SYSTEMATIC TUNING PROCEDURE

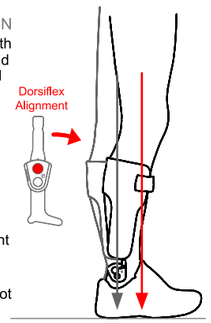
MILINE™ Double Action with Dorsiflexion Resist Spring & Plantarflexion Motion Stop (PIN)

STEP 1: Bench Adjustment

Adjust Shank Alignment to 0°. Adjust Plantarflexion Range of Motion to 0°. Adjust Dorsiflexion Range of Motion to 0°.

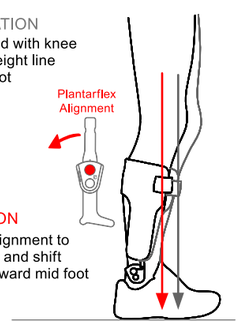
STEP 2: Static Alignment

Adjust Shank Alignment. Note: Plantarflexion and Dorsiflexion ROM = 0°



GAIT DEVIATION
Shank reclined with knee extended and weight line toward heel

CORRECTION
Dorsiflex alignment to incline shank and shift weight line toward mid foot



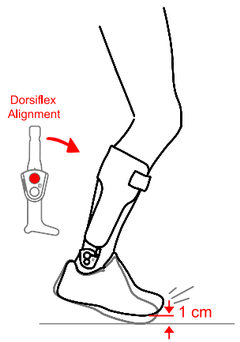
GAIT DEVIATION
Shank inclined with knee flexed and weight line toward forefoot

CORRECTION
Plantarflex alignment to recline shank and shift weight line toward mid foot

QUIET STANDING

STEP 3: Swing Phase Alignment

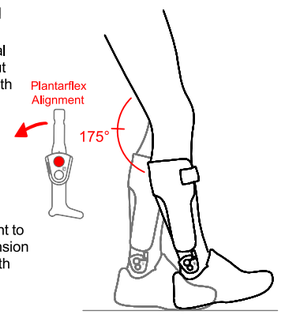
Adjust Ankle Alignment. Note: Plantarflexion and Dorsiflexion ROM = 0°



GAIT DEVIATION
Not enough toe clearance in mid swing

CORRECTION
Dorsiflex alignment to increase toe clearance

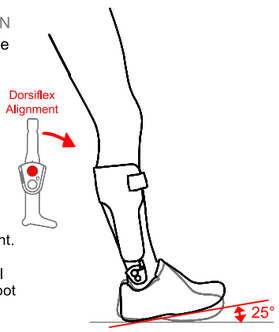
MID SWING



GAIT DEVIATION
Not enough knee extension at terminal swing with or without shortened step length

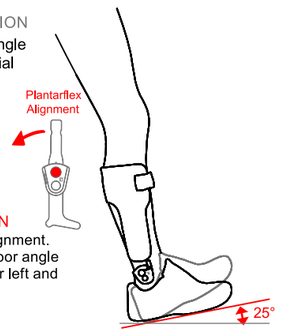
CORRECTION
Plantarflex alignment to increase knee extension and make step length equal left to right

TERMINAL SWING



GAIT DEVIATION
Foot to floor angle too low at initial contact

CORRECTION
Dorsiflex alignment. Make foot to floor angle symmetrical for left and right foot



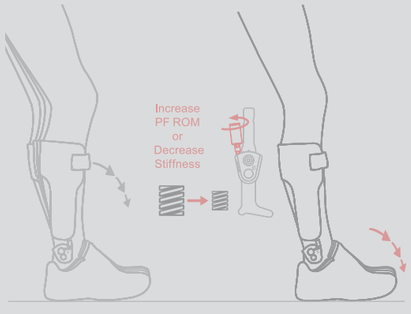
GAIT DEVIATION
Foot to floor angle too high at initial contact

CORRECTION
Plantarflex Alignment. Make foot to floor angle symmetrical for left and right foot

INITIAL CONTACT

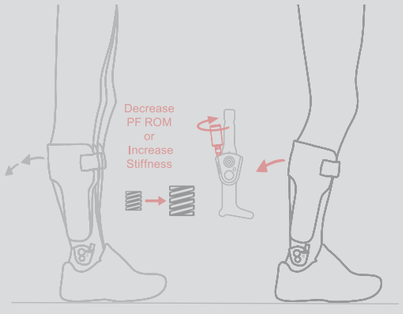
STEP 4A: Early Stance Phase Adjustment

Adjust Plantarflexion ROM. If foot to floor angle at initial contact decreases with increased PF ROM, return the previous ROM setting or increase spring stiffness. Note: DF ROM = 0°



GAIT DEVIATION
Rapid knee flexion in 1st rocker with limited ankle plantarflexion

CORRECTION
Increase plantarflexion range of motion to slow knee flexion. Note: If PF ROM must be adjusted greater than 10° to slow knee flexion, then decrease plantarflexion spring stiffness



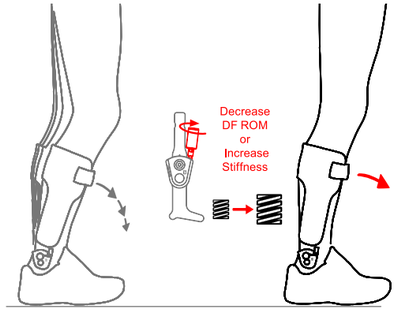
GAIT DEVIATION
Knee hyperextension before mid stance

CORRECTION
Decrease plantarflexion range of motion to reduce knee hyperextension. Note: If PF ROM must be adjusted to less than 5° to reduce knee hyperextension, then increase plantarflexion spring stiffness

1ST ROCKER

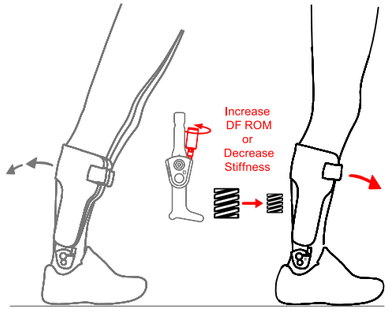
STEP 4B: Late Stance Phase Adjustment

Adjust Dorsiflexion ROM.



GAIT DEVIATION
Excessive knee flexion after mid stance

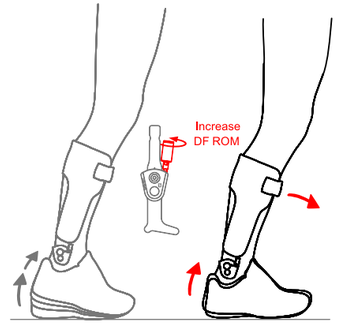
CORRECTION
Decrease dorsiflexion range of motion to reduce knee flexion. Note: If DF ROM must be adjusted to less than 5°, then Increase dorsiflexion spring stiffness



GAIT DEVIATION
Knee hyperextension after midstance

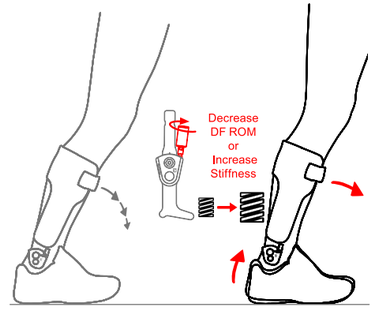
CORRECTION
Increase dorsiflexion range of motion to reduce knee extension. Note: If DF ROM must be adjusted to greater than 10°, then decrease dorsiflexion spring stiffness

2ND ROCKER



GAIT DEVIATION
Early heel rise with or without knee hyperextension

CORRECTION
Increase dorsiflexion range of motion to delay heel rise



GAIT DEVIATION
Late heel rise with or without knee flexion

CORRECTION
Decrease dorsiflexion range of motion to advance heel rise. Note: if DF ROM must be adjusted to less than 5°, then increase dorsiflexion spring stiffness

3RD ROCKER

SYSTEMATIC TUNING PROCEDURE

MILINE™ Double Action with Plantarflexion Resist Spring & Dorsiflexion Motion Stop (PIN)

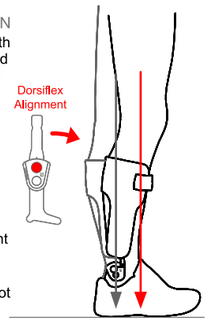
STEP 1: Bench Adjustment

Adjust Shank Alignment to 0°. Adjust Plantarflexion Range of Motion to 0°. Adjust Dorsiflexion Range of Motion to 0°.

STEP 2: Static Alignment

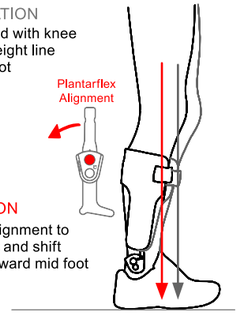
Adjust Shank Alignment. Note: Plantarflexion and Dorsiflexion ROM = 0°

GAIT DEVIATION
Shank reclined with knee extended and weight line toward heel



CORRECTION
Dorsiflex alignment to incline shank and shift weight line toward mid foot

GAIT DEVIATION
Shank inclined with knee flexed and weight line toward forefoot



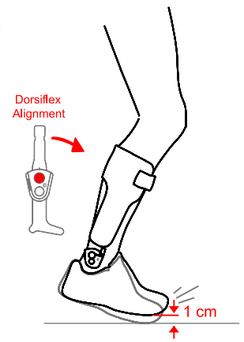
CORRECTION
Plantarflex alignment to recline shank and shift weight line toward mid foot

QUIET STANDING

STEP 3: Swing Phase Alignment

Adjust Ankle Alignment. Note: Plantarflexion and Dorsiflexion ROM = 0°

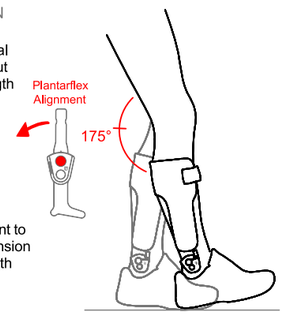
GAIT DEVIATION
Not enough toe clearance in mid swing



CORRECTION
Dorsiflex alignment to increase toe clearance

MID SWING

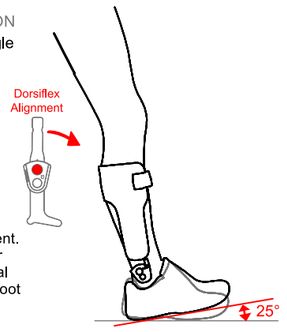
GAIT DEVIATION
Not enough knee extension at terminal swing with or without shortened step length



CORRECTION
Plantarflex alignment to increase knee extension and make step length equal left to right

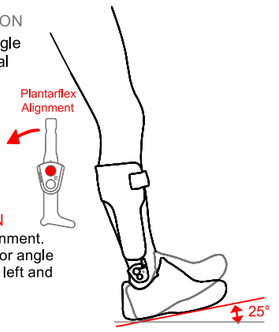
TERMINAL SWING

GAIT DEVIATION
Foot to floor angle too low at initial contact



CORRECTION
Dorsiflex alignment. Make foot to floor angle symmetrical for left and right foot

GAIT DEVIATION
Foot to floor angle too high at initial contact

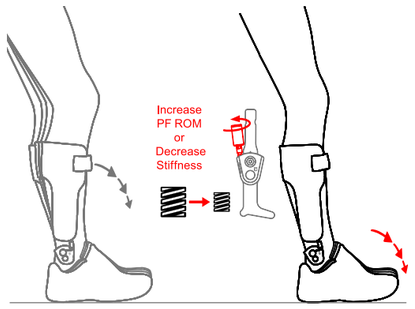


CORRECTION
Plantarflex Alignment. Make foot to floor angle symmetrical for left and right foot

INITIAL CONTACT

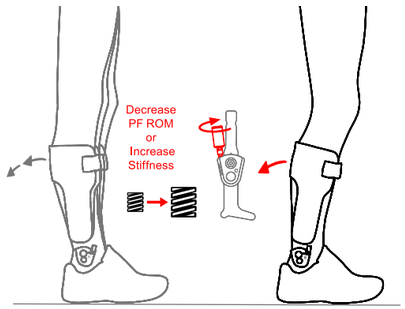
STEP 4A: Early Stance Phase Adjustment

Adjust Plantarflexion ROM. If foot to floor angle at initial contact decreases with increased PF ROM, return the previous ROM setting or increase spring stiffness. Note: DF ROM = 0°



GAIT DEVIATION
Rapid knee flexion in 1st rocker with limited ankle plantarflexion

CORRECTION
Increase plantarflexion range of motion to slow knee flexion. Note: If PF ROM must be adjusted greater than 10° to slow knee flexion, then decrease plantarflexion spring stiffness



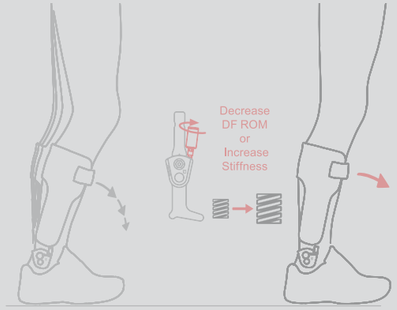
GAIT DEVIATION
Knee hyperextension before mid stance

CORRECTION
Decrease plantarflexion range of motion to reduce knee hyperextension. Note: If PF ROM must be adjusted to less than 5° to reduce knee hyperextension, then increase plantarflexion spring stiffness

1ST ROCKER

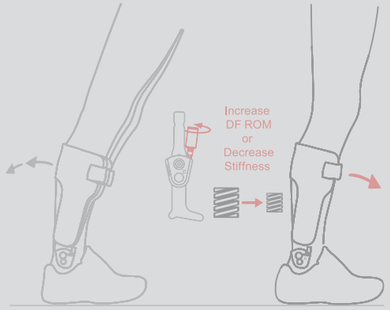
STEP 4B: Late Stance Phase Adjustment

Adjust Dorsiflexion ROM.



GAIT DEVIATION
Excessive knee flexion after mid stance

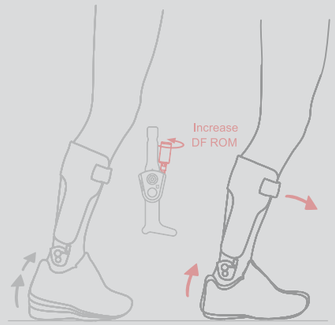
CORRECTION
Decrease dorsiflexion range of motion to reduce knee flexion. Note: If DF ROM must be adjusted to less than 5°, then Increase dorsiflexion spring stiffness



GAIT DEVIATION
Knee hyperextension after midstance

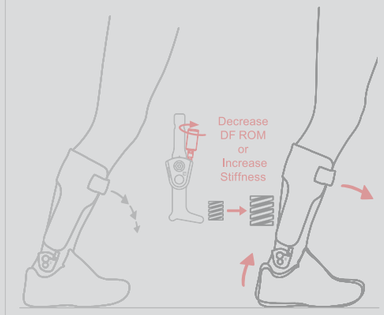
CORRECTION
Increase dorsiflexion range of motion to reduce knee extension. Note: If DF ROM must be adjusted to greater than 10°, then decrease dorsiflexion spring stiffness

2ND ROCKER



GAIT DEVIATION
Early heel rise with or without knee hyperextension

CORRECTION
Increase dorsiflexion range of motion to delay heel rise



GAIT DEVIATION
Late heel rise with or without knee flexion

CORRECTION
Decrease dorsiflexion range of motion to advance heel rise. Note: if DF ROM must be adjusted to less than 5°, then increase dorsiflexion spring stiffness

3RD ROCKER