# Escalade<sup>®</sup> Acetabular System

# **Surgical Technique**





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The following technique is a general guide for instrumentation of the Escalade® Acetabular System. It is expected that the surgeon is already familiar with the fundamentals of Total Hip Arthroplasty (THA). Each patient represents an individual case that may require modification of the technique according to the surgeon's judgment and experience.

Please see the Escalade® Acetabular System Instructions for Use (IFU) for intended uses/indications, device description, contraindications, precautions, warnings and potential risks associated with the Escalade® Acetabular System.

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# Surgical Technique Overview





3. Final Shell Implantation

# **1. Device Description**

The Escalade® Acetabular Shell is hemispherical in shape with a titanium plasma spray coating on the exterior surface. The acetabular shell incorporates a taper and snap locking mechanism for acceptance of Escalade® HXLPE neutral and hooded liners. Twelve tabs built into the liner mate and sit flush with the rim of the shell and provide both visual and tactile verification that the locking mechanism is fully engaged. These tabs also facilitate ease of liner insertion and provide exceptional anti-rotational stability. The Escalade<sup>®</sup> Acetabular System was designed with the following objectives in mind:

- · Maximize range of motion capabilities
- Incorporate advancements in crosslinking processes to enhance wear resistance and the integrity of mechanical properties
- Maximize the long term durability of the liner locking mechanism
- Optimize polyethylene thickness in the principal bearing area of the liner
- Enhance instrument offering to accommodate less invasive surgical approaches



# 2. Preoperative Planning

TEMPLATING

Templates with a 20% magnification are provided by Ortho Development® Corporation for use with preoperative x-rays. Preoperative templating enables the surgeon to estimate the correct implant size as well as to identify any unusual circumstances specific to the case at hand. The templates should be used with standard preoperative A/P radiographs to determine the approximate size and position of the prosthesis (Figure 1).



Figure 1: Template overlaid on A/P radiograph

# 3. Incision

In Total Hip Arthroplasty, exposure can be achieved through a multitude of methods based on each surgeon's individual preferences. The Escalade® Acetabular Shell can be implanted using a variety of approaches, including Anterolateral, Posterolateral or Direct Anterior. Complete acetabular exposure is required regardless of the approach used.

## 4. Acetabular Preparation

The acetabulum is prepared by reaming with the Acetabular Reamer Handle and Reamers. The starting reamer size can be selected by a few different methods depending on surgeon preference.

Measure the size of the resected head and start with a Reamer that is smaller than the size of the resected head, and seats easily into the acetabulum.

Sequentially ream in one millimeter increments until a hemispheric bed of bleeding subchondrial bone is exposed (Figure 2). Acetabular reaming should restore the normal center of hip rotation, while preserving subchondrial bone to provide good support for the cup.

Note: The Acetabular Reamers are available in 1mm increments while the implants are available in 2mm increments. Therefore, depending on the desired press-fit, the acetabulum may be under-reamed to achieve a greater press-fit. Typically, a 1mm press-fit is utilized (i.e. ream to 51mm and implant a 52mm acetabular shell).

Figure 2: Acetabular Reaming

Part Numbers this page: MIS Reamer Handle 270-0101 Hemispherical Acetabular Reamer T2637 : T2643

# 5. Trial Reduction

The Shell Trial should be inserted to verify the size and position of the final Shell (Figure 3). The Acetabular Shell Trial corresponding to the size of the last Reamer used is assembled onto the Shell Impactor. To attach the Alignment Guide to the Shell Impactor, snap the Alignment Guide onto the Shell Impactor Handle in the designated area at the bottom of the handle.

**Note:** Reamers and Shell Trials correspond to the actual size of the implant. For example; a 50mm Reamer has a cutting diameter of 50mm, a 50mm Shell Trial has an outer diameter of 50mm, and a 50mm Escalade® Acetabular Shell has an outer diameter of 50mm.

When inserting the Shell Trial into the acetabulum, note the following:

- Coverage of the bony rim against the shell
- Seating of the trial against the bone—utilize the windows in the Shell Trial
- Utilize the Alignment Guide to ensure proper anatomic positioning
- Removal of impeding osteophytes or soft tissue may be performed at this time
- The Alignment Guide sets anteversion at 20 degrees for both right and left sided placements for a Posterior Approach.

To set the abduction angle to 45 degrees, rotate the Alignment Guide around the axis of the Impactor until it lies in the coronal plane through the acetabulum. The Shell Impactor is then rotated around the anteriorposterior axis through the acetabulum until the Alignment Guide is parallel to the transverse plane through the acetabulum.

To position the Shell Trial for the desired anteversion, maintain the 45 degree abduction while rotating the impactor around the medial-lateral axis through the acetabulum until the Alignment Guide pointer is oriented parallel to the coronal plane through the acetabulum.

Once the desired placement of the Shell Trial is achieved, the Shell Impactor may be removed for preparation of the Trial Liner insertion.

The properly selected Trial Liner should correspond to the diameter of the Shell Trial and desired Femoral Head Trial diameter.

To position the Trial Liner, insert it into the Shell Trial and rotate the tabs so that it is properly indexed in the Shell Trial. Secure the Trial Liner to the Shell Trial by tightening the hex screw with the provided Hex Driver.



Figure 3: Acetabular Shell Trial

Part Numbers this page: Shell Impactor 270-5100 Alignment Guide 271-5003 Shell Trial 270-1041 : 270-1070

# 6. Final Implantation

Select the appropriately sized Escalade® Acetabular Shell implant, which is determined from the previously performed Shell Trial reduction. Implant position and placement should be obtained using the same steps described in Section 5, Trial Reduction. When desired positioning has been confirmed, carefully seat the shell by striking the Shell Impactor with a mallet (Figure 4).

If using the No-Hole version of the shell and implantation is satisfactory, proceed to Section 8, Liner Trial Reduction.



Figure 4: Acetabular Shell Impaction

Part Numbers this page: Shell Impactor 270-5100 Escalade Acetabular Shell 170-0040 : 170-0170

# 7. Screw Placement

If a Three-Hole Shell is selected, Cancellous Bone Screws may be used for additional fixation. Make sure that the screw holes are oriented properly in the acetabulum over adequate bone stock.

When using a Cancellous Bone Screw, select the appropriate size drill bit. Drill a pilot hole utilizing the Drill Guide to control direction and restrict angulation in conjunction with the Drill Drivers (Flexible or Fixed Angle) and the desired length Drill Bit.

**Note:** Ensure the Drill Guide is fully seated and centered in the screw hole before beginning the drilling of each pilot hole. Angulation is variable for the Flexible Driver and fixed at 42.5 degrees for the Fixed Angle Driver. The Depth Gage is used to determine the appropriate length of the Cancellous Bone Screw(s) to be used. The Depth Gage is marked to show depth in 10mm increments, ranging from 10mm to 50mm. The pilot hole depth measurement is taken from the surface of the inner diameter of the shell. Using a clamp, such as a tonsil or similar instrument, grasp the Depth Gage at the inner shell surface to facilitate accurate depth measurement. This mark corresponds to the actual length of the Cancellous Bone Screw to be used.

Once depth is confirmed and the proper Cancellous Bone Screw is selected, proceed to Bone Screw insertion. To insert, grasp the neck of the Cancellous Bone Screw using the Screw Holding Forceps and advance the screw with the Hex Driver (Figure 5). Take care to fully seat the screw head into the counter bore of the shell and avoid overtorqueing to reduce the risk of push-through.

*Note:* Do not attempt to place a Cancellous Bone Screw through the apical hole.



Figure 5: Screw Placement

Part Numbers this page: Escalade Acetabular Shell 170-0040 : 170-0170 Cancellous Bone Screw 170-3015 : 170-3065 Screw Holding Forceps 270-5008 Hex Driver 226-0018 : 228-0016

# 8. Liner Trial Reduction

A final trial reduction may be performed to ensure range of motion, stability, and coverage. Alternate head lengths, hooded liners, etc. may be trialed as needed to ensure the final appropriate fit and stability.

If desired, the apical hole may be covered using an Apical Hole Plug which is packaged separately. Use the Hex Driver to insert the Apical Hole Plug into the Acetabular Shell. Check to ensure that the Apical Hole Plug is fully seated and flush prior to implanting the final liner.

### 9. Liner Impaction

Prior to locking the Liner in place, perform a final check to ensure no soft tissue or bone is in the Shell or on the rim. Use suction to remove any fluid from the inside of the Shell.

Align the tabs of the Liner with the scallops on the Acetabular Shell and secure the Liner into the Shell. Assemble the Impactor Head onto the tip of the Shell Impactor and then place the Impactor Head into the Liner. Tap the Liner into the Shell with a few firm blows to the Impactor using a mallet (Figure 6). The Liner is fully seated once the tabs of the Liner sit flush with the Shell face to provide a visual and tactile verification that the locking mechanism is fully engaged.

# **10. Hip Reduction**

The hip should be reduced and taken through full range of motion. After taking the hip through full range of motion and the desired result is achieved, the wound should be closed in a standard fashion.



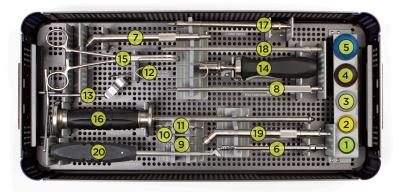
Escalade Acetabular Shell 170-0040 : 170-0170 Legend Liner 172-2844: 172-4064, 174-2844:174-4064, 173-2844:173-3664, 175-2844:175-4064 Shell Impactor 270-5100 Liner Impactor 270-5226 : 270-5240

Figure 6: Liner Impaction

#### **Escalade® Instrument Trays**

270-9004 ESCALADE ACETABULAR PREP KIT

NUMBER	ITEM #	DESCRIPTION
1	270-5226	Liner Impactor 26mm Head
2	270-5228	Liner Impactor 28mm Head
3	270-5232	Liner Impactor 32mm Head
4	270-5236	Liner Impactor 36mm Head
5	270-5240	Liner Impactor 40mm Head
6	270-5004	Flexible Drill Shaft
7	228-0019	3.5mm Hex 42.5° Driver
8	228-0009	Liner Remover
9	228-0003	3.2x25mm Drill Bit
10	228-0006	3.2x35mm Drill Bit
11	228-0007	3.2x50mm Drill Bit
12	270-5007	Flexible Depth Guage
13	271-5003	Lateral Alignment Guide 45°x20°
14	228-0001	Hudson Screwdriver Handle
15	270-5008	Screw Holding Forceps
16	270-5100	Straight Shell Impactor
17	228-0016	3.5mm Hex U-Joint Driver
18	226-0018	3.5mm Hex Straight Driver
19	228-0018	42.5° Drill Driver with Collar
20	270-5001	3.2mm Drill Guide
	270-6004	Escalade Acetabular Prep Case



#### 270-9007 ESCALADE OFFSET INSTRUMENT KIT

NUMBER	ITEM #	DESCRIPTION
1	T16612	Offset Reamer Handle
2	T16611	Offset Acetabular Cup Impactor
	270-6007	Escalade Offset Instrument Case



#### 270-9006 ESCALADE REAMER KIT

NUMBER	ITEM #	DESCRIPTION
1	211-0016	Hudson Adapter Chuck
2	270-0101	MIS Reamer Handle
3	T2637	38mm Hemispherical Acetabular Reamer
4	T2638	39mm Hemispherical Acetabular Reamer
5	T2611	40mm Hemispherical Acetabular Reamer
6	T2639	41mm Hemispherical Acetabular Reamer
7	T2612	42mm Hemispherical Acetabular Reamer
8	T2640	43mm Hemispherical Acetabular Reamer
9	T2461	44mm Hemispherical Acetabular Reamer
10	T2462	45mm Hemispherical Acetabular Reamer
11	T2463	46mm Hemispherical Acetabular Reamer
12	T2464	47mm Hemispherical Acetabular Reamer
13	T2465	48mm Hemispherical Acetabular Reamer
14	T2466	49mm Hemispherical Acetabular Reamer
15	T2467	50mm Hemispherical Acetabular Reamer
16	T2468	51mm Hemispherical Acetabular Reamer
17	T2469	52mm Hemispherical Acetabular Reamer
18	T2470	53mm Hemispherical Acetabular Reamer
19	T2471	54mm Hemispherical Acetabular Reamer
20	T2472	55mm Hemispherical Acetabular Reamer
21	T2473	56mm Hemispherical Acetabular Reamer
22	T2474	57mm Hemispherical Acetabular Reamer
23	T2475	58mm Hemispherical Acetabular Reamer
24	T2476	59mm Hemispherical Acetabular Reamer
25	T2477	60mm Hemispherical Acetabular Reamer
26	T2478	61mm Hemispherical Acetabular Reamer
27	T2479	62mm Hemispherical Acetabular Reamer
28	T2480	63mm Hemispherical Acetabular Reamer
29	T2481	64mm Hemispherical Acetabular Reamer
30	T2641	65mm Hemispherical Acetabular Reamer
31	T2613	66mm Hemispherical Acetabular Reamer
32	T2642	67mm Hemispherical Acetabular Reamer
33	T2614	68mm Hemispherical Acetabular Reamer
34	T2643	69mm Hemispherical Acetabular Reamer
	270-6005	Escalade MIS Reamers Case





#### 270-9002 ESCALADE SHELL TRIAL KIT

NUMBER	ITEM #	DESCRIPTION
1	270-1041	41mm Shell Trial
2	270-1042	42mm Shell Trial
3	270-1043	43mm Shell Trial
4	270-1044	44mm Shell Trial
5	270-1045	45mm Shell Trial
6	270-1046	46mm Shell Trial
7	270-1047	47mm Shell Trial
8	270-1048	48mm Shell Trial
9	270-1049	49mm Shell Trial
10	270-1050	50mm Shell Trial
11	270-1051	51mm Shell Trial
12	270-1052	52mm Shell Trial
13	270-1053	53mm Shell Trial
14	270-1054	54mm Shell Trial
15	270-1055	55mm Shell Trial
16	270-1056	56mm Shell Trial
17	270-1057	57mm Shell Trial
18	270-1058	58mm Shell Trial
19	270-1059	59mm Shell Trial
20	270-1060	60mm Shell Trial
21	270-1061	61mm Shell Trial
22	270-1062	62mm Shell Trial
23	270-1063	63mm Shell Trial
24	270-1064	64mm Shell Trial
25	270-1065	65mm Shell Trial
26	270-1066	66mm Shell Trial
27	270-1067	67mm Shell Trial
28	270-1068	68mm Shell Trial
29	270-1069	69mm Shell Trial
30	270-1070	70mm Shell Trial
	270-6002	Escalade Shell Trial Case





#### 270-9009: LEGEND NEUTRAL LINER TRIALS

NUMBER	ITEM #	DESCRIPTION
1	272-2844	Trial, Legend Liner, Neutral 28/44
2	272-2846	Trial, Legend Liner, Neutral 28/46
3	272-2848	Trial, Legend Liner, Neutral 28/48
4	272-2850	Trial, Legend Liner, Neutral 28/50
5	272-3246	Trial, Legend Liner, Neutral 32/46
6	272-3248	Trial, Legend Liner, Neutral 32/48
7	272-3250	Trial, Legend Liner, Neutral 32/50
8	272-3252	Trial, Legend Liner, Neutral 32/52
9	272-3254	Trial, Legend Liner, Neutral 32/54
10	272-3256	Trial, Legend Liner, Neutral 32/56
11	272-3650	Trial, Legend Liner, Neutral 36/50
12	272-3652	Trial, Legend Liner, Neutral 36/52
13	272-3654	Trial, Legend Liner, Neutral 36/54
14	272-3656	Trial, Legend Liner, Neutral 36/56
15	272-3658	Trial, Legend Liner, Neutral 36/58
16	272-3660	Trial, Legend Liner, Neutral 36/60
17	272-3662	Trial, Legend Liner, Neutral 36/62
18	272-3664	Trial, Legend Liner, Neutral 36/64-70
19	272-4054	Trial, Legend Liner, Neutral 40/54
20	272-4056	Trial, Legend Liner, Neutral 40/56
21	272-4058	Trial, Legend Liner, Neutral 40/58
22	272-4060	Trial, Legend Liner, Neutral 40/60
23	272-4062	Trial, Legend Liner, Neutral 40/62
24	272-4064	Trial, Legend Liner, Neutral 40/64-70

270-9011: LEGEND HOODED LINER TRIALS

NUMBER	ITEM #	DESCRIPTION
1	273-2844	Trial, Legend Liner, Hooded 28/44
2	273-2846	Trial, Legend Liner, Hooded 28/46
3	273-2848	Trial, Legend Liner, Hooded 28/48
4	273-2850	Trial, Legend Liner, Hooded 28/50
5	273-3246	Trial, Legend Liner, Hooded 32/46
6	273-3248	Trial, Legend Liner, Hooded 32/48
7	273-3250	Trial, Legend Liner, Hooded 32/50
8	273-3252	Trial, Legend Liner, Hooded 32/52
9	273-3254	Trial, Legend Liner, Hooded 32/54
10	273-3256	Trial, Legend Liner, Hooded 32/56
11	273-3650	Trial, Legend Liner, Hooded 36/50
12	273-3652	Trial, Legend Liner, Hooded 36/52
13	273-3654	Trial, Legend Liner, Hooded 36/54
14	273-3656	Trial, Legend Liner, Hooded 36/56
15	273-3658	Trial, Legend Liner, Hooded 36/58
16	273-3660	Trial, Legend Liner, Hooded 36/60
17	273-3662	Trial, Legend Liner, Hooded 36/62
18	273-3664	Trial, Legend Liner, Hooded 36/64-70

#### 270-9010: LEGEND +3 NEUTRAL LINER TRIALS

NUMBER	ITEM #	DESCRIPTION
1	274-2844	Trial, Legend Liner +3 Neutral 28/44
2	274-2846	Trial, Legend Liner +3 Neutral 28/46
3	274-2848	Trial, Legend Liner +3 Neutral 28/48
4	274-2850	Trial, Legend Liner +3 Neutral 28/50
5	274-3246	Trial, Legend Liner +3 Neutral 32/46
6	274-3248	Trial, Legend Liner +3 Neutral 32/48
7	274-3250	Trial, Legend Liner +3 Neutral 32/50
8	274-3252	Trial, Legend Liner +3 Neutral 32/52
9	274-3254	Trial, Legend Liner +3 Neutral 32/54
10	274-3256	Trial, Legend Liner +3 Neutral 32/56
11	274-3650	Trial, Legend Liner +3 Neutral 36/50
12	274-3652	Trial, Legend Liner +3 Neutral 36/52
13	274-3654	Trial, Legend Liner +3 Neutral 36/54
14	274-3656	Trial, Legend Liner +3 Neutral 36/56
15	274-3658	Trial, Legend Liner +3 Neutral 36/58
16	274-3660	Trial, Legend Liner +3 Neutral 36/60
17	274-3662	Trial, Legend Liner +3 Neutral 36/62
18	274-3664	Trial, Legend Liner +3 Neutral 36/64-70
19	274-4054	Trial, Legend Liner +3 Neutral 40/54
20	274-4056	Trial, Legend Liner +3 Neutral 40/56
21	274-4058	Trial, Legend Liner +3 Neutral 40/58
22	274-4060	Trial, Legend Liner +3 Neutral 40/60
23	274-4062	Trial, Legend Liner +3 Neutral 40/62
24	274-4064	Trial, Legend Liner +3 Neutral 40/64-70

#### 270-9012: LEGEND FACE-CHANGING LINER TRIALS

NUMBER	ITEM #	DESCRIPTION
1	275-2844	Trial, Legend Liner Face-Changing 28/44
2	275-2846	Trial, Legend Liner Face-Changing 28/46
3	275-2848	Trial, Legend Liner Face-Changing 28/48
4	275-2850	Trial, Legend Liner Face-Changing 28/50
5	275-3246	Trial, Legend Liner Face-Changing 32/46
6	275-3248	Trial, Legend Liner Face-Changing 32/48
7	275-3250	Trial, Legend Liner Face-Changing 32/50
8	275-3252	Trial, Legend Liner Face-Changing 32/52
9	275-3254	Trial, Legend Liner Face-Changing 32/54
10	275-3256	Trial, Legend Liner Face-Changing 32/56
11	275-3650	Trial, Legend Liner Face-Changing 36/50
12	275-3652	Trial, Legend Liner Face-Changing 36/52
13	275-3654	Trial, Legend Liner Face-Changing 36/54
14	275-3656	Trial, Legend Liner Face-Changing 36/56
15	275-3658	Trial, Legend Liner Face-Changing 36/58
16	275-3660	Trial, Legend Liner Face-Changing 36/60
17	275-3662	Trial, Legend Liner Face-Changing 36/62
18	275-3664	Trial, Legend Liner Face-Changing 36/64-70
19	275-4054	Trials, Legend Liner Face-Changing 40/54
20	275-4056	Trials, Legend Liner Face-Changing 40/56
21	275-4058	Trials, Legend Liner Face-Changing 40/58
22	275-4060	Trials, Legend Liner Face-Changing 40/60
23	275-4062	Trials, Legend Liner Face-Changing 40/62
24	275-4064	Trials, Legend Liner Face-Changing 40/64-70

#### Escalade® Implants

ESCALADE SHELLS

ITEM#	DESCRIPTION
170-0040	40mm Escalade Shell No-Hole
170-0042	42mm Escalade Shell No-Hole
170-0044	44mm Escalade Shell No-Hole
170-0046	46mm Escalade Shell No-Hole
170-0048	48mm Escalade Shell No-Hole
170-0050	50mm Escalade Shell No-Hole
170-0052	52mm Escalade Shell No-Hole
170-0054	54mm Escalade Shell No-Hole
170-0056	56mm Escalade Shell No-Hole
170-0058	58mm Escalade Shell No-Hole
170-0060	60mm Escalade Shell No-Hole
170-0062	62mm Escalade Shell No-Hole
170-0064	64mm Escalade Shell No-Hole
170-0066	66mm Escalade Shell No-Hole
170-0068	68mm Escalade Shell No-Hole
170-0070	70mm Escalade Shell No-Hole
170-0140	40mm Escalade Shell Three-Hole
170-0142	42mm Escalade Shell Three-Hole
170-0144	44mm Escalade Shell Three-Hole
170-0146	46mm Escalade Shell Three-Hole
170-0148	48mm Escalade Shell Three-Hole
170-0150	50mm Escalade Shell Three-Hole
170-0152	52mm Escalade Shell Three-Hole
170-0154	54mm Escalade Shell Three-Hole
170-0156	56mm Escalade Shell Three-Hole
170-0158	58mm Escalade Shell Three-Hole
170-0160	60mm Escalade Shell Three-Hole
170-0162	62mm Escalade Shell Three-Hole
170-0164	64mm Escalade Shell Three-Hole
170-0166	66mm Escalade Shell Three-Hole
170-0168	68mm Escalade Shell Three-Hole
170-0170	70mm Escalade Shell Three-Hole
170-0301	Escalade Apical Hole Plug
1,0,0301	Escalade Apical Hole Hug

#### ESCALADE CANCELLOUS BONE SCREWS

-	
ITEM#	DESCRIPTION
170-3015	6.5x15mm Cancellous Bone Screw
170-3020	6.5x20mm Cancellous Bone Screw
170-3025	6.5x25mm Cancellous Bone Screw
170-3030	6.5x30mm Cancellous Bone Screw
170-3035	6.5x35mm Cancellous Bone Screw
170-3040	6.5x40mm Cancellous Bone Screw
170-3045	6.5x45mm Cancellous Bone Screw
170-3050	6.5x50mm Cancellous Bone Screw
170-3055	6.5x55mm Cancellous Bone Screw
170-3060	6.5x60mm Cancellous Bone Screw
170-3065	6.5x65mm Cancellous Bone Screw







#### LEGEND LINER NEUTRAL

ITEM#	DESCRIPTION
172-2844	Legend Acetabular Liner Neutral 28/44
172-2846	Legend Acetabular Liner Neutral 28/46
172-2848	Legend Acetabular Liner Neutral 28/48
172-2850	Legend Acetabular Liner Neutral 28/50
172-2852	Legend Acetabular Liner Neutral 28/52
172-2854	Legend Acetabular Liner Neutral 28/54
172-2856	Legend Acetabular Liner Neutral 28/56
172-2858	Legend Acetabular Liner Neutral 28/58
172-2860	Legend Acetabular Liner Neutral 28/60
172-2862	Legend Acetabular Liner Neutral 28/62
172-2864	Legend Acetabular Liner Neutral 28/64-70
172-3246	Legend Acetabular Liner Neutral 32/46
172-3248	Legend Acetabular Liner Neutral 32/48
172-3250	Legend Acetabular Liner Neutral 32/50
172-3252	Legend Acetabular Liner Neutral 32/52
172-3254	Legend Acetabular Liner Neutral 32/54
172-3256	Legend Acetabular Liner Neutral 32/56
172-3258	Legend Acetabular Liner Neutral 32/58
172-3260	Legend Acetabular Liner Neutral 32/60
172-3262	Legend Acetabular Liner Neutral 32/62
172-3264	Legend Acetabular Liner Neutral 32/64-70
172-3650	Legend Acetabular Liner Neutral 36/50
172-3652	Legend Acetabular Liner Neutral 36/52
172-3654	Legend Acetabular Liner Neutral 36/54
172-3656	Legend Acetabular Liner Neutral 36/56
172-3658	Legend Acetabular Liner Neutral 36/58
172-3660	Legend Acetabular Liner Neutral 36/60
172-3662	Legend Acetabular Liner Neutral 36/62
172-3664	Legend Acetabular Liner Neutral 36/64-70
172-4054	Legend Acetabular Liner Neutral 40/54
172-4056	Legend Acetabular Liner Neutral 40/56
172-4058	Legend Acetabular Liner Neutral 40/58
172-4060	Legend Acetabular Liner Neutral 40/60
172-4062	Legend Acetabular Liner Neutral 40/62
172-4064	Legend Acetabular Liner Neutral 40/64-70

#### LEGEND LINER HOODED

ITEM#	DESCRIPTION
173-2844	Legend Acetabular Liner Hooded 28/44
173-2846	Legend Acetabular Liner Hooded 28/46
173-2848	Legend Acetabular Liner Hooded 28/48
173-2850	Legend Acetabular Liner Hooded 28/50
173-2852	Legend Acetabular Liner Hooded 28/52
173-2854	Legend Acetabular Liner Hooded 28/54
173-2856	Legend Acetabular Liner Hooded 28/56
173-2858	Legend Acetabular Liner Hooded 28/58
173-2860	Legend Acetabular Liner Hooded 28/60
173-2862	Legend Acetabular Liner Hooded 28/62
173-2864	Legend Acetabular Liner Hooded 28/64-70
173-3246	Legend Acetabular Liner Hooded 32/46
173-3248	Legend Acetabular Liner Hooded 32/48
173-3250	Legend Acetabular Liner Hooded 32/50
173-3252	Legend Acetabular Liner Hooded 32/52
173-3254	Legend Acetabular Liner Hooded 32/54
173-3256	Legend Acetabular Liner Hooded 32/56
173-3258	Legend Acetabular Liner Hooded 32/58
173-3260	Legend Acetabular Liner Hooded 32/60
173-3262	Legend Acetabular Liner Hooded 32/62
173-3264	Legend Acetabular Liner Hooded 32/64-70
173-3650	Legend Acetabular Liner Hooded 36/50
173-3652	Legend Acetabular Liner Hooded 36/52
173-3654	Legend Acetabular Liner Hooded 36/54
173-3656	Legend Acetabular Liner Hooded 36/56
173-3658	Legend Acetabular Liner Hooded 36/58
173-3660	Legend Acetabular Liner Hooded 36/60
173-3662	Legend Acetabular Liner Hooded 36/62
173-3664	Legend Acetabular Liner Hooded 36/64-70

#### LEGEND LINER +3 NEUTRAL

ITEM#	DESCRIPTION
174-2844	Legend Acetabular Liner +3 Neutral 28/44
174-2846	Legend Acetabular Liner +3 Neutral 28/46
174-2848	Legend Acetabular Liner +3 Neutral 28/48
174-2850	Legend Acetabular Liner +3 Neutral 28/50
174-2852	Legend Acetabular Liner +3 Neutral 28/52
174-2854	Legend Acetabular Liner +3 Neutral 28/54
174-2856	Legend Acetabular Liner +3 Neutral 28/56
174-2858	Legend Acetabular Liner +3 Neutral 28/58
174-2860	Legend Acetabular Liner +3 Neutral 28/60
174-2862	Legend Acetabular Liner +3 Neutral 28/62
174-2864	Legend Acetabular Liner +3 Neutral 28/64-70
174-3246	Legend Acetabular Liner +3 Neutral 32/46
174-3248	Legend Acetabular Liner +3 Neutral 32/48
174-3250	Legend Acetabular Liner +3 Neutral 32/50
174-3252	Legend Acetabular Liner +3 Neutral 32/52
174-3254	Legend Acetabular Liner +3 Neutral 32/54
174-3256	Legend Acetabular Liner +3 Neutral 32/56
174-3258	Legend Acetabular Liner +3 Neutral 32/58
174-3260	Legend Acetabular Liner +3 Neutral 32/60
174-3262	Legend Acetabular Liner +3 Neutral 32/62
174-3264	Legend Acetabular Liner +3 Neutral 32/64-70
174-3650	Legend Acetabular Liner +3 Neutral 36/50
174-3652	Legend Acetabular Liner +3 Neutral 36/52
174-3654	Legend Acetabular Liner +3 Neutral 36/54
174-3656	Legend Acetabular Liner +3 Neutral 36/56
174-3658	Legend Acetabular Liner +3 Neutral 36/58
174-3660	Legend Acetabular Liner +3 Neutral 36/60
174-3662	Legend Acetabular Liner +3 Neutral 36/62
174-3664	Legend Acetabular Liner +3 Neutral 36/64-70
174-4054	Legend Acetabular Liner +3 Neutral 40/54
174-4056	Legend Acetabular Liner +3 Neutral 40/56
174-4058	Legend Acetabular Liner +3 Neutral 40/58
174-4060	Legend Acetabular Liner +3 Neutral 40/60
174-4062	Legend Acetabular Liner +3 Neutral 40/62
174-4064	Legend Acetabular Liner +3 Neutral 40/64-70

#### LEGEND LINERS FACE-CHANGING

ITEM#	DESCRIPTION
175-2844	Legend Acetabular Liner Face-Changing 28/44
175-2846	Legend Acetabular Liner Face-Changing 28/46
175-2848	Legend Acetabular Liner Face-Changing 28/48
175-2850	Legend Acetabular Liner Face-Changing 28/50
175-2852	Legend Acetabular Liner Face-Changing 28/52
175-2854	Legend Acetabular Liner Face-Changing 28/54
175-2856	Legend Acetabular Liner Face-Changing 28/56
175-2858	Legend Acetabular Liner Face-Changing 28/58
175-2860	Legend Acetabular Liner Face-Changing 28/60
175-2862	Legend Acetabular Liner Face-Changing 28/62
175-2864	Legend Acetabular Liner Face-Changing 28/64-70
175-3246	Legend Acetabular Liner Face-Changing 32/46
175-3248	Legend Acetabular Liner Face-Changing 32/48
175-3250	Legend Acetabular Liner Face-Changing 32/50
175-3252	Legend Acetabular Liner Face-Changing 32/52
175-3254	Legend Acetabular Liner Face-Changing 32/54
175-3256	Legend Acetabular Liner Face-Changing 32/56
175-3258	Legend Acetabular Liner Face-Changing 32/58
175-3260	Legend Acetabular Liner Face-Changing 32/60
175-3262	Legend Acetabular Liner Face-Changing 32/62
175-3264	Legend Acetabular Liner Face-Changing 32/64-70
175-3650	Legend Acetabular Liner Face-Changing 36/50
175-3652	Legend Acetabular Liner Face-Changing 36/52
175-3654	Legend Acetabular Liner Face-Changing 36/54
175-3656	Legend Acetabular Liner Face-Changing 36/56
175-3658	Legend Acetabular Liner Face-Changing 36/58
175-3660	Legend Acetabular Liner Face-Changing 36/60
175-3662	Legend Acetabular Liner Face-Changing 36/62
175-3664	Legend Acetabular Liner Face-Changing 36/64-70
175-4054	Legend Acetabular Liner Face-Changing 40/54
175-4056	Legend Acetabular Liner Face-Changing 40/56
175-4058	Legend Acetabular Liner Face-Changing 40/58
175-4060	Legend Acetabular Liner Face-Changing 40/60
175-4062	Legend Acetabular Liner Face-Changing 40/62
175-4064	Legend Acetabular Liner Face-Changing 40/64-70

#### Legend® Neutral and Hooded Liners

		SHELL DIAMETER															
		44	46	48	50	52	54	56	58	60	62	64	66	68	70		
TER	28	28/44	28/46	28/48	28/50	28/52	28/54	28/56	28/58	28/60	28/62	28/64-70					
DIAME	32		32/46	32/48	32/50	32/52	32/54	32/56	32/58	32/60	32/62		32/64-70				
EAD	36				36/50	36/52	36/54	36/56	36/58	36/60	36/62	36/64-70					
I	40						40/54	40/56	40/58	40/60	40/62			40/64-70			
			HOODED	LINERS	AVAILAB	LE IN TH	ESE SIZE	S	SIZES IN BOXES WITH BOLD OUTLINES ARE SPECIAL ORDER ONLY								

\*ALL NEUTRAL AND HOODED LINERS HAVE A 1 MM LATERALIZATION.

#### Legend® +3 Neutral (Lateralized) and Face-Changing Liners

	SHELL DIAMETER																	
		44	46	48	50	52	54	56	58	60	62	64	66	68	70			
ER	28	28/44 +3	28/46 +3	28/48 +3	28/50 +3	28/52 +3	28/54 +3	28/56 +3	28/58 +3	28/60 +3	28/62 +3	28/64-70 +3						
IAMET	32		32/46 +3	32/48 +3	32/50 +3	32/52 +3	32/54 +3	32/56 +3	32/58 +3	32/60 +3	32/62 +3		32/64-70 +3					
EAD D	36				36/50 +3	36/52 +3	36/54 +3	36/56 +3	36/58 +3	36/60 +3	36/62 +3		36/64-70 +3					
т	40						40/54 +3	40/56 +3	40/58 +3	40/60 +3	40/62 +3	40/64-70 +3						
										SIZES IN BOXES WITH BOLD OUTLINES ARE SPECIAL ORDER ONLY								

\*LEGEND AND ESCALADE LINERS ARE COMPATIBLE WITH ALL ORTHO DEVELOPMENT SHELLS.



Ortho Development<sup>®</sup> Corporation designs, manufactures, and distributes orthopedic implants and related surgical instrumentation—with a specialty focus on hip and knee joint replacement, trauma fracture repair, and basic spinal fixation. Ortho was founded in 1994 and is located at the base of the Wasatch Mountains in the Salt Lake City suburb of Draper, Utah. The company has established distribution throughout the United States and Japan, along with other select international markets.



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