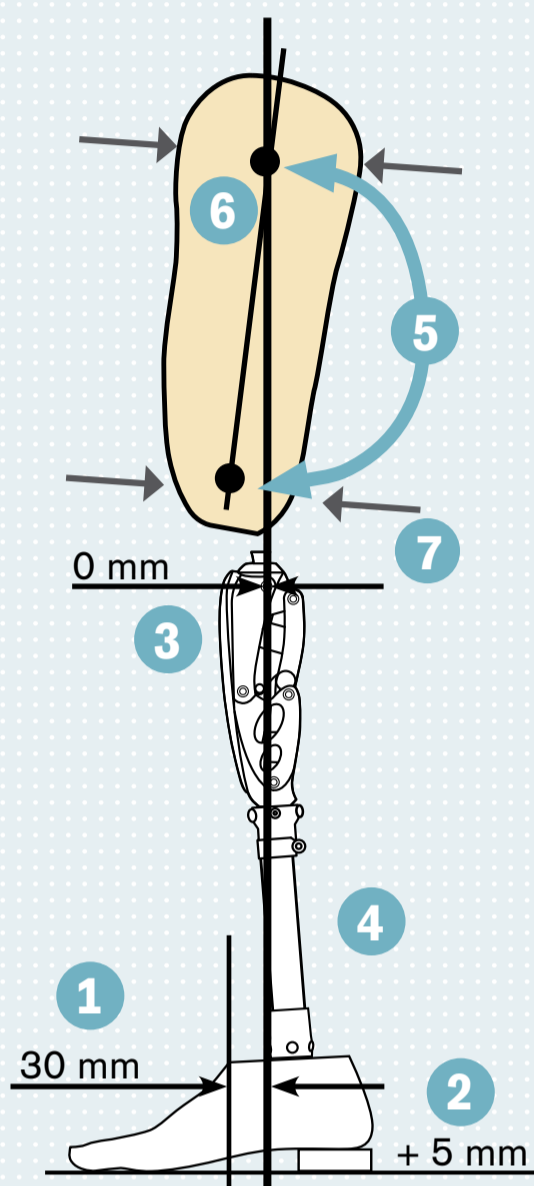


Alignment Recommendations for TF Modular Lower Limb Prostheses

Bench alignment in the PROS.A. Assembly

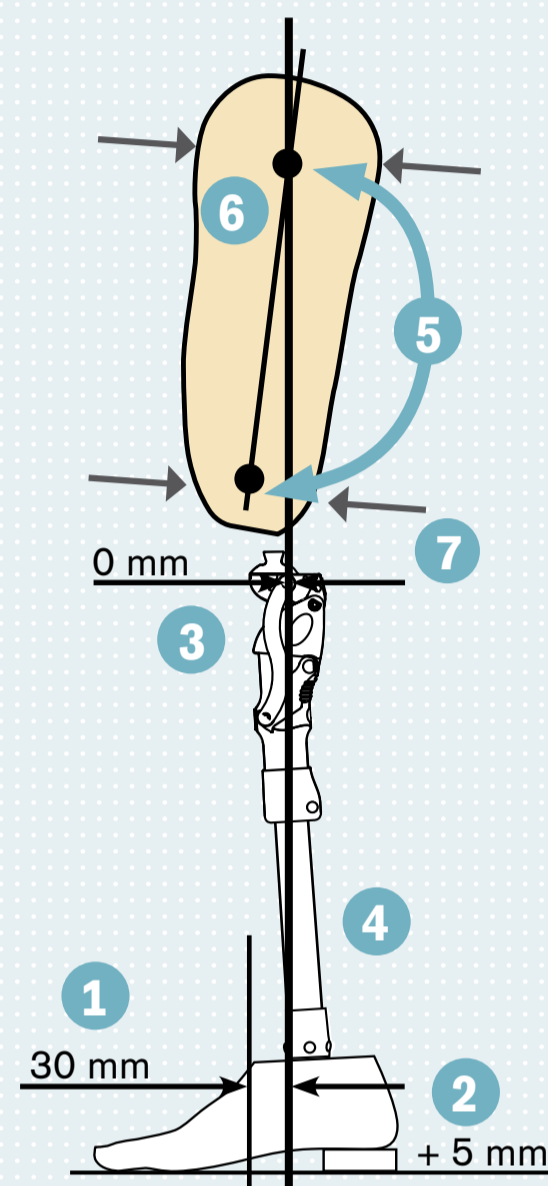
Polycentric Knee Joints

3R60 EBS / 3R60 EBS^{PRO}



Recommended prosthetic feet according to MOBIS for:
3R60 1M10 Adjust, 1A30 Greissinger plus, 1D35 Dynamic Motion, 1C30 Trias, 1C40 C-Walk, 1E56 Axtion, 1E58 Axtion DP, 1C60 Triton, 1C61 Triton Vertical Shock, 1C62 Triton Harmony, 1C63 Triton Low Profile or 1C64 Triton Heavy Duty
 (Selection depends on the Mobility Grade and functional demands of the patient)

3R106



Recommended prosthetic feet according to MOBIS for:
3R106 1M10 Adjust, 1A30 Greissinger plus, 1D35 Dynamic Motion, 1C30 Trias, 1C40 C-Walk, 1E56 Axtion, 1E58 Axtion DP, 1C60 Triton, 1C61 Triton Vertical Shock, 1C62 Triton Harmony, 1C63 Triton Low Profile or 1C64 Triton Heavy Duty
 (Selection depends on the Mobility Grade and functional demands of the patient)

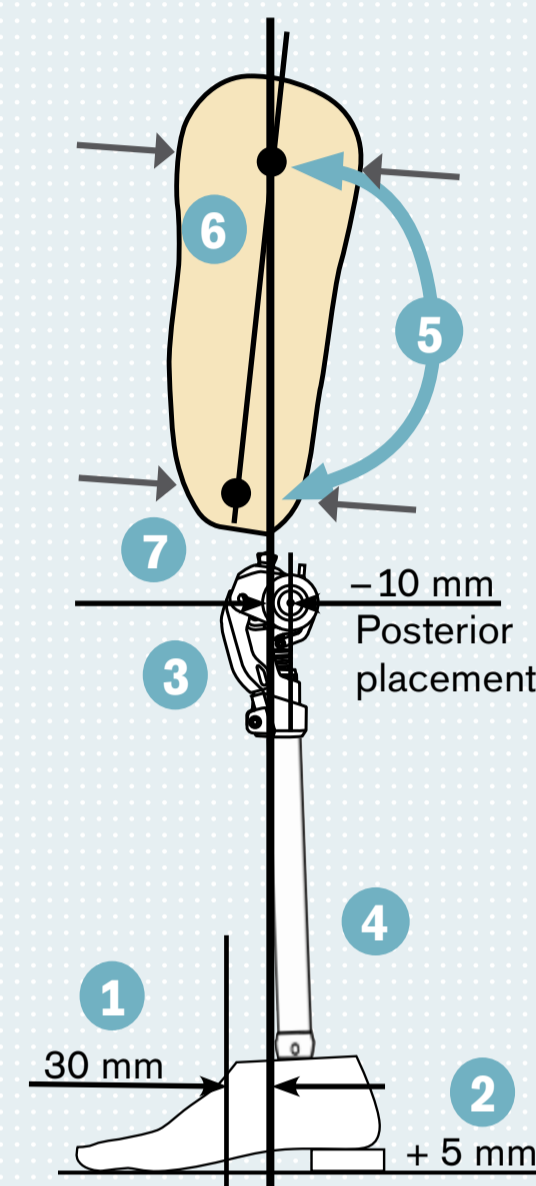
Bench alignment* 3

3R20 / 3R36	0 mm
3R21 / 3R30	0 mm
3R23 / 3R32	0 mm
3R46	0 mm
3R55	0 mm
3R60 EBS	0 mm
3R60 EBS ^{PRO}	0 mm
3R72	0 mm
3R78	0 mm
3R106	0 mm

Recommended prosthetic feet according to MOBIS
 (Selection depends on the Mobility Grade and functional demands of the patient)
 Please refer to the respective instructions for the use of the knee joints.

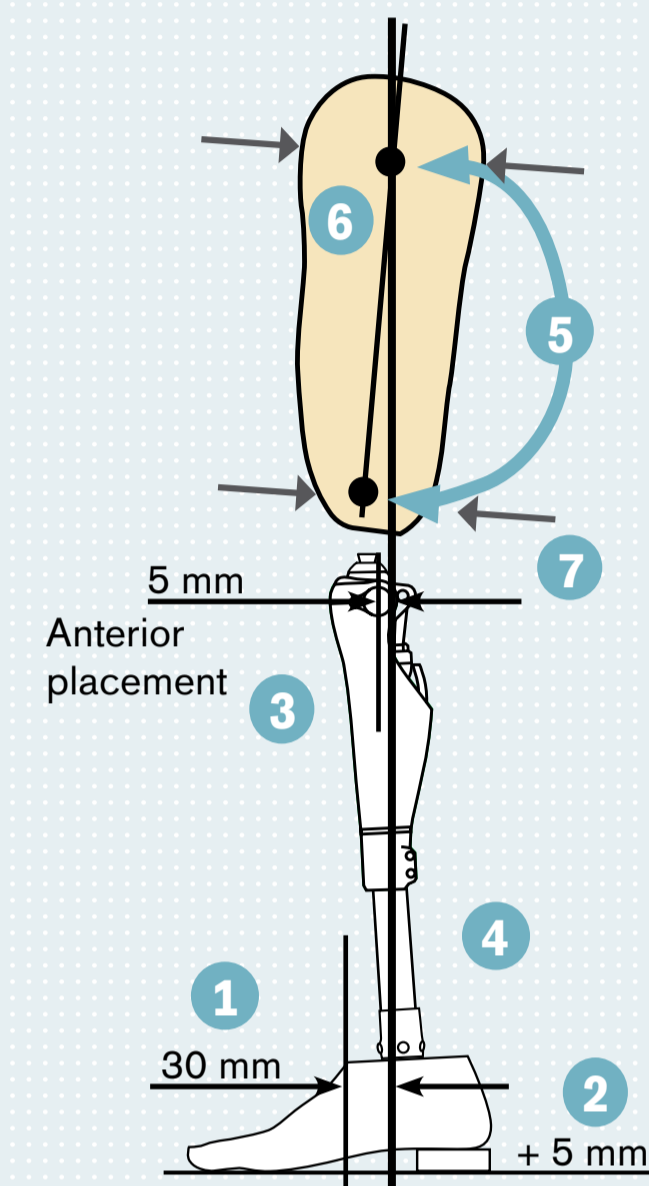
Monocentric Knee Joints

3R93



Recommended prosthetic feet according to MOBIS for:
3R93 1M10 Adjust, 1H32-1H40 Single Axis Foot, 1S49-1S90 SACH+ foot, 1D10 / 1D11 Dynamic Foot, 1A30 Greissinger Plus, 1D35 Dynamic Motion or 1C30 Trias
 (Selection depends on the Mobility Grade and functional demands of the patient)

C-Leg / C-Leg compact



Recommended prosthetic feet according to MOBIS for:
C-Leg / C-Leg compact 1D10 Dynamik Foot, 1M10 Adjust, 1A30 Greissinger plus, 1D35 Dynamic Motion, 1C30 Trias, 1C40 C-Walk, 1E56 Axtion, 1E57 Lo Rider, 1C60 Triton, 1C61 Triton Vertical Shock, 1C62 Triton Harmony, 1C63 Triton Low Profile or 1C64 Triton Heavy Duty
 (Selection depends on the Mobility Grade and functional demands of the patient)

Bench alignment* 3

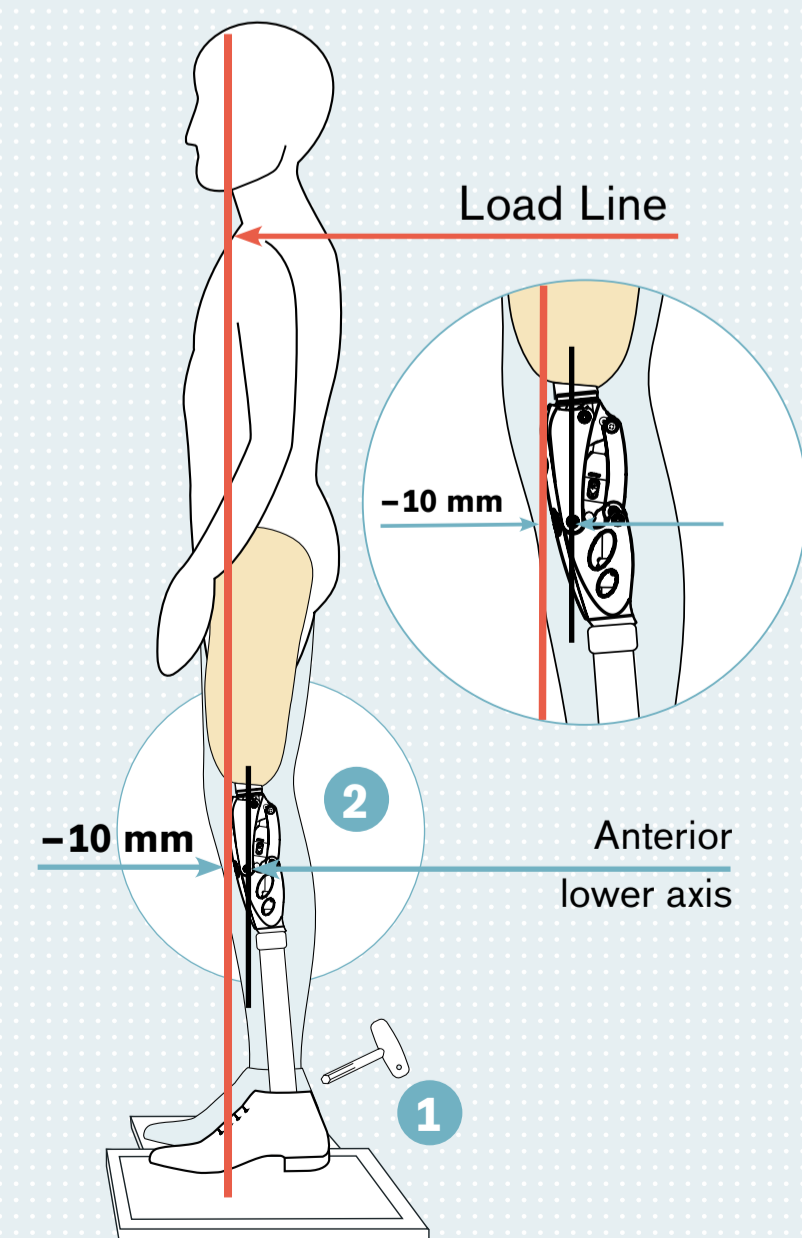
3R15 / 3R49	- 10 mm
3R17 / 3R33	- 15 mm
3R22 / 3R34	- 15 mm
3R40 / 3R41	- 15 mm
3R80	0 mm
3R90 / 3R90	- 10 mm
3R92 / 3R92	- 10 mm
3R93 / 3R93	- 10 mm
3R95 / 3R95=1	- 15 mm
C-Leg	5 mm
C-Leg compact	5 mm
„-“	Rückverlagerung

Recommended prosthetic feet according to MOBIS
 (Selection depends on the Mobility Grade and functional demands of the patient)
 Please refer to the respective instructions for the use of the knee joints.

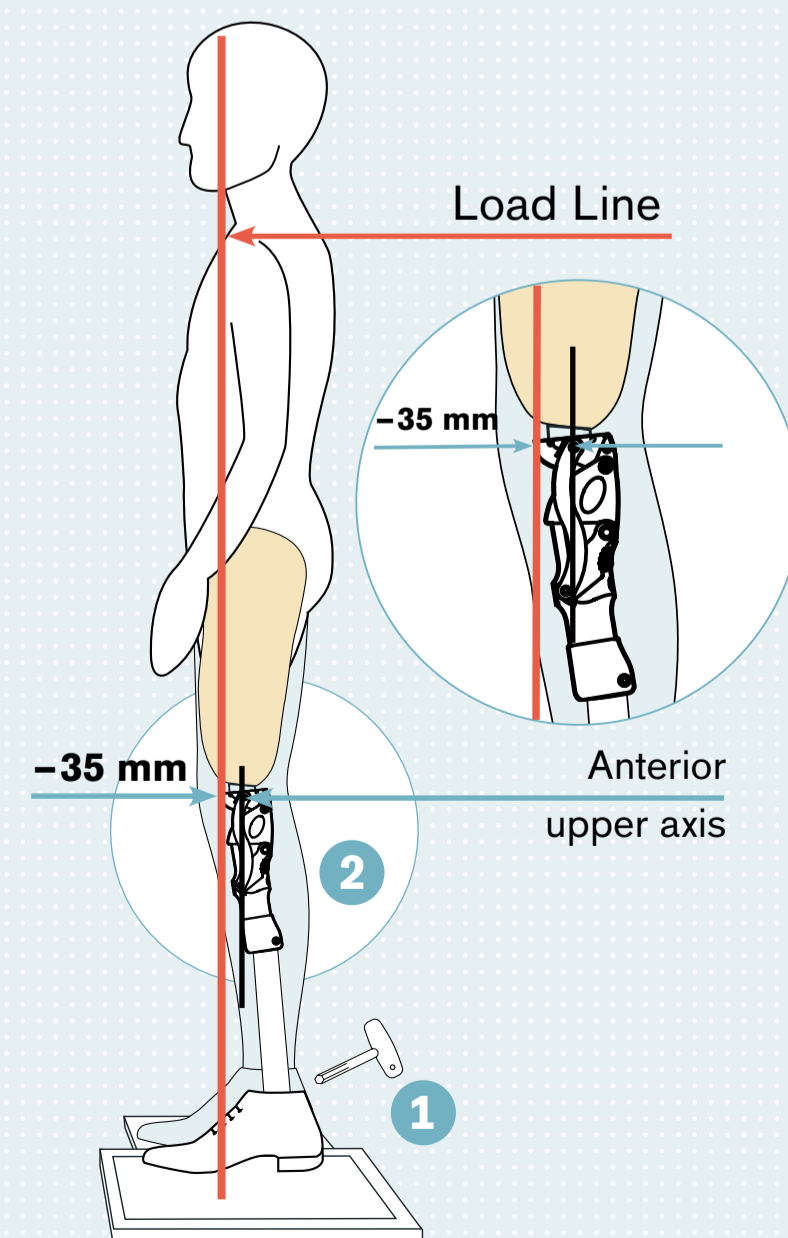
To make use of the functional benefits of the Ottobock knee joints, correct bench alignment, e.g. in the PROS.A. Assembly or in the L.A.S.A.R. Assembly is required as follows:

- Position the middle of the foot 30 mm anterior to the alignment reference line (observe the alignment recommendation contained in the instructions for use of the knee joint and foot).
- Add 5 mm to the required heel height (observe the alignment recommendation contained in the instructions for use of the foot) and set correct outward rotation of the foot.
- Position the alignment reference point (for monocentric knee joints = rotation axis; for polycentric knee joints = anterior upper axis) in relation to the alignment recommendation of the knee joint. Pay attention to the knee ground distance and outward rotation of the knee (adapter inserts provide for a rotation of approx. 5°). Recommended sagittal position of the alignment reference point: 20 mm above the medial tibial plateau.
- Connect the foot to the knee joint by means of a tube adapter.
- Mark the centre of the socket proximal and distal on the lateral side. Draw a line through both marks from socket brim to the distal end of the socket.
- Now position the socket such that the alignment reference line passes through the proximal mark. Set the socket flexion to somewhere between 3° and 5°; however, the individual situation (e.g. hip flexion contractures) must be taken into account. Also take into account to the ischial tuberosity to ground distance.
- Connect the socket and knee by means of an adapter.

Static alignment using L.A.S.A.R. Posture



-10 mm Anterior lower axis

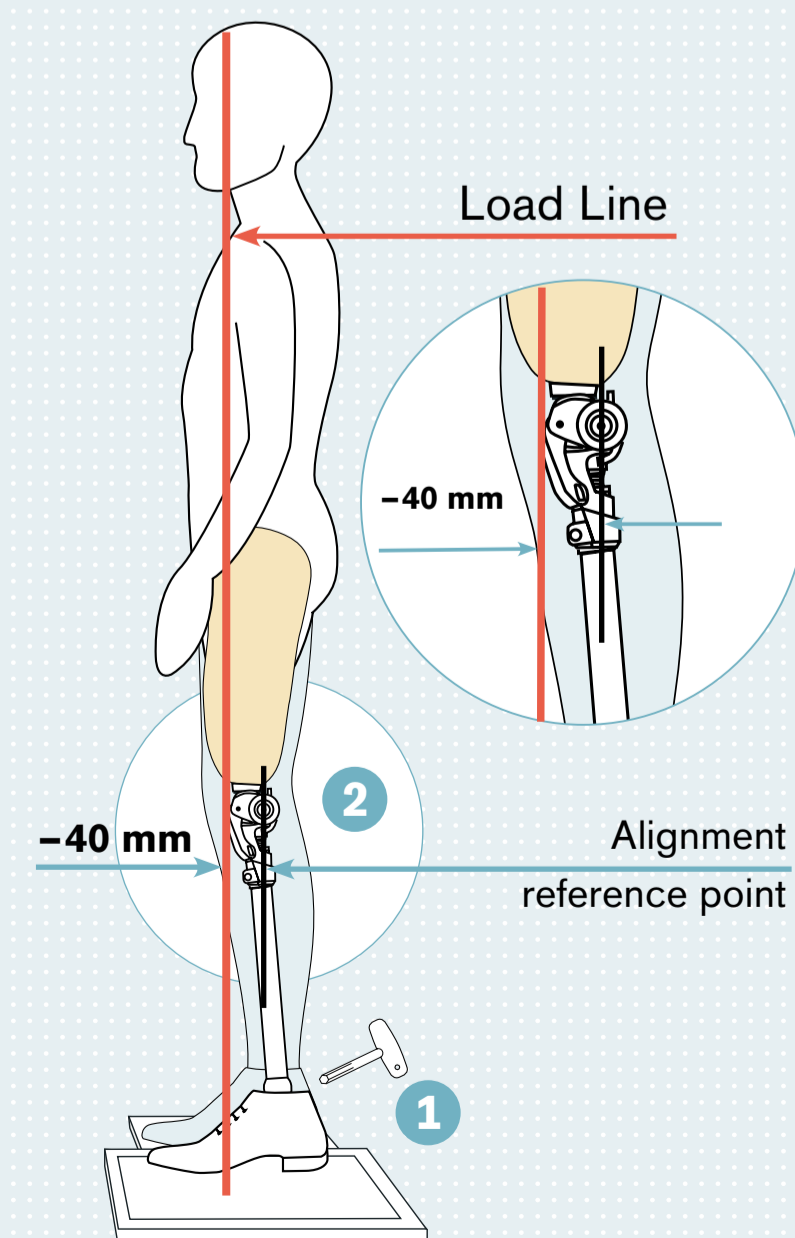


-35 mm Anterior upper axis

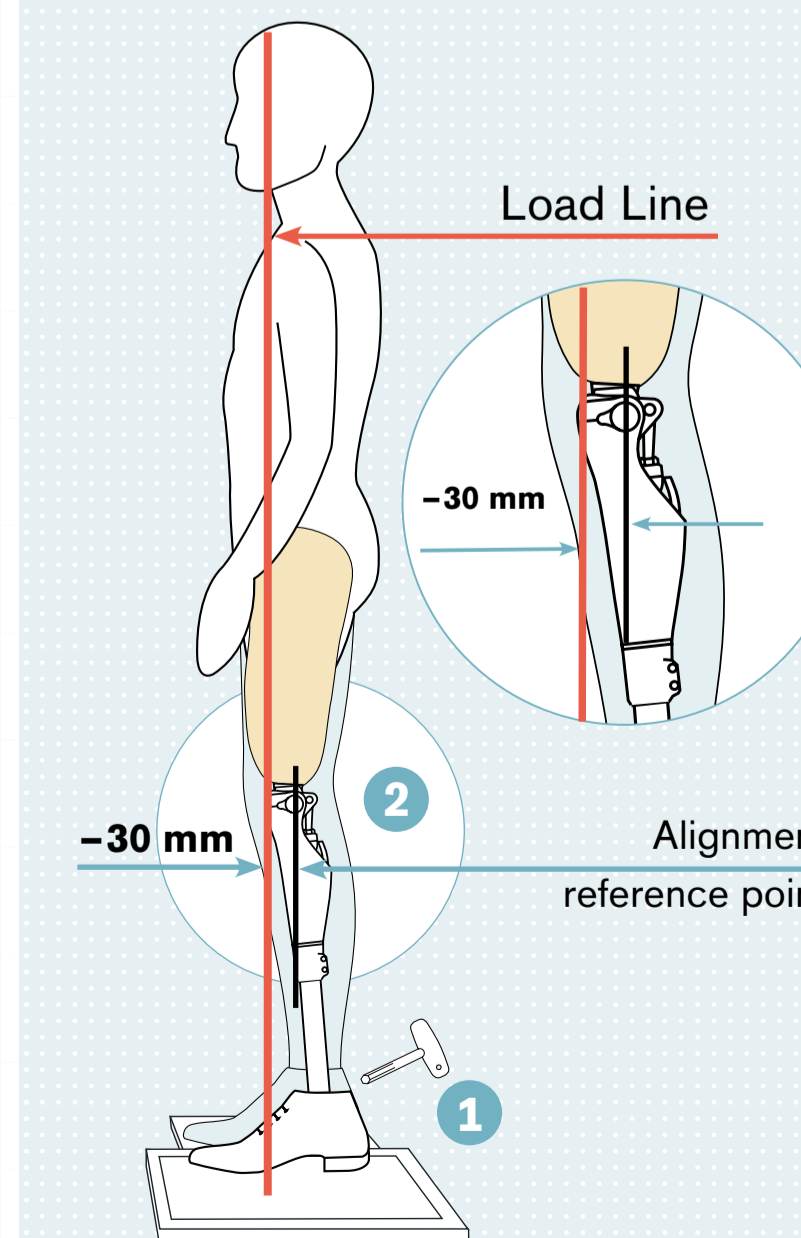
Static alignment* 2

3R20 / 3R36	- 35 mm
3R21 / 3R30	- 35 mm
3R23 / 3R32	- 35 mm
3R46	- 35 mm
3R55	- 35 mm
3R60 EBS	- 10 mm**
3R60 EBS ^{PRO}	- 10 mm**
3R72	- 35 mm
3R78	- 35 mm
3R106	- 35 mm

„-“ = Posterior placement
 *) According to Prof. Blumentritt
 **) Anterior lower axis is the alignment reference point



-40 mm Alignment reference point



-30 mm Alignment reference point

Static alignment* 2

3R15 / 3R49	- 40 mm
3R17 / 3R33	- 45 mm
3R22 / 3R34	- 45 mm
3R40 / 3R41	- 45 mm
3R80	- 35 mm
3R90 / 3R90	- 40 mm
3R92 / 3R92	- 40 mm
3R93 / 3R93	- 40 mm
3R95 / 3R95=1	- 45 mm
C-Leg	- 30 mm
C-Leg compact	- 30 mm
„-“	Posterior placement

*) According to Prof. Blumentritt

After bench alignment of the transfemoral prosthesis static alignment is made using the L.A.S.A.R. Posture. In order to ensure appropriate stability combined with easy swing phase initiation, please proceed as follows:

- To make the load line visible, the amputee (with shoes) stands on the L.A.S.A.R. Posture with the prosthetic side on the force plate and with the other leg on the height compensation panel. The prosthetic side should at least be loaded with 35% of the body weight.
- Now adapt the alignment by only adjusting the plantar flexion of the foot. The load line/laser line should be placed anterior to the alignment reference point (except for 3R60, see ill.) according to the alignment recommendation of the knee joint.
- Perform dynamic optimisation during trial walking. You will often have to take the following aspects into consideration and make any necessary adjustments:
 - Socket flexion position by verifying step length symmetry (sagittal plane)
 - Adduction position of the socket and M-L positioning of the socket adapter (frontal plane)
 - Rotation position of the knee joint axis and outward rotation of the prosthetic foot (transversal plane)
- Finally, document the fitting result using the „Dartfish“ motion analysis software.