



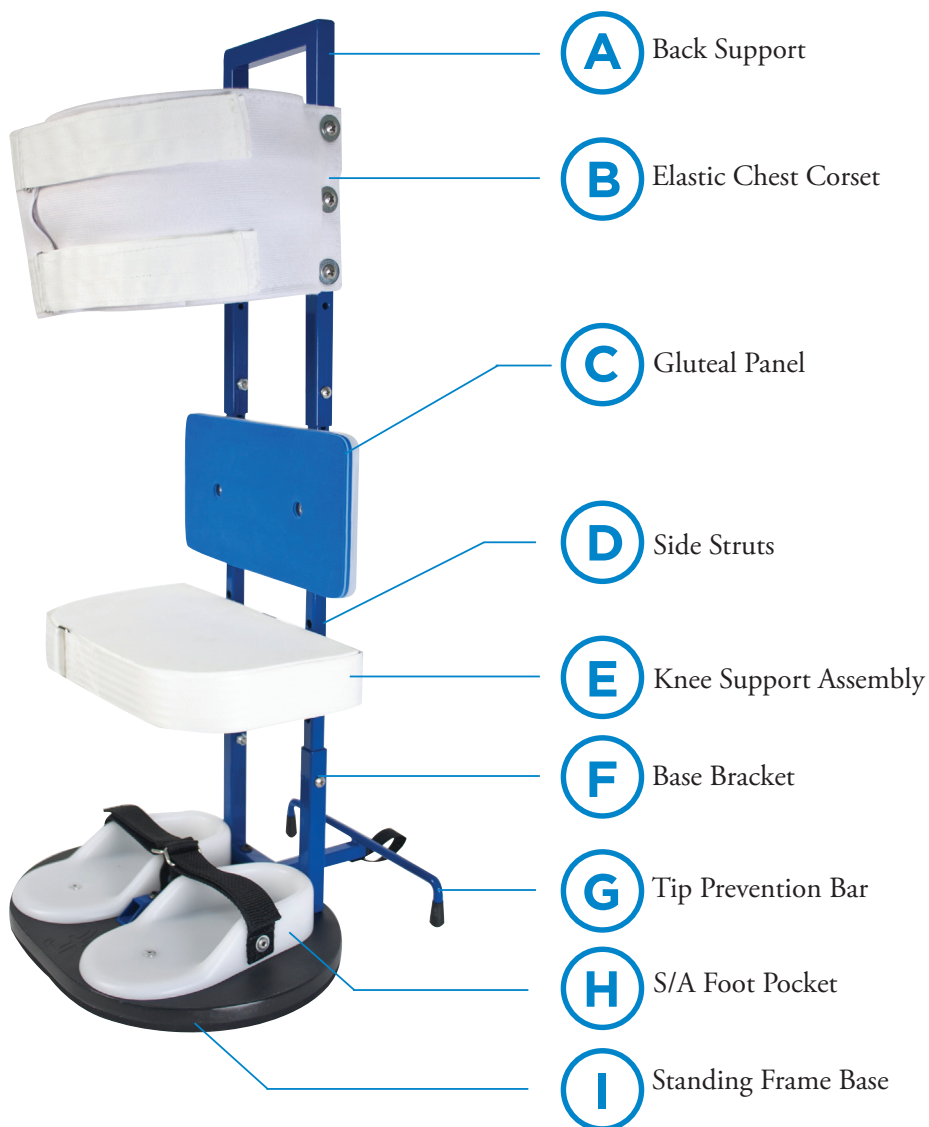
FILLAUER II STANDING FRAME

from Fillauer LLC

**FABRICATION
MANUAL**

Fillauer
COMPANIES

COMPONENTS LIST



PARTS LIST

Fillauer II Standing Frame	021036
A Back Support.	021350
B Elastic Chest Corset (white, blue, pink)	021330
C Gluteal Panel.	021355
D Side Struts	021366
E Knee Support Assembly	021300
Knee Socket	021305
Knee Strap	021310
F Base Bracket	021360
G Tip Prevention Bar	021340
H S/A Foot Pocket.	021104
I Standing Frame Base	021320
Hardware Package (not shown)	021370

DESIGN DESCRIPTION

The standing frame is an adjustable metal frame which attaches to a stable base support. It is available in kit form and easily assembled with a minimum number of tools. The frame consists of 1) an oval base, to which two foot pockets and a metal bracket are attached, 2) the bracket continues vertically, and provides attachment for a knee support, and 3) a gluteal panel and a chest corset.

The fastening system uses Velcro™ straps, and the foot pockets will accept any standard shoe with a firm sole. The frame has a wide range of adjustments to provide a customized fit for each child, as well as, accommodation for changes due to growth.

SELECTION CRITERIA

1. The standing frame may be chosen if the child is developmentally mature enough to stand, or indicates a desire to stand up by pulling on furniture and other objects, a bracing program may commence.
2. A standing frame may also be used if the child does not have sufficient muscle power in the lower extremities and trunk to ambulate and stand without crutches.
3. Evaluate the condition of the feet, and determine if there is indication for custom shoes, special padding, and plantar flexion wedges. Check the condition of the skin, bones, and joints for good weight bearing capabilities. A physical therapy program may be required to prepare the child for weight bearing activities.
4. Evaluate for deformities and contractures to determine if device modification may be required. Check the legs, pelvis, and spine for severe deformities. Orthopedic surgery and physical therapy should be involved with implementation.
5. Evaluate the skin condition and check for sores and hypersensitive areas around the chest panels (front panel area, sacral area (buttock support) and patellar tendon and knees (knee pads).
6. Protruding myelomeningocele and spinal deformities should be evaluated to determine if there is enough clear area over the sacrum to have a good buttocks support panel and if a body jacket can be used if necessary.

FITTING CRITERIA

The standing frame is intended for the very young child who lacks sufficient muscle power in the lower extremities and trunk to stand. A child of 12 months or older with good head control in the vertical position and who is commando crawling (drag crawling) in prone, who attempts to pull herself/himself up to standing at a low table, is ready for fitting.

Children older than two years who are not able to crawl prone may be appropriate candidates for a standing frame to provide hands free standing.

The frame can also be used as a training tool to help the parents and the therapist develop the child's physical abilities so that she/he can progress to other types of assistive devices. Upright positioning will benefit the child both physically and socially, but in all cases, the child should be properly assessed by the rehabilitation team prior to the prescription of the frame.

Measurement Criteria:

Maximum height	35 in. (0.88 m)
Maximum chest circumference	26 in. (0.66 m)
Maximum weight	40 lbs. (18.2 kg)

FITTING AND ASSEMBLY PROCEDURE

Compare and verify contents of standing frame kit (parts list). If any portion of standing frame is missing, contact your Fillauer Representative. Ensure that the child has suitable foot wear (shoes or boots). Verify shoes fit well. Place the child on their back on a bed or padded table and record the measurements. A measurement form is included with each standing frame. Do not forget to accommodate for differences of sole thickness of shoes in measurements.



Attach base bracket to standing frame base using 3 included carriage bolts and locking nuts.



FITTING AND ASSEMBLY PROCEDURE

Insert the side struts (D) into the two vertical tubes of the base bracket. Secure with the #10-32 machine screws and self-locking nuts in the uppermost hole of the three holes provided. This allows for growth adjustments later.

Note: Side struts may be inverted to accommodate large floor-to-mid-patellar tendon values. Insert side struts into base bracket. Ensure side struts are fully inserted into the base bracket. This will allow for growth accommodation. Insert included screws (#10-32) into holes of the base brackets and tighten with self locking nuts.



Using the measurement sheet, determine the floor-to-mid-patellar tendon and the floor-to-axilla measurements. Be sure to add the thickness of the foot pockets to these measurements.

Position the knee support (E) on the side struts; ensure that the top of the ethafoam corresponds to the floor-to-patellar tendon value on the measurement sheet. After determining the proper height, secure the knee support to the side struts with the two Phillips head (1/4-20 x 1 in.) machine screws. Position knee support so that height of proximal edge of knee support corresponds to the patella tendon to floor value from measurement form. Secure knee support to side struts using included Phillips head screw (1/4-20 x 1 in.).



FITTING AND ASSEMBLY PROCEDURE

Insert the upper ends of the side struts into the back support. Using the upper most hole as a reference, slide the back support up and down until the top hole corresponds with the axilla-to-floor value on the measurement sheet. When this is accomplished, secure the two pieces together using the #10-32 machine screws and self-locking nuts in the two lower holes provided.

If a hole does not exist in the necessary position, a new one must be drilled. Slide the back support onto the side struts.

Align the top hole of the back support so that the height corresponds to the axilla-to-floor value from the measurement form. Secure back support to side struts using included machine screws (#10-32) and locking nut.

If existing hole does not correspond to the measured height, a new hole can be drilled into side struts.



FITTING AND ASSEMBLY PROCEDURE

Refer to the measurement sheet and obtain the floor-to-gluteus maximus measurement. With the center of the gluteal panel corresponding to this height, drill one hole on the front face of each side strut to allow for the attachment of the gluteal panel. Align gluteal panel such that center of panel pre-drilled holes corresponds to gluteal to floor measurement holes. Mark height on side struts and drill through front face with 3/16 in. bit. Secure the parts using the 3/16 in. pop rivets.

To determine the correct length of the chest belt, refer to the measurement chart. Taking the circumference of the body at the axilla, subtract the distance between the outside edges of the side struts. Now attach the chest belt to the back support using the six #12 x 5/8 inch self-threading screws and washers. For the chest corset length, subtract the width of the side struts (outside edge to outside edge) from the circumference at axilla level. Attach the chest corset using the six self-threading screws and washers.

The proper cut-outs for the knees in the knee support must now be determined. Remove the knee support from the side struts, remembering or marking which holes they were assigned to. Refer to the measurement chart and obtain 3 measurements: 1) Knee A-P 2) Knee M-L; and 3) Mid-Patellar Distance.



After holes are marked, cut out the holes, round the edges, and pad if necessary (See Appendix B). Remove the knee support from the frame to cut holes for legs. Refer to measurements form for hole dimensions. Round the edges of the foam.

FITTING AND ASSEMBLY PROCEDURE

Cut the ethafoam so that it allows access for the legs. A wedge is cut on the anterior section of the ethafoam leaving enough width to cover the support from underneath. As well, wedges are cut laterally for added support of the ethafoam block. Once all the cutting is done, glue the straps to the outside edges and re-attach to the side struts. Cut foam to allow for don/doff. Cut a wedge at anterior and lateral sections. Be certain to not remove foam from support. Start with small cuts and proceed carefully, as knee support is easy to damage. Once cutting is complete, glue straps to foam and reattach knee support to side struts.



Insert the anti-tip bar into the posterior side of the standing frame base. **The device is now ready for fitting. Note: Do not attach foot pockets at this point.**

Open the Velcro™ straps and lay the standing frame down on its back supports on a bed or padded table. Place a pillow or cushion where the child's head will rest. It may be necessary to remove anti-tip bar.



FITTING AND ASSEMBLY PROCEDURE

Place child in frame and insert legs into knee support. Be careful to minimize wrinkling of clothing to prevent discomfort. Verify fit of knees in knee support. Modify if necessary. Fasten knee straps.



Fasten chest corset. Chest corset should be snug without restricting breathing. Place foot socket under each shoe and fasten with Velcro™ straps.



FITTING AND ASSEMBLY PROCEDURE

Slowly and carefully, lift child and standing frame to vertical position.



Verify proper fit and placement of back support, gluteal pad, and knee support. Modify if necessary. Position each foot on support base, ensuring foot is oriented correctly and weight is supported equally. Mark locations of foot pocket. Remove child from standing frame and secure foot pockets to support base.



FITTING AND ASSEMBLY PROCEDURE

Place child in standing frame. Position near table with toys so child can be supervised during play. Ensure anti-tip bar is in place. Verify good fit after 15-20 minutes of use.

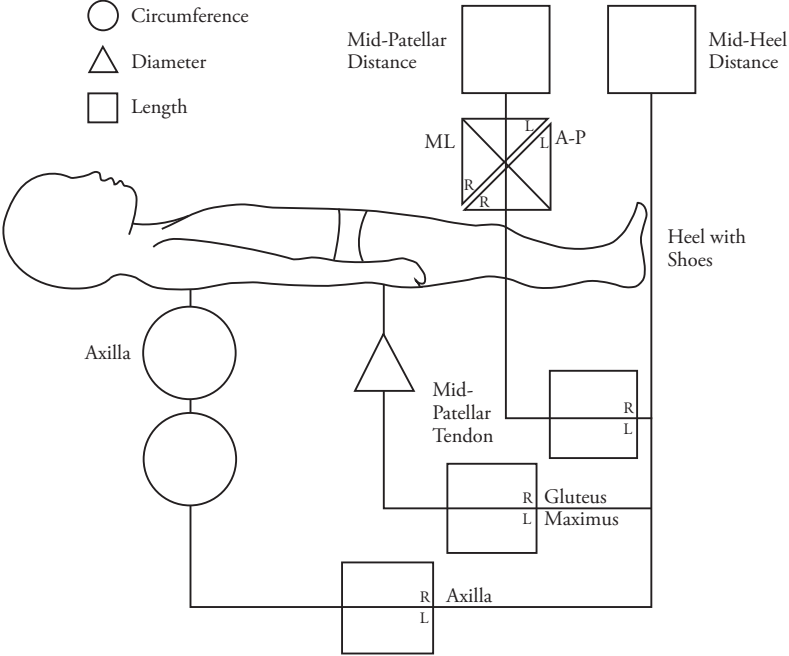


PARENTAL INSTRUCTION

Parents should be instructed on proper donning, doffing, and maintenance/care. Initially standing frame should be worn for 15-20 minutes and skin integrity checked. If skin is in good condition, wear time can be increased in 15 minute intervals. Maximum wear time can be as much as desired. After tolerance is increased, the child should use the device as much as desired.

Good fit and function of device should be verified continuously. Consult with orthotist periodically (every 6 months) for assessment and changes if necessary.

APPENDIX A: MEASUREMENT CHART



Hip Dislocation:	_____	LLD:	_____
Hip Flexion Contraction:	_____	Comments:	_____
Hip Abduction/Adduction:	_____		_____
Knee Flexion Contractures:	_____		_____
Knee Valgus/Varus:	_____		
Knee Hyperextension:	_____	Date:	_____
Ankle Valgus/Varus:	_____	Patient:	_____
External Rotation:	_____	Orthotist:	_____
Scoliosis:	_____	Therapist:	_____
LLD:	_____		

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