant surgery.
- 5.12 Any case not needing a bone graft and fusion or where fracture healing is not required
- 5.13 Any patient having inadequate tissue coverage over the operative site or where there is inadequate bone stock, bone quality, or anatomical definition.
- 5.14 Any condition that totally precludes the possibility of fusion, i.e. cancer, kidney dialysis.
- 5.15 Any case not described in the Indications.
- 5.16 Any patient unwilling to cooperate with the post-operative instructions.
- 5.17 Any time implant utilization would interfere with anatomical structures or expected physiological performance, or if the patient has grossly distorted anatomy caused by congenital abnormalities.
- 5.18 Symptomatic cardiac disease.
- 5.19 Systemic or terminal illness.
- 5.20 Prior fusion at the level to be treated.

These contraindications can be absolute or relative and must be taken into account by the physician when making surgical decisions. The list above is not exhaustive.

## 6.0 POSSIBLE ADVERSE EVENTS

- 6.1 A listing of possible adverse events includes, but is not limited to:
  - 6.1.1 Bending or fracture of implant. Loosening of the implant.
  - 6.1.2 Implant material sensitivity, or allergic reaction to a foreign body.
  - 6.1.3 Infection, early or late.
  - 6.1.4 Decrease in bone density due to stress shielding.
  - 6.1.5 Pain, discomfort, or abnormal sensations due to the presence of the device.

- 6.1.6 Pressure on the skin from component parts in patients with inadequate tissue coverage over the implant possibly causing skin penetration, irritation, and/or pain. Tissue damage caused by improper positioning and placement of implants or instruments.
- 6.1.7 Post-operative change in spinal curvature, loss of correction, height, and/or reduction.
- 6.1.8 Dural tears.
- 6.1.9 Loss of neurological function, including paralysis (complete or incomplete), dysesthesias, hyperesthesia, anesthesia, paraesthesia, appearance of radiculopathy, and/or the development or continuation of pain, numbness, neuroma, or tingling sensation.
- 6.1.10 Neuropathy, neurological deficits (transient or permanent), bilateral paraplegia, reflex deficits, and/or arachnoiditis.
- 6.1.11 Loss of bowel and/or bladder control or other types of urological system compromise.
- 6.1.12 Scar formation possibly causing neurological compromise around nerves and/or pain.
- 6.1.13 Fracture, microfracture, resorption, damage, or penetration of any spinal bone and/or bone graft or bone graft harvest site at, above, and/or below the level of surgery.
- 6.1.14 Herniated nucleus pulposus, disc disruption, or degeneration at, above, or below the level of surgery.
- 6.1.15 Interference with radiographic, CT, and/or MR imaging because of the presence of the implants.
- 6.1.16 Graft donor site complications including pain, fracture, or wound healing problems.
- 6.1.17 Atelectasis, ileus, gastritis, herniated nucleus pulposus, retropulsed graft.
- 6.1.18 Hemorrhage, hematoma, seroma, embolism, edema, stroke, excessive bleeding, phlebitis, wound necrosis, wound dehiscence, or damage to blood vessels.
- 6.1.19 Gastrointestinal and/or reproductive system compromise, including sterility and loss of consortium.
- 6.1.20 Development of respiratory problems, e.g. pulmonary embolism, bronchitis, pneumonia, etc.
- 6.1.21 Change in mental status.
- 6.1.22 Non-union (or pseudarthrosis). Delayed union. Mal-union.
- 6.1.23 Cessation of any potential growth of the operated portion of the spine. Loss of spinal mobility or function.
- 6.1.24 Inability to perform the activities of daily living.
- 6.1.25 Paralysis.
- 6.1.26 Death

**Note:** Re-operation or revision may be necessary to correct some of these anticipated adverse events.

**7.0 WARNINGS AND PRECAUTIONS:** The SIRION SYSTEM is intended to be used to augment the development of a spinal fusion by providing temporary stabilization while a solid fusion mass forms. This device is not intended to be the sole means of spinal support. The use of autogenous bone graft must be part of the spinal fusion procedure in which the SIRION SYSTEM is utilized. Use of this product without a bone graft or in cases that develop into a non-union will not be successful. This spinal implant cannot withstand body loads without the support of bone. In this event, loosening, disassembly and/or breakage of the device will eventually occur. Preoperative planning and operating procedures, including knowledge of surgical techniques, proper reduction, and proper selection and placement of the implant are important considerations in the successful utilization of the SIRION SYSTEM by the surgeon. Further, the proper selection and compliance of the patient will greatly affect the results. Patients who smoke have been shown to have an increased incidence of non-unions. These patients should be advised of this fact and warned of this consequence. Obese, malnourished, and/or alcohol and/or other drug abuse patients are also not good candidates for spine fusion. Patients with poor muscle and bone quality and/or nerve paralysis are also not good candidates for spine fusion. Patients with previous spinal surgery at the level to be treated may have different clinical outcomes compared to those without a previous surgery. The implantation of the intervertebral body fusion device 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.

**PHYSICIAN NOTE:** Although the physician is the learned intermediary between the company and the patient, the indications, contraindications, warnings and precautions given in this document must be conveyed to the patient.

**CAUTION:** The selection of the proper size, shape and design of the implant for each patient is crucial to the success of the procedure. The physician should always consider a variety of patient conditions including but not limited to the levels of implantation, patient weight, and patient activity level, which may have an impact on the performance of the intervertebral body fusion device. The SIRION SYSTEM has not been evaluated for safety and compatibility in the MR environment. The SIRION SYSTEM has not been tested for heating or migration in the MR environment. The safety of SIRION SYSTEM implants in the MR environment is unknown. Scanning a patient who has this device may result in patient injury.

**8.0 IMPLANT SELECTION:** The choice of proper size, shape, and design of the implant for each patient is crucial to the success of the surgery. Surgical implants are subject to repeated stresses in use, and their strength is limited by the need to adapt the design to the size and shape of human bones. Unless great care is taken in patient selection, proper placement of the implant, and postoperative management to minimize stresses on the implant, such stresses may cause fatigue and consequent breakage or loosening of the device before the healing process is complete, which may result in further injury or the need to remove the device prematurely. The surgeon is responsible for this choice, which is specific to each patient. Overweight patients may be responsible for additional stresses and strains on the device, which can speed up fatigue and/or lead to deformation or failure of the implants. The surgeon must be thoroughly trained with the surgical procedure, instrumentation and implant characteristics prior to performing surgery. The use of dissimilar materials (e.g., titanium and stainless steel) should not be used together because of the risk of galvanic corrosion. SIRION SYSTEM components should not be used with components from other manufacturers.

## 9.0 PREOPERATIVE:

- 9.1 Only patients that meet the criteria described in the indications should be selected.
- 9.2 Patient conditions and/or predispositions such as those addressed in the aforementioned contraindications should be avoided.
- 9.3 Care should be used in the handling and storage of the implant components. The implants should not be scratched or otherwise damaged. Implants and instruments should be protected during storage especially from corrosive environments.
- 9.4 The type of construct to be assembled for the case should be determined prior to beginning the surgery. An adequate inventory of implant sizes should be available at the time of surgery, including sizes larger and smaller than those expected to be used.
- 9.5 The surgeon must ensure that all necessary implants and instruments are available and on hand prior to surgery.
- 9.6 Since mechanical parts are involved, the surgeon should be familiar with the various components before using the equipment and should personally assemble the devices to verify that all parts and necessary instruments are present before the surgery begins. The SIRION SYSTEM components are not to be combined with the components from another manufacturer.
- 9.7 All components and instruments should be cleaned and sterilized before use. Additional sterile components should be available in case of an unexpected need.
- 9.8 All sets should be carefully checked for completeness and all components should be carefully checked for lack of damage prior to all surgeries.
- 9.9 A surgical technique manual may be obtained from SIRION SYSTEM from any of its representatives.

## 10.0 INTRAOPERATIVE

- 10.1 Any instruction manual should be carefully followed.
- 10.2 At all times, extreme caution should be used around the spinal cord and nerve roots. Damage to nerves will cause loss of neurological functions.
- 10.3 The implant surfaces should not be scratched or notched, since such actions may reduce the functional strength of the construct.
- 10.4 Autogenous bone grafts must be placed in the area to be fused and the graft should be extended from the upper to the lower vertebrae to be fused.
- 10.5 Bone cement should never be used with this device since this material will make removal of the components difficult or impossible and may affect the properties of the implant. The heat generated from the curing process may also cause neurological damage and bone necrosis.
- 10.6 Before closing the soft tissues, all of the devices should be securely seated.
- 10.7 Breakage, slippage, or misuse of the instruments or implant components may cause injury to the patient or the operative personnel.

## 11.0 POSTOPERATIVE: The physician's postoperative directions and warnings to the patient and the corresponding patient compliance are extremely important

- 11.1 Detailed instructions on the use and limitations of the device should be given to the patient. The risk of fatigue and/or breakage of a temporary internal fixation device during postoperative rehabilitation may be increased if the patient is active, or if the patient is debilitated, demented or otherwise unable to use crutches or other such weight supporting devices. The patient should be warned to avoid falls or sudden jolts in spinal position.
- 11.2 To allow the maximum chances for a successful surgical result: the patient or device should not be exposed to mechanical vibrations that may loosen the device construct. The patient should be warned of this possibility and instructed to limit and restrict physical activities, especially lifting and twisting motions and any type of sport participation. The patient should be advised not to smoke or consume alcohol during the bone graft healing process.
- 11.3 The patient should be advised of their inability to bend at the point of spinal fusion and taught to compensate for this permanent physical restriction in body motion.
- 11.4 If a non-union develops or if the components loosen and/or break, the device(s) should be revised and/or removed immediately before serious injury occurs. Failure to immobilize a delayed or non-union of bone will result in excessive and repeated stresses on the implant. By the mechanism of fatigue, these stresses can cause eventual loosening or breakage of the device(s). It is important that immobilization of the spinal surgical site be maintained until firm bony union is established and confirmed by roentgenographic examination. The patient must be adequately warned of these hazards and closely supervised to ensure cooperation until bony union is confirmed.
- 11.5 Any decision to remove the device should take into consideration the potential risk to the patient of a second surgical procedure and the difficulty of initial implant removal.
- 11.6 Any retrieved devices should be treated in such a manner that reuse in another surgical procedure is not possible. As with all orthopedic implants, none of the retrieved SIRION SYSTEM components should ever be reused under any circumstances.

**12.0 PACKAGING:** Packages for each of the components should be intact upon receipt. All sets and components should be carefully checked for completeness and lack of damage prior to use. Damaged packages or products should not be used, and should be returned immediately to ASTURA MEDICAL.

**13.0 CLEANING AND DECONTAMINATION:** Instruments of the SIRION SYSTEM are supplied clean and NOT STERILE, and must be sterilized prior to use.

**14.0 CLEANING:** All instruments must first be cleaned before sterilization and introduction into a sterile surgical field. Immediately after the procedure, place the instruments in a tray and cover with a towel moistened with sterile water and transport to decontamination environment. Rinse the instruments under running tap water for a minimum of 1 minute. An enzymatic cleaner bath (soak) or a solution of water and neutral pH detergent are effective in removing organic material from instruments. Use distilled water if possible. Instruments should be fully submerged for at least ten (10) minutes. Instruments must be thoroughly cleaned. Be sure dissimilar metal instruments are separated. Confirm that all cannulated and modular instruments are fully disassembled. Ensure that all cannulas are flushed until cleaning solution runs clear and that all instruments are completely immersed. Use a small brush to remove soil from all surfaces of the instrument while fully immersed in the solution. Remove soil from hinges, jaws, tips, box locks, and ratchets. Never use steel wool, wire brushes, or highly abrasive detergents or cleaners to remove soil from instruments. Rinse instruments under running water for at least one (1) minute to remove solutions. Once instruments are cleaned and disassembled place instruments in an ultrasonic cleaner with warm enzymatic detergent for a minimum of fifteen (15) minutes. If there is any visual contamination, repeat the steps as necessary until the instruments are visually clean. Rinse instruments under running water for at

least one (1) minute to remove solutions. Instruments should never be exposed to cleaning agents containing any peroxides. Users should periodically inspect instruments for corrosion, discoloration, etc., and properly dispose of instruments that show signs of wear and tear.

**Note:** Certain cleaning solutions such as those containing caustic soda, formalin, glutaraldehyde, bleach and/or other alkaline cleaners may damage some devices, particularly instruments; these solutions should not be used.

**15.0 STERILIZATION:** Moist heat sterilization is recommended using the Association for the Advancement of Medical Instrumentation (AAMI) guideline ST79:2006 according to the following validated cycle parameters:

| Metho | Cycle     | Temperature  | Exposure Time | Dry Time   |
|-------|-----------|--------------|---------------|------------|
| Steam | Prevacuum | 270°F(132°C) | 4 minutes     | 30 minutes |

Wrap tray with a towel placed between tray and FDA cleared wrap.

The Sterility Assurance Level (SAL) is  $1 \times 10^{-6}$ , via the indicated methods. No claims of pyrogenicity are made. Remove all packaging materials prior to sterilization. Use only sterile products in the operative field. Always immediately re-sterilize all implants and instruments used in surgery. This process must be performed before handling or returning to ASTURA MEDICAL. It is the end user's responsibility to use only sterilizers and sterilization wraps, sterilization pouches, chemical indicators, biological indicators, and sterilization cassettes that have been cleared by the Food and Drug Administration for the selected sterilization cycle specifications.

It has not been determined if reprocessing affects the chemical, phase, or structural properties of the hydroxyapatite on the SIRION Posterior Lumbar Interbody Spacer.

**16.0 PRODUCT COMPLAINTS:** Any Health Care Professional, who has any complaints or who has experienced any dissatisfaction relating to the product quality, durability, reliability, safety, effectiveness and/or performance, should notify ASTURA MEDICAL or its representative. Further, if any of the implanted SIRION SYSTEM component(s) ever malfunctions, ASTURA MEDICAL or its representative must be notified immediately. If any SIRION SYSTEM product ever malfunctions and may have caused or contributed to the death or serious injury of a patient, the distributor or ASTURA MEDICAL must be notified immediately by telephone, fax or in writing. For all complaints, please include the device name, reference number, and lot number of the component(s), your name, address, and the nature of the event to help ASTURA MEDICAL understand the cause of the complaint. If further information is needed or required, please contact using the company information listed below.

## 16.0 COMPANY INFORMATION

Astura Medical  
4949 W Royal Ln.  
Irving, TX 75063  
Phone: 469-501-5530  
Email: [info@asturamedical.com](mailto:info@asturamedical.com)





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