

# Kaye Products, Inc.

ADAPTIVE EQUIPMENT AND REHABILITATION PRODUCTS

## KAYE SUSPENSION WALKER, SW7 Series

(effective 2/7/05)

SW7 Model	Accompanying Harness, Model No. & Size	Thread Color on Harness	Acceptable Pelvis Circumference in Inches (cms)	Weight Limit in Pounds (kg)
SW7-S	9820-Small	Red	16" to 25" (41 to 63 cms)	80 lbs (36 kgs)
SW7-MS	9821-Medium, Slim	Yellow	22" to 32" (56 to 81 cms)	80 lbs (36 kgs)
SW7-M	9822-Medium	Blue	24" to 35" (61 to 88 cms)	250 lbs (113 kgs)
SW7-L	9824-Large	Green	34" to 45" (86 to 114 cms)	250 lbs (113 kgs)

These are the user instructions for the SW7 Series Kaye Suspension Walkers.

These instructions are divided into three parts:

1. The SW7 Walking Frame;
2. Harness Use; and
3. Maintenance, Warranty and Cautions.

All people who set-up, adjust, and use this item should first read these entire instructions while referring to the accompanying diagram. Please store these instructions for future reference.

### SW7 WALKING FRAME

#### USE

The SW7 is designed as a partial weight-bearing walker for users who have a wide range of impairments due to neuropathology. This includes impairments in postural control, interlimb coordination, and balance.

The unit supports the user in the upright, walking, or partial weight-bearing position. It can be adjusted to allow a controlled amount of the user's own body-weight to be removed from the legs. It can

be paired with a treadmill, for repetitive, stationary walking, or it can be used to assist walking over open, level ground.

### SIZE and WEIGHT LIMITS and IDENTIFICATION

The SW7 walking frame itself is appropriate for users up to 75 inches (191 cms) tall. However, when the unit is used over a raised walking platform, such as a treadmill, the maximum user-height will be reduced by the height of the platform.

The four SW7 models are identified in the above chart—the four models differ only by the harness sizes. Each harness has its own identifying thread color and size and weight limits, as identified in the chart. The small and medium-slim harnesses should not be used on patients who weigh more than 80 pounds (36 kgs). The medium and large harnesses, and the walking frame itself, should not be used on patients who weigh more than 250 pounds (113 kgs).

### FRAME SET UP and ASSEMBLY

The SW7 is partially disassembled in order to reduce



shipping costs. To set up and assemble the SW7:

1. For shipping, the rear legs were flexed inward and between the front legs. Pull the rear (inner) legs forward and free from the front (outer) legs.
2. Pivot the front and rear legs away from each other.
3. Pivot the crossbar so that the ends point towards tubes A.
4. Guide each tube A into the ends of the crossbar.
5. Depress pushpin B.
6. Guide tubes A into the ends of the crossbar until pushpins B project from the holes in the crossbar.

#### WHEEL INSTALLATION

The leg extensions were removed for shipping. Install them as follows:

1. Remove the two nuts and bolts from each leg extension tube.
2. Each leg extension has a sticker that identifies its location in the frame. Telescope each leg extension into the appropriate location; rotate the leg extension until holes C are aligned and so that the plate to which the caster attaches protracts outward and runs parallel with the ground.
3. Install the hardware that you removed from the leg into holes C and tighten securely. When doing this, the bolt-head should recess into the large hole on the outside of the leg. The nut should be securely attached on the inside of the leg.

#### CASTER USE

The SW7 was equipped with swivel locking casters (these have the darker colored brake pedals) on the left side and total locking

casters (with the lighter colored brake pedals) on the right side.

To lock each caster, point it straight ahead and step on the brake until it locks downward. Then try rotating the caster (and the wheel on the total lock casters) to ensure that they are locked.

To unlock each caster, rotate the brake up until it is parallel with the floor.

To allow the walker to maneuver freely, unlock all four casters.

To prevent the rear end of the unit from swiveling, lock the left rear swivel-lock caster only (This has the darker brake pedal.).

To allow the unit to roll forward and backward, but not to swivel, lock both left swivel-lock casters only. (These have the darker colored brake pedals).

To hold the unit in place so that it does not roll, lock both right total-lock casters (These have the lighter colored brake pedals.).

#### ADJUSTING ALIGNMENT, SWIVEL WHEELS

If needed, adjust the swivel wheel alignment so that they point straight ahead when locked, as follows:

1. Ensure that the swivel casters are locked, as detail above.
2. Bolts D protrude through the metal caster plates. The bearing housings are directly beneath these plates. Use a large set of pliers or wrench to grasp and hold each bearing housing stationary. Caution: do not squeeze the bearing housing too tightly, or you will damage the housing and disrupt the swiveling of the caster.
3. Use a wrench to loosen nut D.
4. Point the caster assembly in the desired direction.



5. Hold the bearing housing stationary.
6. Securely tighten nut D.

#### WIDTH ADJUSTMENT

The SW7 is width-adjustable.

By increasing the width of the unit, you will: create more side-to-side room within the unit; allow the unit to straddle wider treadmills; and make the unit more stable.

By decreasing the width of the unit, you will: make the unit more maneuverable through doorways and within confined spaces; and make the unit less stable.

Because decreasing the width makes the unit less stable, always operate the unit with it adjusted as wide as possible.

To adjust the width:

1. Remove the user from the unit.
2. Remove both knobs E and their corresponding bolts.
3. Realign the holes in the two tubes.
4. Reinstall and securely tighten the bolts and knobs. When doing this, Position the knobs on the outside of the unit.

#### WINCH USE

The winch handle has a built-in latch that stops the winch from rotating. To use this:

1. Firmly grasp the grip and squeeze the trigger into the grip. If the winch is carrying a load when you do this, you may need to rotate the handle clockwise or counterclockwise to disengage the latch.
2. While keeping the trigger depressed, rotate the handle in order to lift or lower the rope/user.
3. Once the desired amount of lift is reached, release the trigger

and continue to rotate the handle until in locks into place.

4. The higher you lift the user, the more weight you will remove from the user's feet.

#### WINCH HANDLE REMOVAL and STORAGE

In certain circumstances, the handle might interfere with using the unit. To avoid this, remove and store the handle as follows:

1. Depress pushpin F. When you do this, pushpin G should retract.
2. Pull the handle assembly free from the winch socket.
3. Depress pushpin F and plug the end of the handle assembly into the storage socket. Do this so that once you release pushpin F, pushpin G locks in the hole near the end of the storage socket.

#### WINCH HANDLE INSTALLATION

To remove the handle from the storage socket and install it in the winch:

1. Depress pushpin F. This should cause pushpin G to retract.
2. Pull the handle assembly free from the storage socket.
3. While depressing pushpin F, insert the end of the handle assembly into the winch socket, as shown.
4. Ensure that the slot in the end of the black panel inserts under the head of bolt H.
5. Release pushpin F.
6. Ensure that pushpin G protrudes from the hole on the underside of the winch socket.

#### FOLDING and UNFOLDING THE UNIT

To fold the unit:

1. Depress pushpins B (one per side).
2. Pull the front and rear legs apart until tubes A separate from the crossbar.



3. Pivot the crossbar up.
4. Pivot the front and rear legs together.
5. Lay the unit down—do not leave it standing once it is folded.

To unfold the unit, refer to the previous section entitled "FRAME SET UP and ASSEMBLY."

#### HARNESSES ATTACHMENT

To install the harness:

1. Refer to the instructions, below, to fit and adjust the harness to the user.
2. Center the "harnessed" user inside the walking frame so that the user faces away from the winch.
3. Lower the rope, as needed, and pull the snap-hooks down until they reach the user's shoulders.
4. Hook the snap-hooks around the shoulder straps.
5. Ensure that each snap-hook locks and produces a continuous metal loop.
6. Pull on the rope to ensure that the shoulder straps and harness are securely attached.

#### HARNESSES USE

##### HARNESSES

There are four sizes of harnesses available. One harness is included with each Kaye Suspension Walker. (The purchaser chooses the size.) Other harnesses can be purchased separately. Harness details are identified in the chart on page 1.

##### HARNESSES USE

As previously noted, each of the four harnesses sizes has its own identifying thread color and size and weight limits. For details,

refer to the chart on page 1 of these instructions. The small and medium-slim harnesses should not be used on patients who weigh more than 80 lbs. (36kgs.). The medium and large harnesses should not be used on patients who weigh more than 250 lbs. (113 kgs.).

#### HARNESSES COMPONENTS

Each harness includes the following:

1. 1 ea. Body Vest with adjustable shoulder straps.
2. 4 ea. 3"x 20" Compression straps for small and medium harnesses, 4 ea. 3"x 24" Compression straps for the large harness.
3. 4 ea. 6"x 6" Shoulder strap pads.
4. 2 ea. Removable thigh cuffs for the medium (9822) and large (9824) harnesses only.

#### GENERAL HARNESSES INFORMATION

1. The body vest can be donned while the user is in supine or standing. For correct placement around the hips and pelvis, the hips must be straight when donning the vest. If the harness can only be donned while the user sits, it will need to be adjusted again once the user stands.
2. Bulky clothing (coats, large sweat shirts, or very baggy jeans...) and slick clothing (bicyclists' outfits...) should be avoided when using the harness. These can interfere with the fit and comfort of the harness. Close fitting t-shirts and cotton gym shorts or pants work well. Because the two smallest harnesses (9820, 9821) fit between the legs, additional padding in that area might make the body vest more comfortable.



**Fitting the harness for the first time takes patience. It is important to fit the harness symmetrically around the user's body and low around the pelvis for proper fit. If the harness is not well fitted to the user before placing the person in the suspension frame, it will be necessary to take the user out of the frame and begin again. Do not rush this process.**

DONNING THE SMALL (#9820) and MEDIUM-SLIM (#9821) HARNESSES

1. Unfasten the side release buckles along each side of the body vest.
2. Place the body vest between the user's legs so that the panel with the Kaye label is against the user's chest and the other panel is against the user's back.
3. Fasten each of the side release buckles on each side of the vest, pulling evenly on each side so that the vest is positioned symmetrically around the user.
4. Tighten each buckle by pulling on the webbing. It is important for the vest to fit snugly around the pelvis and trunk as this assists with alignment and postural control. The vest material stretches to give some compression around the child's body.

DONNING THE MEDIUM (#9822) and LARGE (#9824) HARNESSES

1. Unfasten the side release buckles that run down the front of the harness. This is the side with the Kaye label.

2. Place the vest around the user's body with the back buckles centered along the center of the user's back.
3. Adjust the webbing on the front and back buckles that fasten the two panels together until the 2" hip buckles are positioned just over each hip bone. Care must be taken to assure placement of these hip buckles.
4. Tighten each panel buckle by pulling on the webbing at each buckle. It is important for the vest to fit snugly around the trunk, as this assists with alignment and postural control. The vest material stretches to give some compression around the user's body.
5. The vest must fit firmly around the pelvis to distribute the user's weight during use. Tighten the lower panel buckles so that you can fit only one finger between the side of the vest and the hip.
6. Snap the thigh bands into the 2" buckles located along the side of each hip. (See 3, above). Wrap these bands snugly around the upper most thighs. Pull on the 2" webbing attached to these buckles to tighten the straps that connect them to the vest so that they wrap as high around the thighs as possible. These thigh bands help hold the harness down during use so their placement is important.

***The user is ready to be attached to the suspension frame.***

ADJUSTING and ATTACHING THE HARNESSES, ALL SIZES

1. Center the "harnessed" user inside the walking frame. The



user can face either away from the winch or toward the winch depending on how the unit will be used. If the user is to be lifted from a chair or bench, it is often easier to place and remove the chair or bench if the open side of the frame is behind the user. If the therapist is assisting leg and foot placement and must follow the user over ground, the therapist will have easier access to the user's legs and feet if the open side of the frame is behind the user. If the unit is used over a treadmill and foot placement is assisted from the side, the unit often fits better over the treadmill, if the user faces the open side of the frame. This in part depends on the structure of the treadmill.

2. Adjust the shoulder straps so that they fit comfortably over the user's shoulders. Note that there are black Velcro strips located around the top front and back of the harness. Place the vertical shoulder straps under this Velcro to align the shoulder straps along the length of the front and back of the Body Vest.
3. Lower the rope, (with the winch) and pull the metal snap-hooks down until they reach the user's shoulders.
4. Place the looped shoulder straps into the metal snap-hooks that dangle from the walking frame. (The shoulder straps have a metal adjustment slide, which holds the two sides of the webbing so that there is a loop at the top, which fits into the snap-hook.) Make sure the snap-hook locks and makes a continuous metal loop.

5. Tighten the shoulder straps where they attach to the front and back of the harness so that the snap-hook rests just above the user's shoulders. You can tighten the front or back webbing as needed to pull the users into more extension or flexion to straighten their posture. You can shorten one side or the other to accommodate for trunk asymmetry.
6. Wrap the snap-hooks and hardware with the 6" x 6" pads provided with the harness to help protect the user's face and head from the hardware.

#### WEBBING RETRACTORS

The SW7 is equipped with webbing retractors. These are the black devices and webbing along the top of the frame. These function as a safety catch, so that, in the event that the rope or winch fails, the webbing retractors will prevent the user from falling. Do not disengage the webbing retractors.

#### HARNESS ACCESSORIES TO SOLVE SPECIFIC USER PROBLEMS

Once the user is standing, the compression straps can be added to aid alignment. These 4 straps are either 3" x 20" or 3" x 24" depending on the size of the harness. They can be used in the following ways.

1. Add straps from the front of one shoulder to the back of the other, crossing them in the back, to aid thoracic extension.
2. Add a strap low around the back of the pelvis, from one hip to the other, to aid pelvic alignment and hip extension.
3. Add a strap across the front of the pelvis, pulling from one hip



to the other, to aid abdominal control.

4. Add two straps vertically down the back of the vest, from shoulder to hip, to aid extension and alignment of the trunk.
5. Add straps around the chest for additional postural control and sense of security.
6. If the buckles create pressure points, add the straps inside the vest and under the buckles, for added comfort. This must be done when the harness is open.
7. On the medium and large harnesses, add straps from the hip to the leg strap on that same side, to aid hip extension. Crossing these straps aids extension while standing but may limit stride length.
8. Add a compression strap around the rope and seat belt retractor webbing, attaching it back to itself behind the user's head. This forms a head rest and aids alignment of the head with the body.

#### CLEANING THE HARNESSSES

The vest and straps can be either hand or machine washed with cold water and detergent. Ensure that all of the buckles and webbing are snapped and the Velcro is hooked before washing. Because Velcro attaches to many other fabrics, if you machine wash the harness, place it in its own mesh laundry bag and wash it by itself. DO NOT place the unit in the dryer. Place flat for air-drying.

#### MAINTENANCE, WARRANTY, AND CAUTIONS

##### MAINTENANCE AND CARE

Before each use, inspect the harness, hooks, rope, and the point where the rope attaches to the winch. If these show wear or fraying, immediately cease use and contact Kaye Products, Inc. or the dealer from whom you purchased the item.

Inspect the entire product regularly. Tighten the hardware as necessary. If an item needs service or spare parts, immediately cease use and contact Kaye Products, Inc. or the dealer from whom you purchased the item.

If a problem is discovered that may impact the unit's function, immediately cease use and contact Kaye Products, Inc. or the dealer from whom you purchased the item.

Do not expose the unit to rain or submerge it in water.

Use a slightly damp cloth, and, if needed, a mild soap, to clean frame. Refer to the section entitled "cleaning the harness" for those details.

Avoid any undue stress to the unit while using, storing, or transporting it.

#### LIMITED WARRANTY

If an item proves defective within two years of the original purchase, we will provide replacement parts in order to correct that defect. Normal wear and tear is not covered by the warranty.

Kaye Products, Inc. makes no other warranty, expressed or implied, and does not warrant the product as being fit for a particular purpose. The purchaser, owner, and user assume all risk of personal and property injury due to the use of the equipment.

##### CAUTIONS



1. Do not adjust the unit while in use.
2. Watch traffic patterns around the unit to ensure that others do not bump or hit it.
3. Do not use the unit if there are broken or missing parts or if the rope, hooks, or harness shows wear or fraying.
4. Do not exceed the size or weight limits.
5. Do not alter the unit or use it in any way other than described herein.
6. Before use, always ensure that all of the hardware is fully tightened.
7. Do not leave the user unattended.
8. Always ensure that the hooks are locked and the harness is secure before lifting the user.
9. Keep the brakes and swivel casters locked unless you are intentionally moving the unit.
10. Use only on level ground.

#### QUESTIONS?

If you have any questions, comments, or requests, please contact Kaye Products, Inc.



Our authorized representative for the European Medical Device Directives is Advena, Ltd., PO Box 30, Leominster, Herefordshire, HR6 0ZQ, UK.



SW7

Snap Hook

FRONT

REAR

INSIDE VIEW

Grip

Trigger

Handle Assembly

F

G

H

Crossbar

E

B

A

Winch Socket

Storage Socket

Brake

D

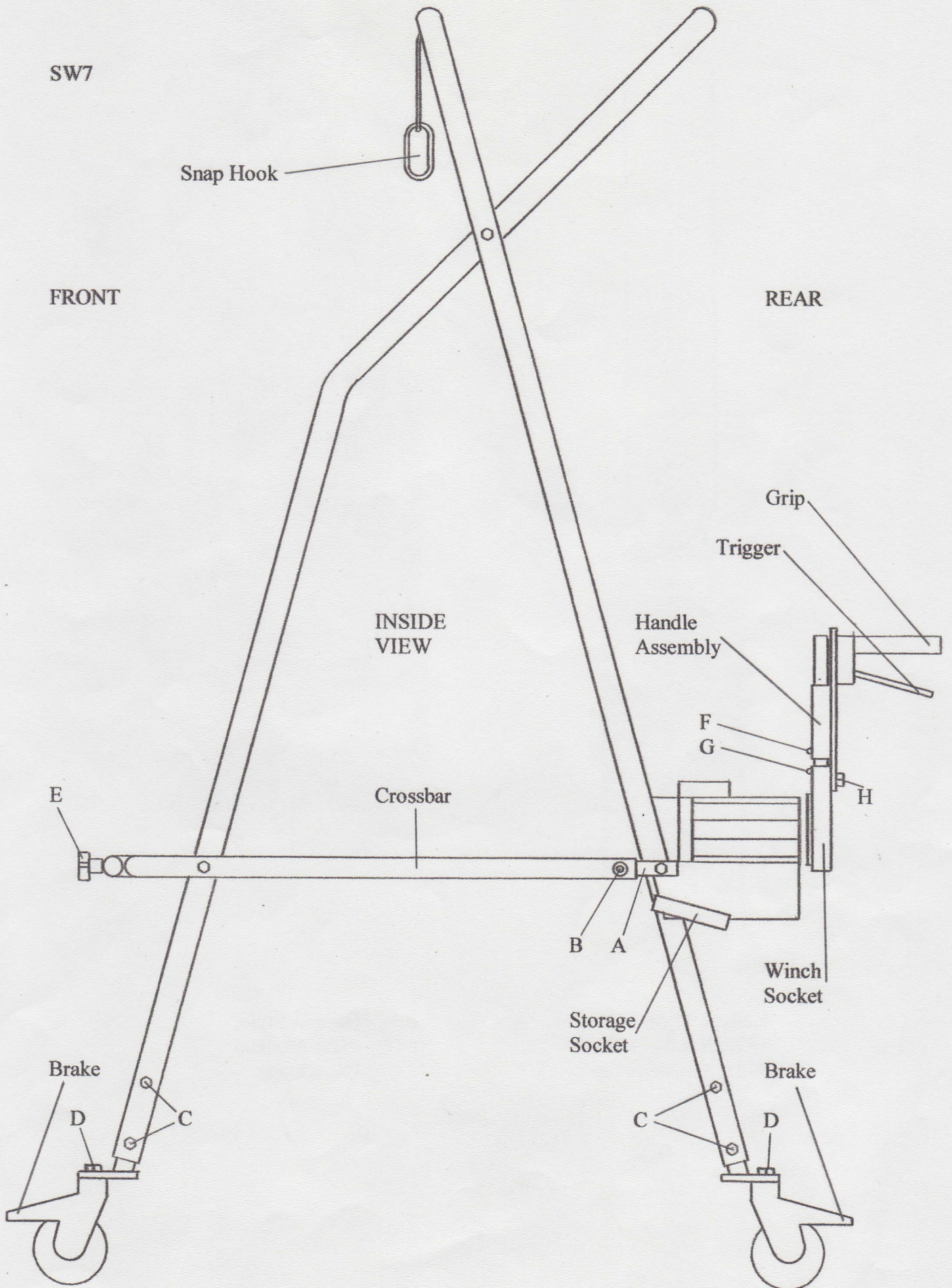
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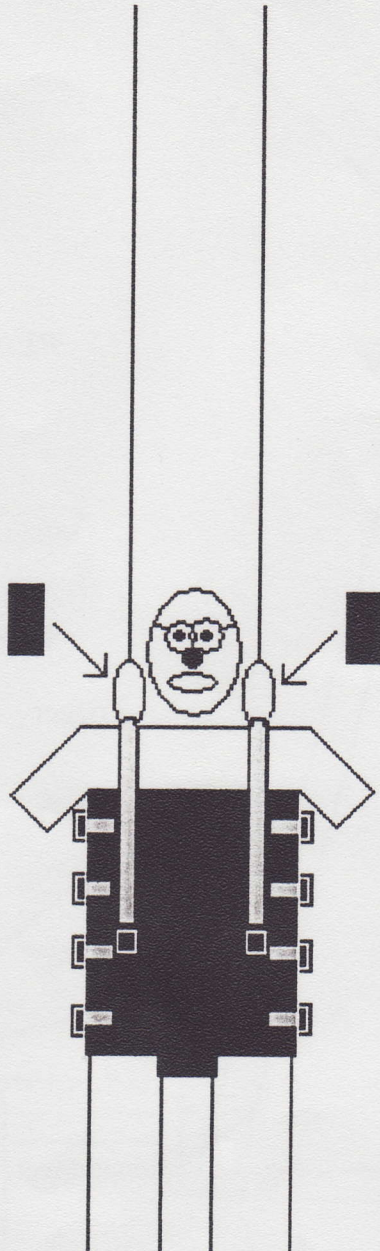
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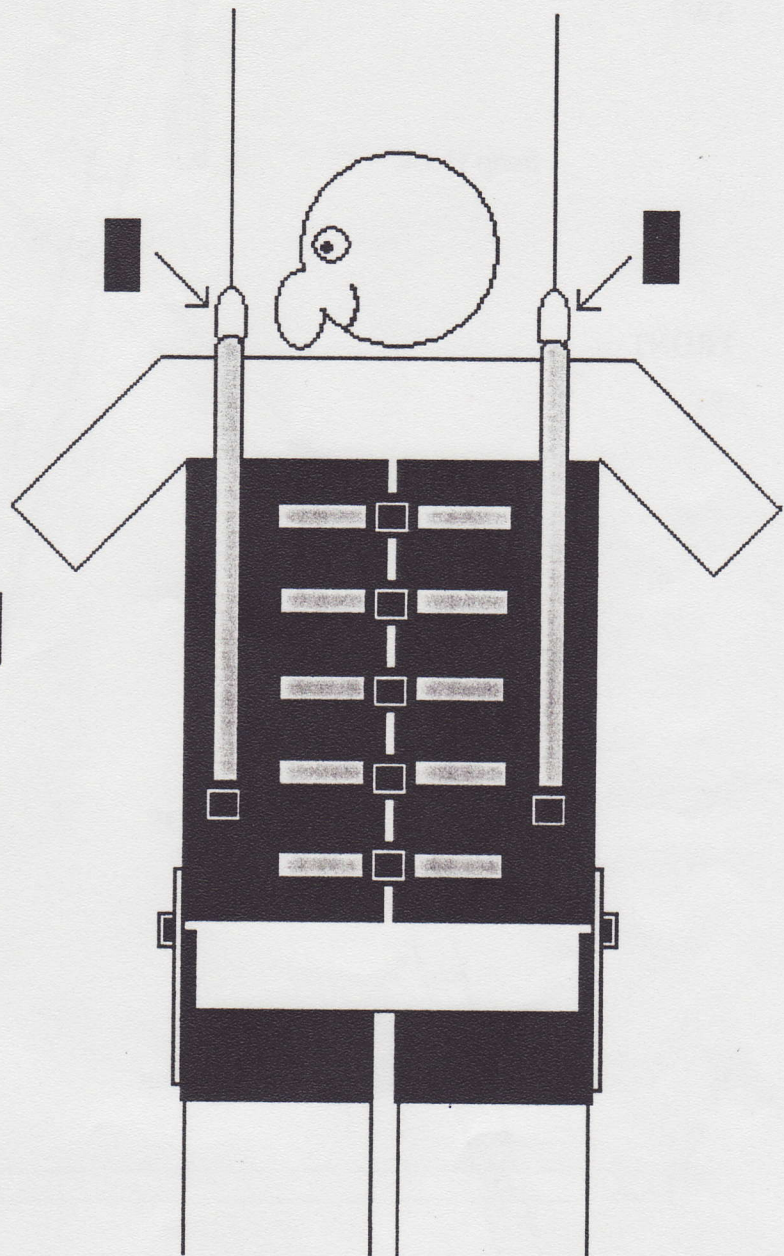
D







Harness Style:  
9820, Small  
9821, Medium-Slim



Harness Style:  
9822, Medium  
9824, Large