RASCHE

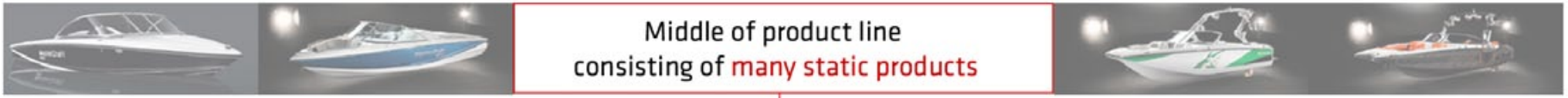
Until now **2 wake styles** called for **2 separate boats**

What if **1 family** or group want a high quality experience with **both sports**?

1 boat with **2** wakes is needed

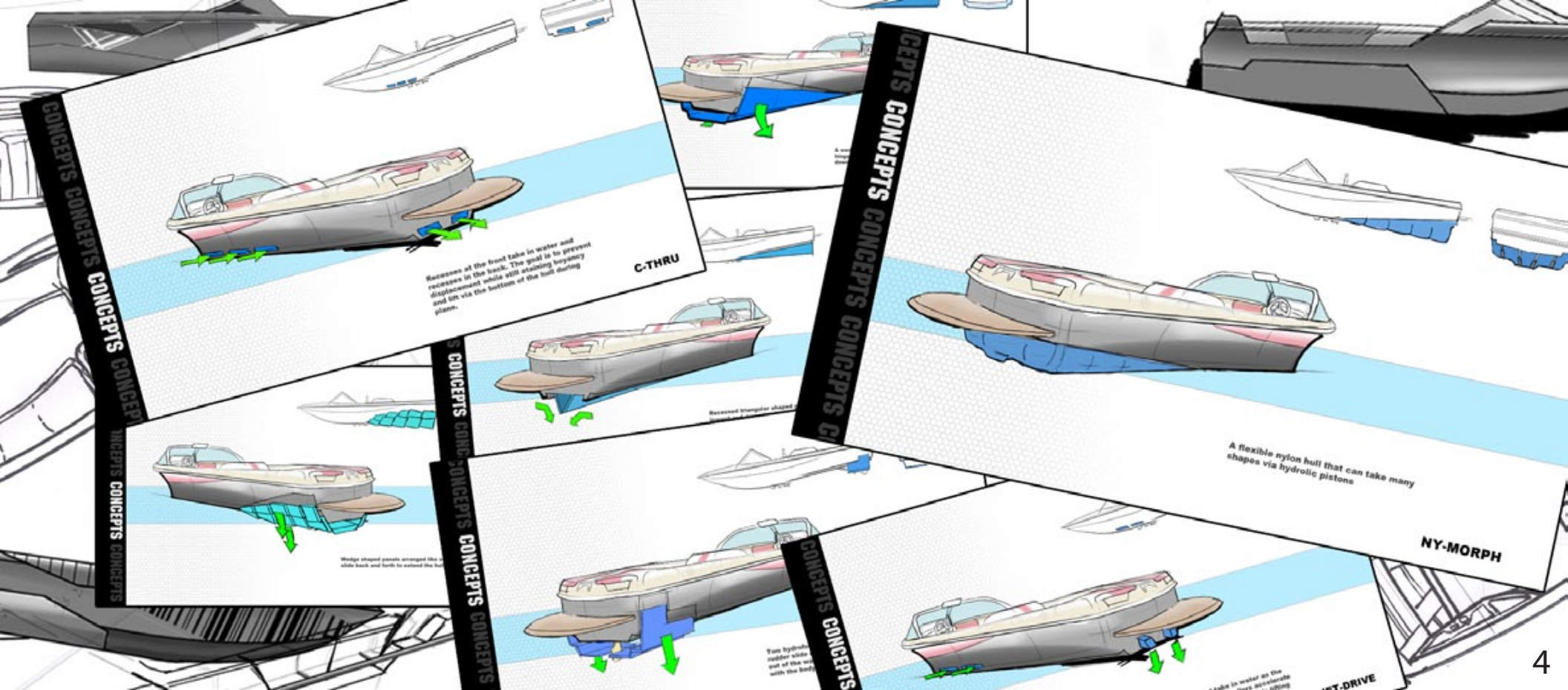
Manufacturer Problem and Benefit

Pure Slalom | Pure Wakeboard



Middle of product line
consisting of many static products

Can be replaced by one dynamic and versitile product: eliminating production lines and saving cost


CONCEPTS CONCEPTS CONCEPTS
Recesses of the front take in water and recesses in the back. The goal is to prevent displacement while still retaining buoyancy and lift via the bottom of the hull during plane.
C-THRU
CONCEPTS CONCEPTS CONCEPTS
A flexible nylon hull that can take many shapes via hydrolic pistons
NY-MORPH
CONCEPTS CONCEPTS CONCEPTS

Scale Model Hull shape testing

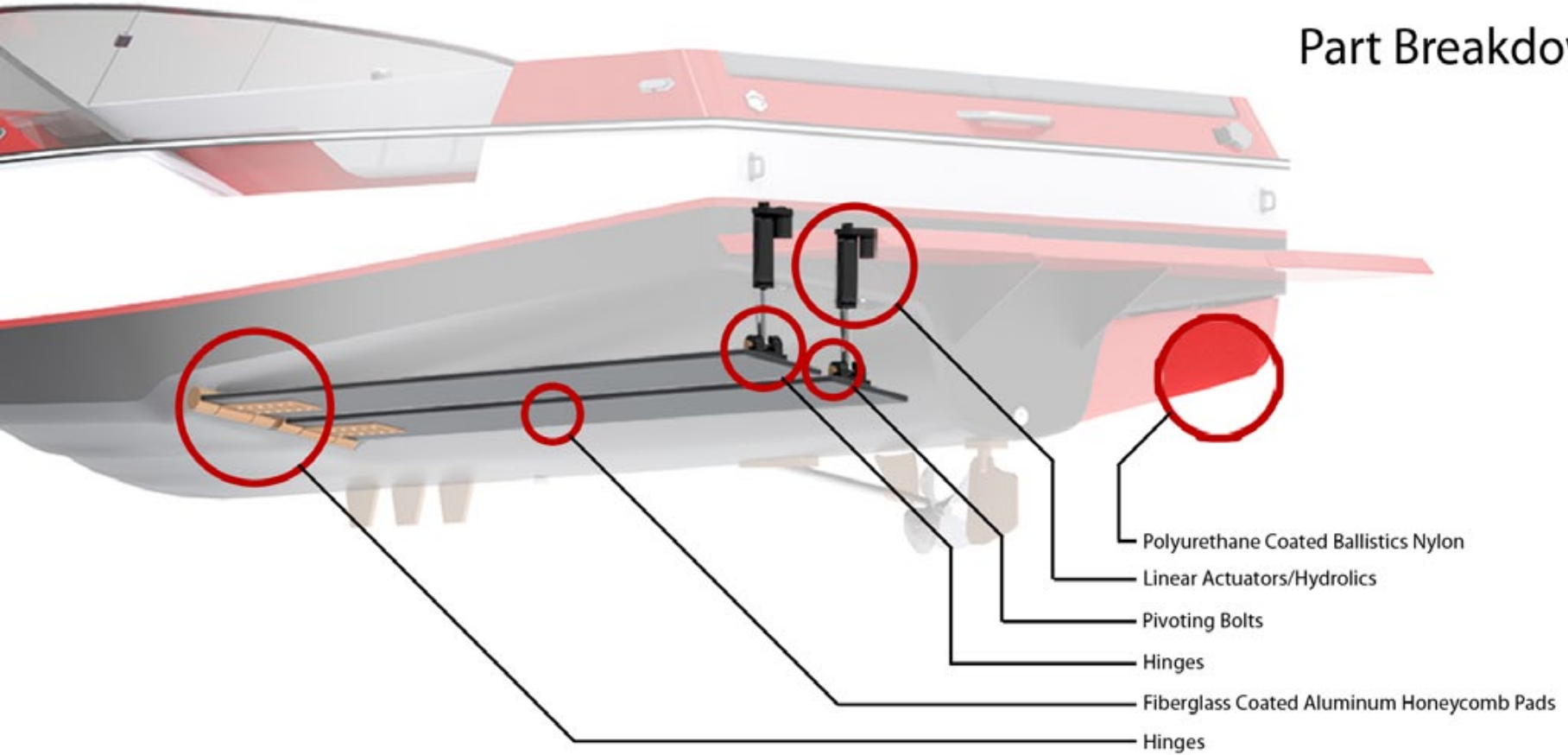




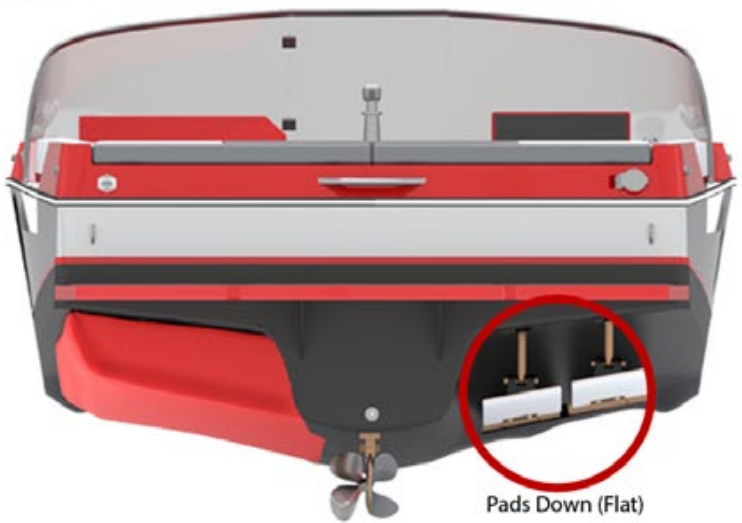


The flat hull on top skims across while the vee hull below digs down and displaces

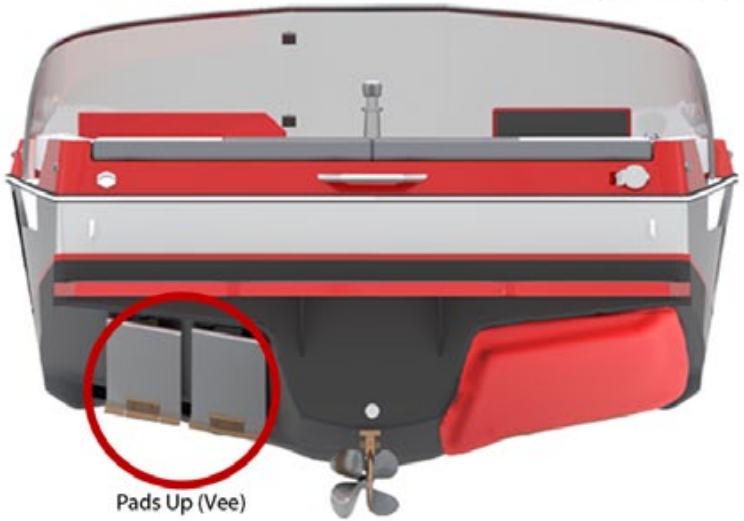
Part Breakdown



Ski Mode



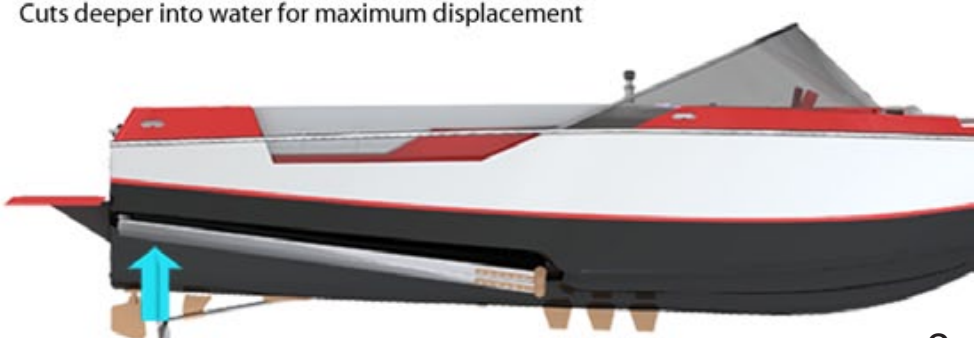
Wake Mode



With less initial surface area, the keel of the Wake Mode doesn't plane out forcing it to displace water

Planes on top of water for minimal displacement

Cuts deeper into water for maximum displacement



Integrated 3 phase, 4-pole electric motor and Lithium-Ion batteries vs the traditional V8 and gas tank dramatically increases usable space.

Scandinavian Furniture Design

My goal was to incorporate **futuristic** and **geometric** design asthetics into the world of laminated wood furniture.

Workshop Build Process

2 week sheet metal mold fabrication and lamination process

BG CHAIR

Clean lines combined with tight bends give the BG CHAIR a sleek sculptural look.

Venerer Workshop
@ The Danish Design Institute
Kobenhavn, Denmark


Stealthcase

GroupProject

My Leading contribution areas

Concepts
Prototype Design and Construction
Refinement

ARCHETYPE STUDY

CHRIS

31 year old businessman from New York, NY. Marcus lives in a condominium in Manhattan, 20 blocks away from his office building. He takes the subway to work, and around the island. The subway station is 5 block away from his condo, and his office is 2 block away from the subway station.

JENNIFER

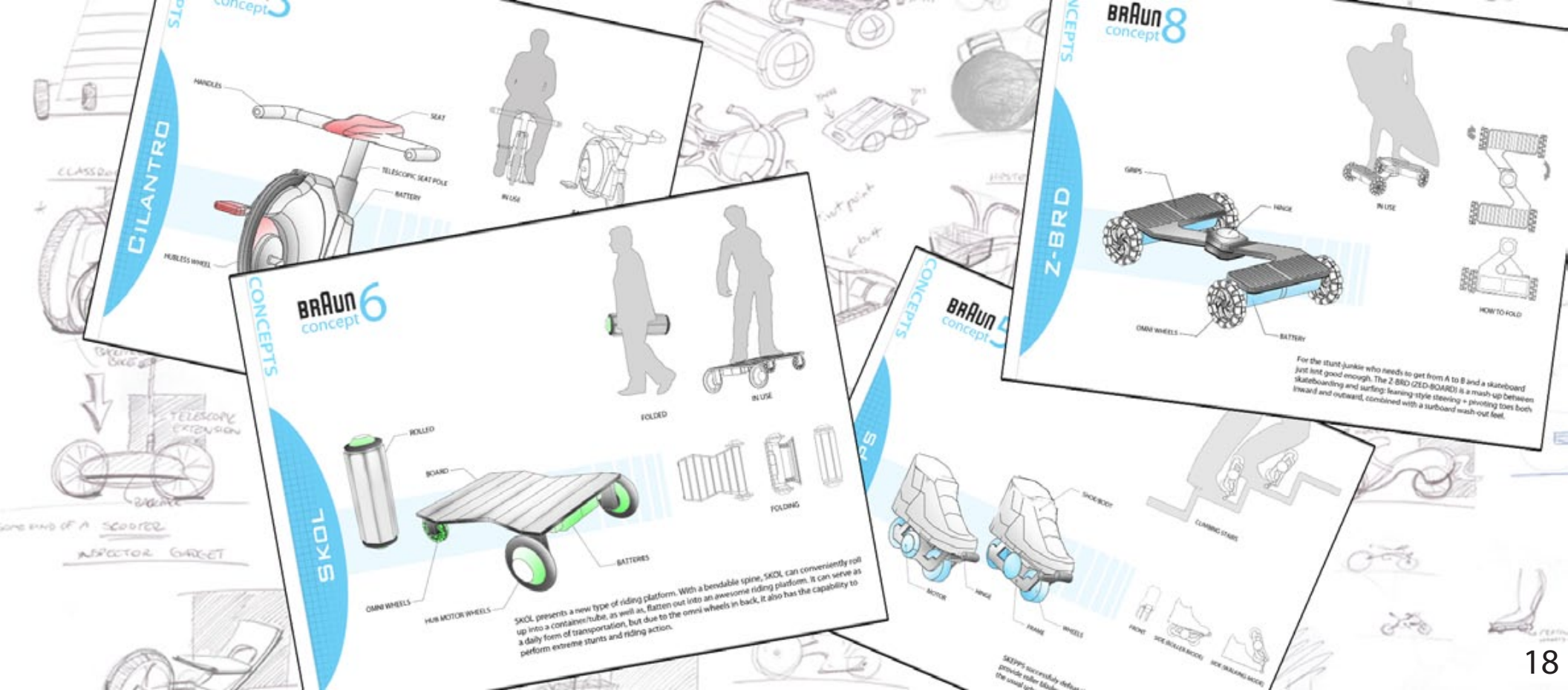
26 year old nurse from Phoenix, AZ. Jennifer lives in the suburbs of Phoenix and commutes to work via bus 6 days a week. The bus stop is 10 blocks from her house, a 15 minute walk, typically followed by a 5-10 minute wait, then a 15 minute bus ride.

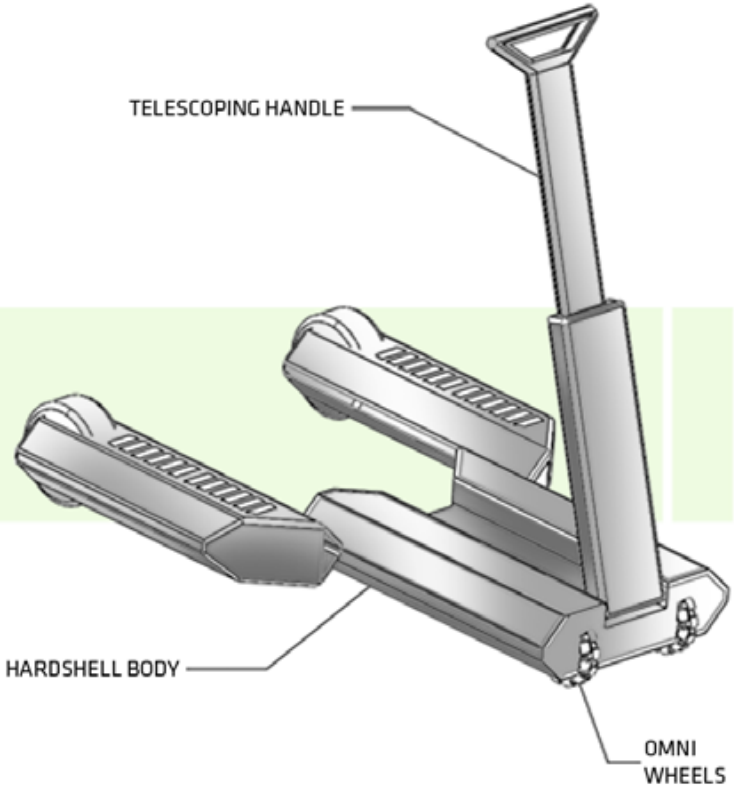
Current public transportation systems adaquetly get you from point A to B.

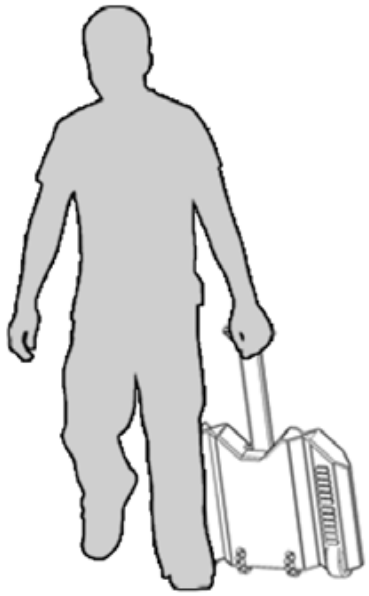
But what if you **aren't near** A or B?

MARKETGAPS

NAME	Segway x2	Strida LT Folding Bike	Razor E200 Electric Scooter
COST	$6,999.00	$650.00	$219.00
SPECS	* Personal Transporter * Max Speed: 12.5 mph * Max Range: 24 mi * Weight: 120 lb * Saphion lithium-ion batteries	* Unique triangular frame * Kevlar greaseless belt drive system * Folds up in 5 seconds * 20 x 45 x 9 inches (W x H x D) when folded	* Chain-driven motor * Hand-operated rear brake * Speeds of up to 12 mph * 45 minutes of use per charge *8-inch pneumatic tires
REVIEW	"Spent roughly 90 minutes on it, mostly on quiet roads and bike trails." "The X2 is very maneuverable, fast, quiet, and fun to ride." "You really don't get much exercise --probably better to be riding a bike."	"Steering is sensitive and it took a little bit to get used to." "Folded, we can fit two LTs in the trunk of a Honda civic with room to spare." "The gearing is low for easy low-speed manoeuvring." "Its a very upright position vs. the more aggressive forward position."	"The scooter is good, works fine, good battery life and stable" "With someone even close to the rated load it has inadequate clearance between the ground and the motor." "The handlebars fold down I am able to fit both into the trunk of a car."
	NOT-Compact	NOT-Attractive	NOT-Professional


CILANTRO
concept 3
HANDLES
SEAT
TELESCOPIC SEAT POLE
BATTERY
HUBLESS WHEEL
IN USE
BRAUN
concept 6
CONCEPTS
SKOL
FOLDED
IN USE
ROLLED
BOARD
BATTERIES
OMNI WHEELS
HUB MOTOR WHEELS
FOLDING
SKOL presents a new type of riding platform. With a bendable spine, SKOL can conveniently roll up into a container/tube, as well as, flatten out into an awesome riding platform. It can serve as a daily form of transportation, but due to the omni wheels in back, it also has the capability to perform extreme stunts and riding action.
BRAUN
concept 8
Z-BRD
GRIPS
HINGE
IN USE
OMNI WHEELS
BATTERY
HOW TO FOLD
For the stunt-junkie who needs to get from A to B and a skateboard just isnt good enough. The Z-BRD (ZED-BOARD) is a mash-up between skateboarding and surfing: leaning-style steering + pivoting toes both inward and outward, combined with a surfboard wash-out feel.
BRAUN
concept 4
CONCEPTS
SHOE BODY
CLIMBING STAIRS
MOTOR
WHEEL
FRAME
FRONT
SIDE (ROLLER RACING)
SIDE (SKATEPARK MODE)





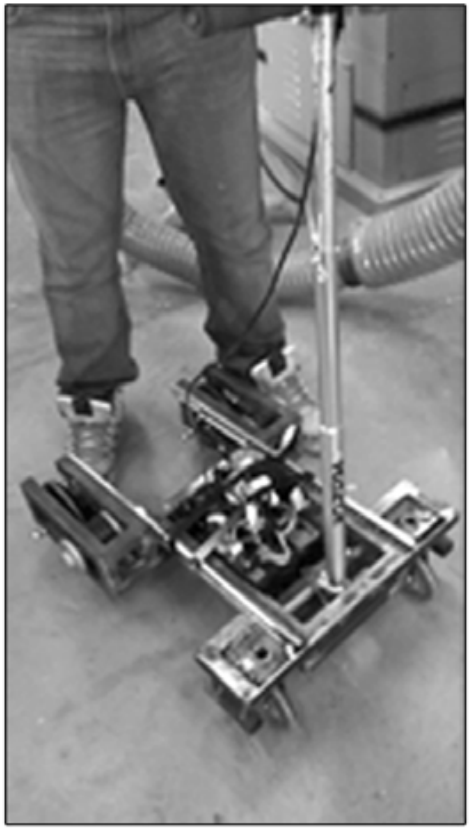
The Y-WING provides a sleek, professional transportation option. No larger than the average briefcase, the Y-WING unfolds into a comfortably sized motorized scooter, perfect for getting around airports or across school campuses.

Stealthcase

stealthmode

speedmode




Razor


TONKATRON
Hasbro

What is TONKA's next big idea?

My goal is to design and construct a **new world**, **characters**, and **toys** for a future TONKA franchise in order to allow a child to fully engage their imaginiation, physically and mentally.

Children's television programs are becoming less **imaginative** and **less educational.**

Unhealthy life style choices are leading to a growing obesity problem amongst American children.

Design Vision

Overall Vision: To create a new play value that is not just cool looking and fun to use, but something that allows kids to play in a new way.

Age Group: 7-11 year olds

Play Pattern: Seven to nine year olds are very interested in role playing and building things. Film and TV characters, sports, construction and demolition. Fast loud things they can interact with.

Play Value: A toy that allows for single role play, or group interaction.

Style: Rugged and construction based but with futuristic twist.

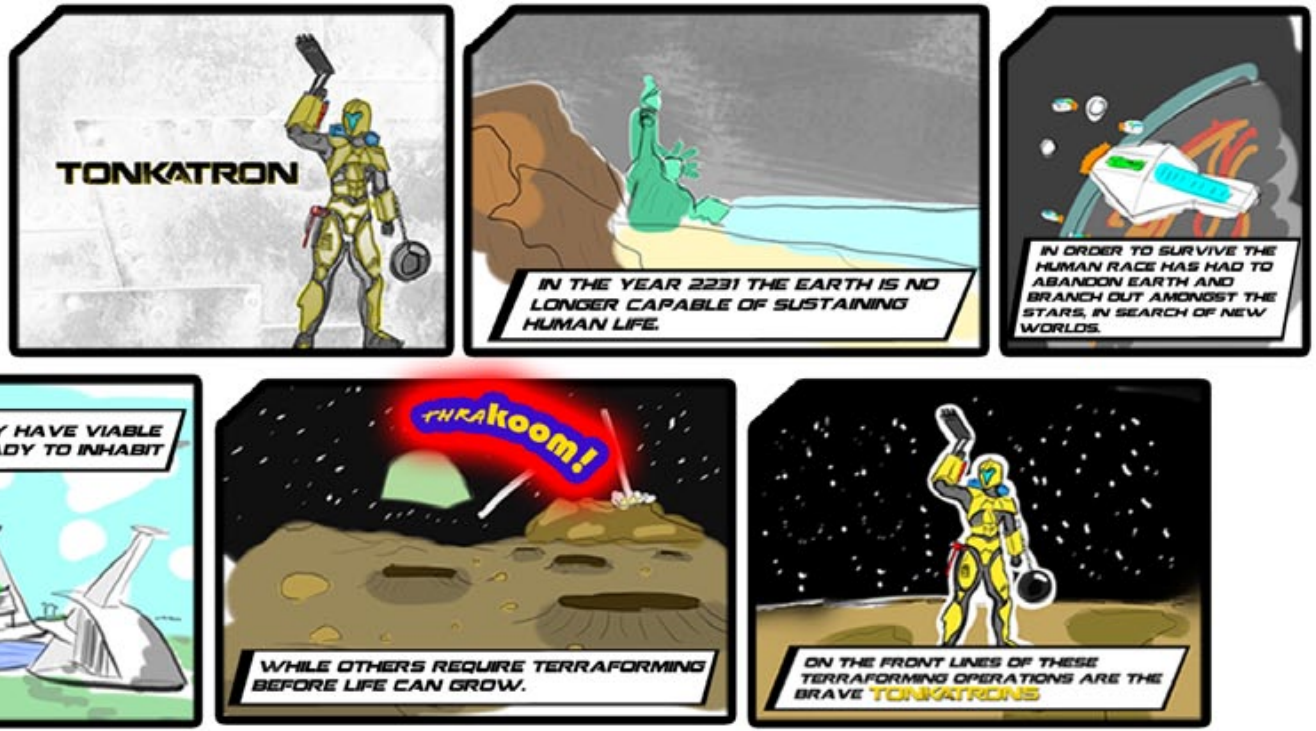
Type: Ride-on: something where the child gets to role play. The child gets to physically be the toy instead imagining themselves inside a smaller toy.

I feel it is important to encourage children to BE whatever they want to BE.

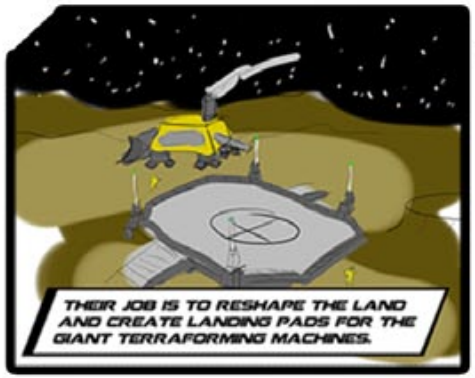
the **story** of TONKATRON

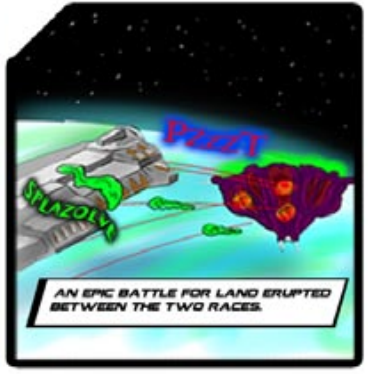
The superhero is a powerful idea.

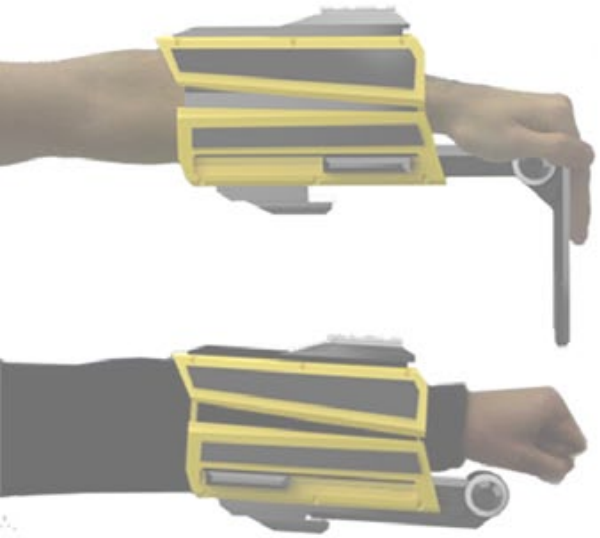
I wanted to take the glory of the super hero and give it to the common worker, which is much more relatable. The world of TONKATRON encompasses this very idea.



the story of TONKATRON

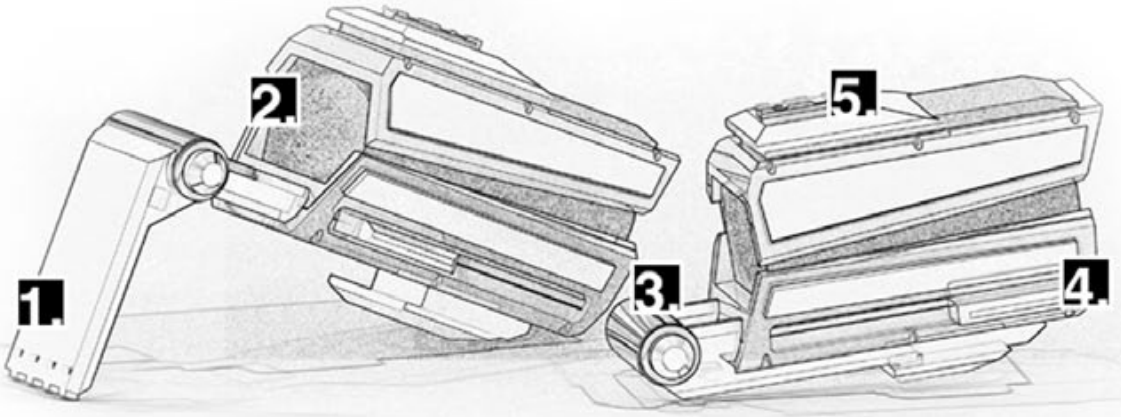


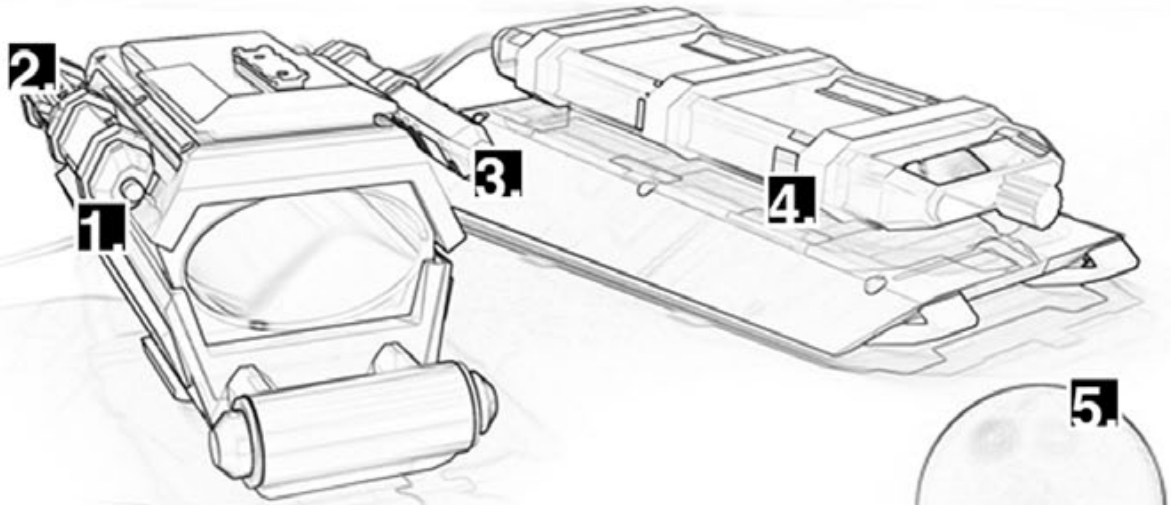




A.R.M.O.R.

The A.R.M.o.r. unit is the standard issue construction equipment that TONKATRONS are equipped with. It boasts a large and sturdy digging arm that collapses away. It features standard NERF connectors to support additional equipment and accessories. Ideal for digging in snow, sand, and dirt as well as hand to hand combat during XENOTAUR raids.





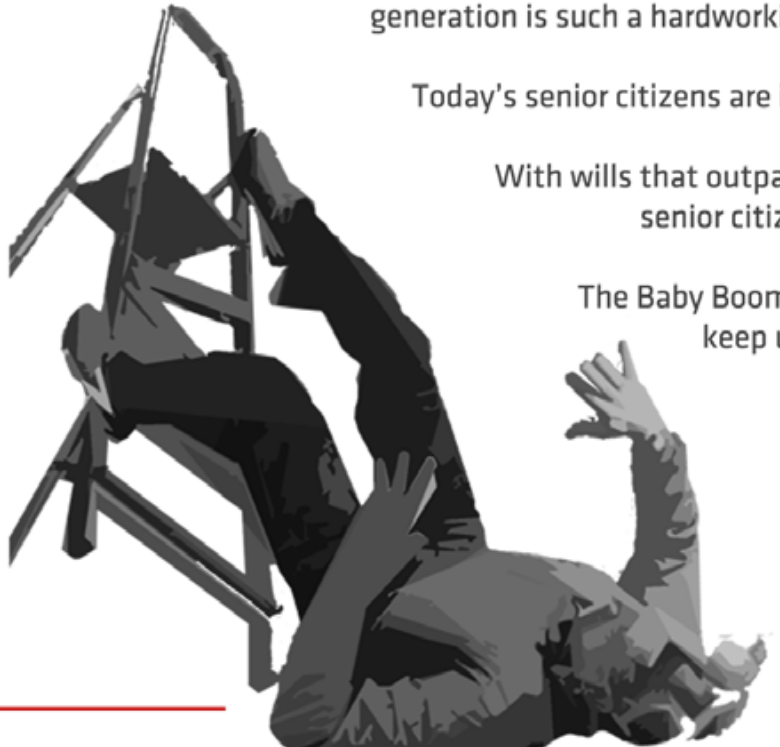
1. Squirt Nozzle - Plastic
2. Trigger - Plastic
3. Air Pump - Plastic
4. Water Tank - Clear Plastic
5. Water Bomb Soaker Splash Ball

Squirt Gun Upgrade For A.R.M.o.r.

For planets with hotter terrain or serious XENOTAUR population problems, the Squirt Gun Upgrade for A.R.M.o.r. and the Wrecker Supplemental A.R.M.o.r. are perfect additions to your TONKATRON construction gear.

Wrecker Supplimental A.R.M.o.r.

Torquent Table

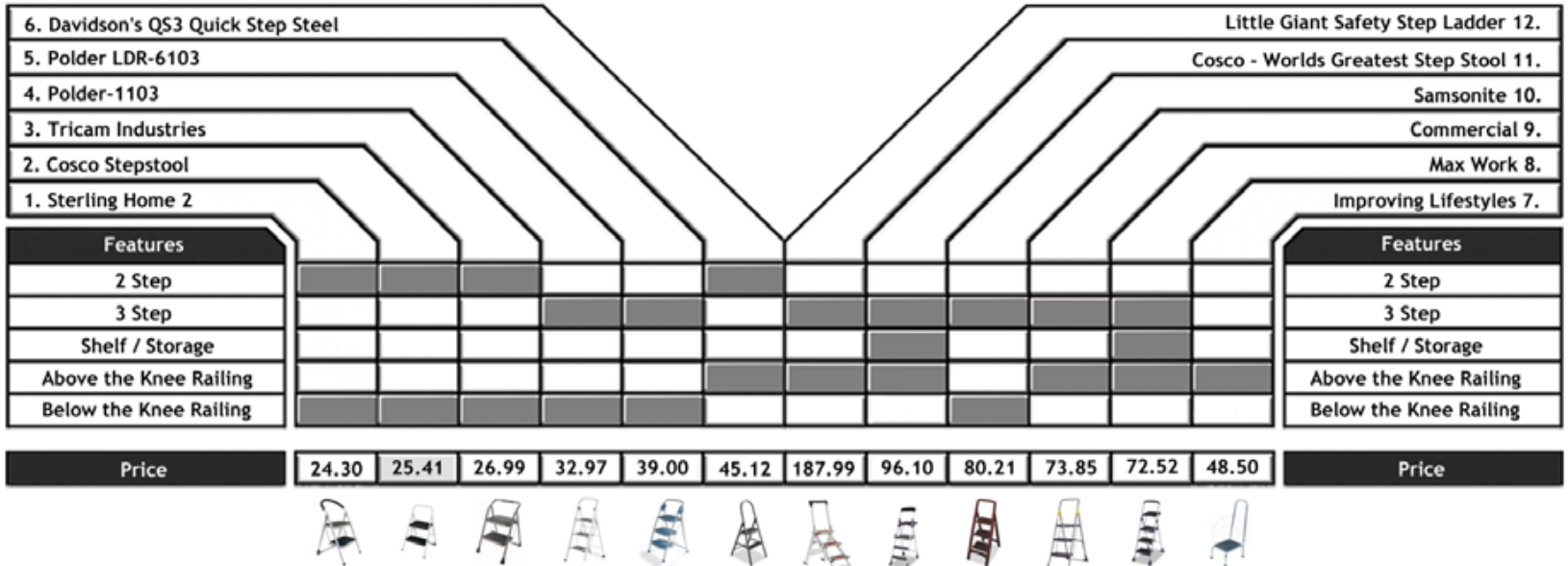


The Baby Boomer population is now reaching their elderly years and because this generation is such a hardworking generation, **they won't stop**.

Today's senior citizens are insisting on doing more things themselves even as they age.

With wills that outpace their bodies,
senior citizens are puting themselves into unsafe situations.

The Baby Boom generation needs **safe stepladders** that can keep up with their lifestyles.



After comparing the best selling stepladders for features and price, I have determined that the market is fairly equalized with regards to features per dollar.

What separates the cheap ladders from the expensive ones is the materials.

Expensive materials appear to be Wood and Aluminum.

FocusGroup

- As I age and get weaker and clumsier I would be willing to pay twice as much to be able to easily and safely work on a stepladder, both for the ease of use and to avoid injury. **It needs to be light**, easy to carry around and easy to set up. I currently have a very light aluminum four step stepladder that works very well, but it can still be hard to reach certain things when you can't set it up directly under or next to something.
- **as long as it doesnt take up too much space in storage**!!
- I'd like a self-storing ladder so I don't have to go down in the basement to get it!
- I'm waiting for this new technology that will grabs things for me such as robots or A.I. humans.
- I can see the draw of not climbing the stepladder for older people or people with disabilities; however, being a strapping young individual, it doesn't bother me at all to climb a step ladder. In fact climbing it would most likely save time because it can be done quickly. The sideways moving stepladder is an interesting idea but may not draw many people in.**The primary draw of a stepladder to me is that it is light and can be easily moved and stored**. Instead of staying on the stepladder and moving to the side, it might be quicker or easier to get off and move it yourself. I wouldn't want to sacrifice weight and mobility for convenience, stepladders are already pretty convenient.
- I do not have a need for a better step ladder. If you ask me again in 40 years, I might very well be willing to pay more.
- It also needs to be **light weight and easy to store**.
- I think if the common household step ladder moved sideways and vertically it would just be another reason for America to be fat, lazy, and taking the shortcut. However, if it was an industrial stepladder of sorts, I think that would be beneficial.
- Its not a step ladder if you dont have to climb it. **The biggest issue with them is that you are perched precariously at the top of a narrow foot printed object**, so the center of gravity to the narrowness of the ladder makes you feel like you are going to tip over if you aren't completely centered on the ladder.
- It sounds like an interesting idea, but I would have to be very convinced to use it especially if it's more expensive.
- I would want a step ladder that I didn't have to climb when I'm older, and less physically fit.
- I would want to make sure it was easy to store and get out of the way when not in use, but easy to get out and use when I wanted
- My husband and I are physically fit and enjoy going up and down steps for the exercise. For the last question, you should have asked "what premium would you pay for a safer, less physically demnading stepladder." We actually have no idea how much a regular, current step ladder costs! It would be nice to go sideways on the step ladder without having to get down. Also, some **step ladders can be a bit wiggly** which is disconcerning.
- to me the key with a step ladder is that it is compact and will be out of the way when not in use

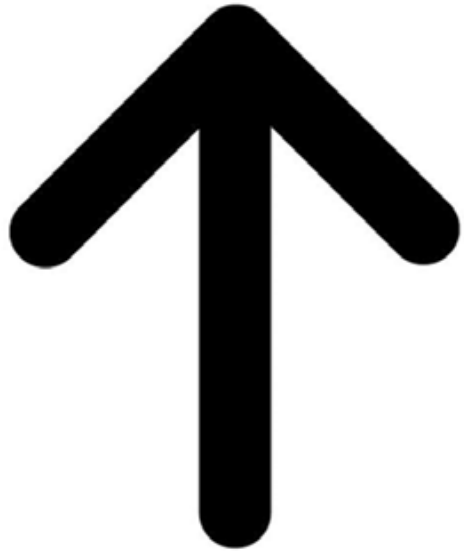
"I purchased a new a new step stool to replace one I had that was **40 years old,** that I was using to paint a front bedroom in my home. As I went up and down and up and down to place tape along the ceiling so I wouldn't paint on it. I'm at the very last piece of tape; which couldn't quite reach where I wanted height-wise and to the side.

I deliberately **told myself to slow down** and take it easy.

Ignoring my own advice, I went right up those two steps **onto the top level** which you're not allowed to stand on. I put my left foot on that top level, leaned to the left balancing with my right and the whole ladder went side-wise and crooked and I fell and **I gouged a piece of my leg** on the back of my right leg, resulting in a fast trip to the emergency room and 30 stitches."

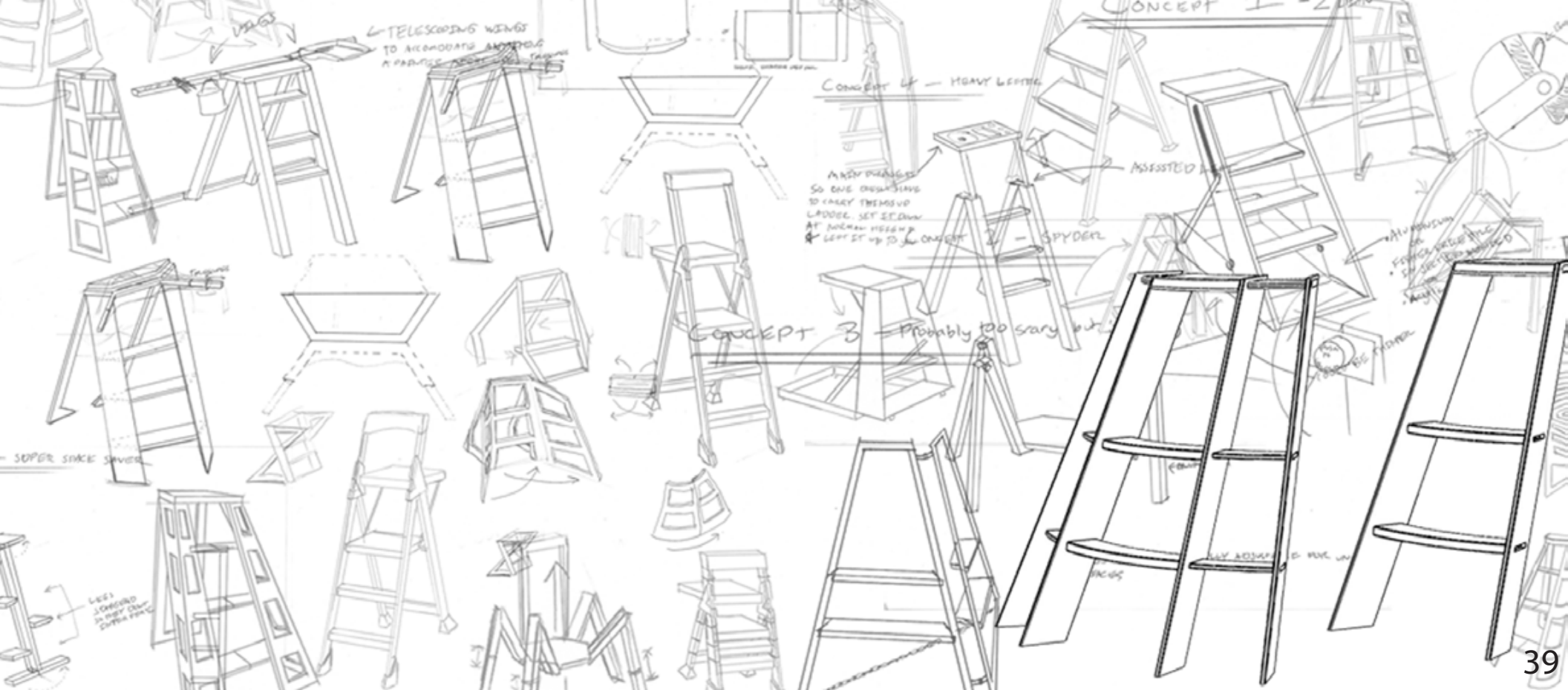
Positively Identified Attributes

- Handle in front just above knee or higher
- Shelf - Paint bucket, light bulb, screwdriver, hooks
- Being able to put whole foot on a step
- Having your shins press against the next step
- Thicker elements are more reassuring
- Getting one as a gift
- Sturdyness



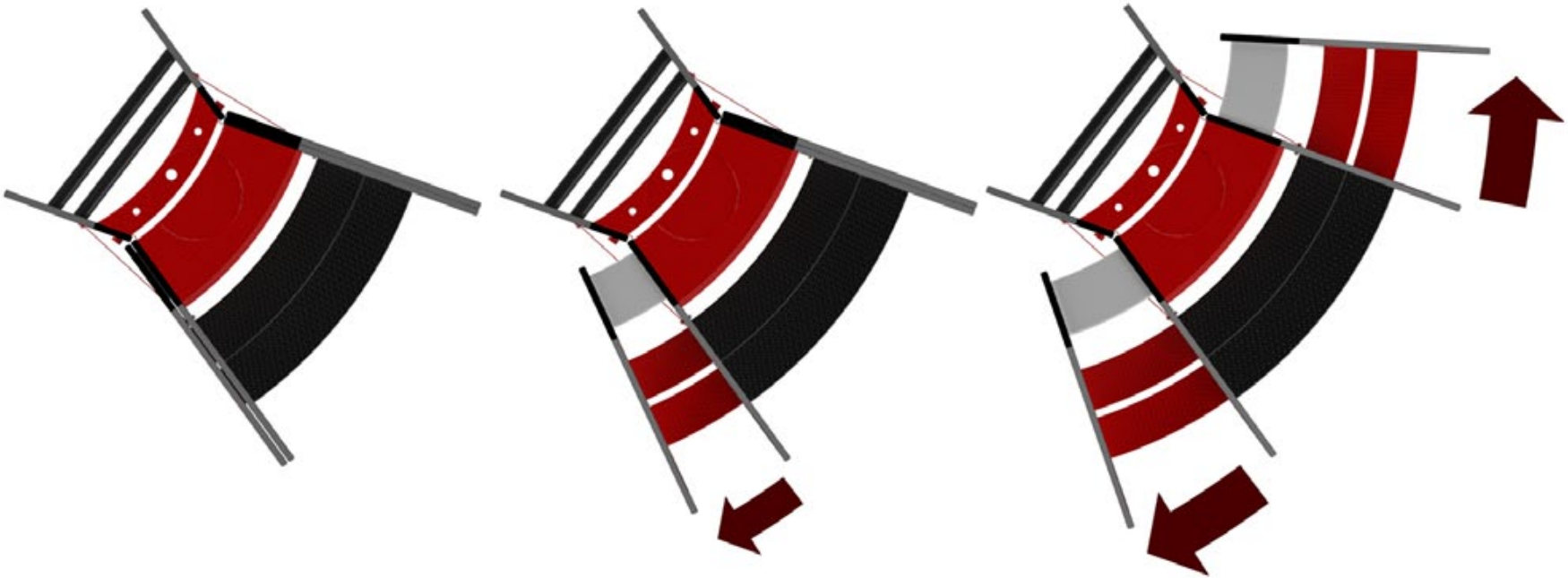
Negatively Identified Attributes

- No railings or handles to help get up
- Small center of gravity
- Wiggle-wobble
- The sturdy ones are too heavy
- Sturdier "Industrial" step ladders have sharp edges
- Difficult to fold
- Latches are more of a hassle than reassuring
- Either too little to use or too big to store
- No place to put things (requires Up/downs)
- $$$

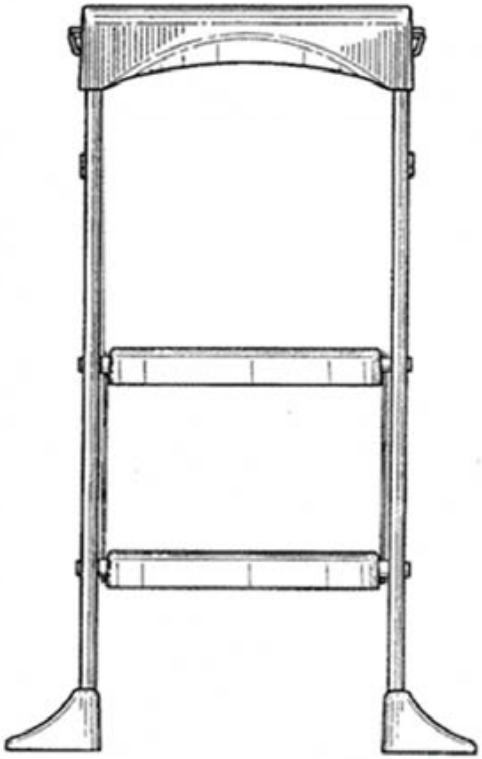

TELESCOPING WINGS
TO ACCOMODATE ANYTHING
CONCEPT 3 — Probably too scary
SUPER STACK SAVER

The PROLIXUS stepladder is a simple solution to tippy unstable stepladders.

Wide visual elements give the user a sense of stability and piece of mind.



Using telescoping arcs this perfectly compact step ladder expands into an extra-wide stepladder.



Slanting splayed out legs now give 6 points of contract and a much wider more stable base compared to traditional ladders

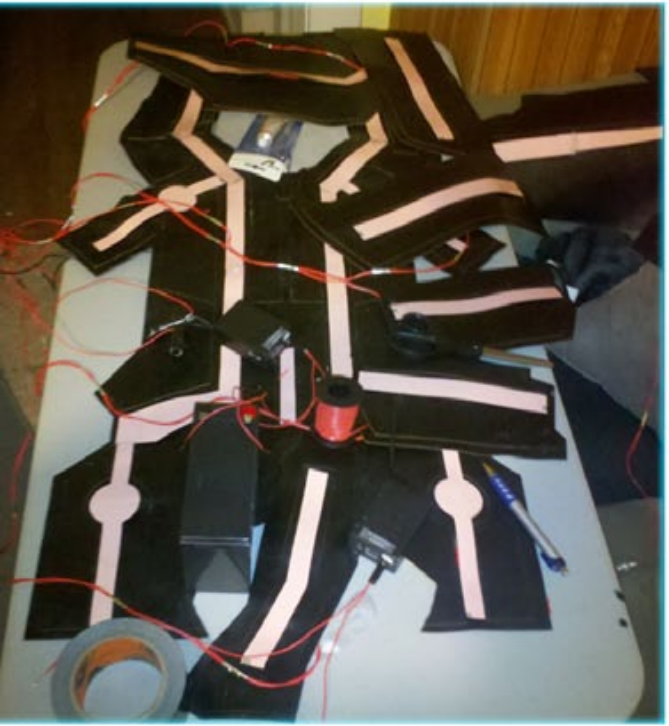
The side steps provide a scaffold like experience saving the user from "up-downs" while still providing safer than normal use due to the wider footprint and increased distance to tipping fulcrums

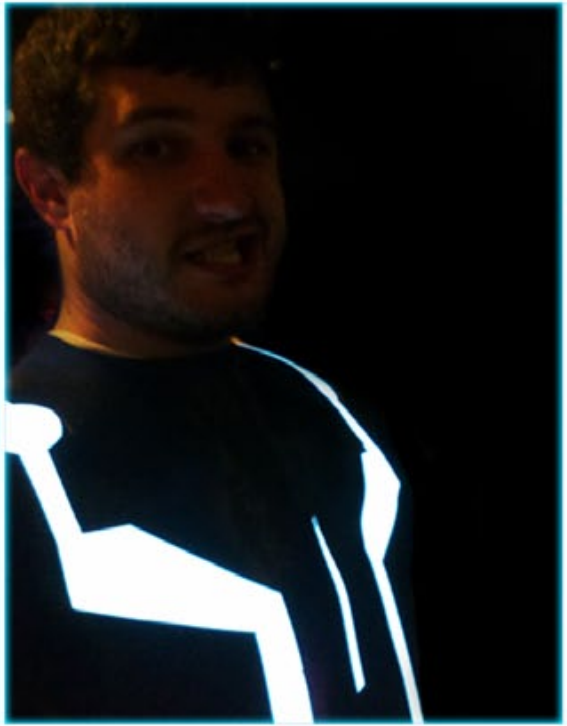
Halloween Costume

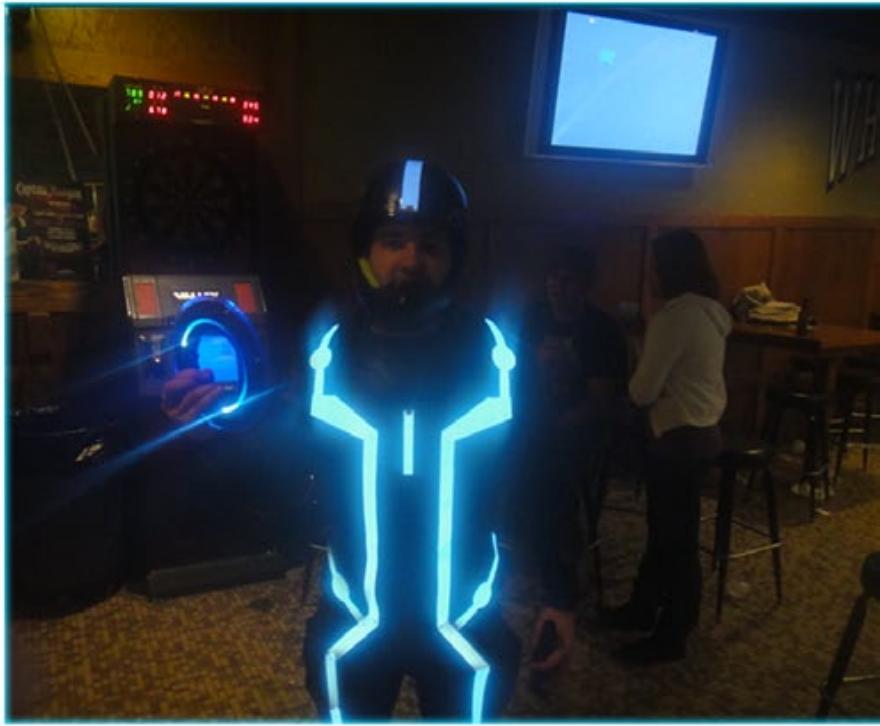
Power Source: 12 V 10A/H Wheel Chair Battery

Materials: Wet-suit, Vinyl, Aluminum Tape, Electro-Luminescent Paper,

TRON







RASCHE

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