

# Manitoba Farmers Assistive Tools Kit

Helping farm families face the challenges of  
injury, illness, and disability



Farm Credit Canada  
Canada



## **MISSION STATEMENT**

Manitoba Farmers is dedicated to the education of the public and the agricultural industry concerning safety issues and supports those living with disabilities.

## **A Message from Manitoba Farmers with Disabilities**

**The Manitoba Farmers Assistive Tools Kit is intended to enhance the lives of farmers and their families who face the challenge of living and working with a disability.**

**The Assistive Tools Kit is not intended as a comprehensive list but an overview of what some farm families have found helpful in their day-to-day lives. We hope this information will build awareness of how disabled farmers have found creative ways to make farm business productive and safe.**

**Manitoba Farmers with Disabilities Board of Directors and staff extend sincere thanks to the individuals who contributed their ideas, and experience.**

**Julien Brias, St. Joseph, MB  
Elizabeth DeVehr, Oakbluff, MB  
Neil Enns, Elm Creek, MB  
John Froese, Altona, MB  
Bernard Gehring, Carman, MB  
Juan Neufeld, Winkler, MB  
Albert Penner, Carman, MB  
Jon Todd, Portage la Prairie, MB  
Kevin Visscher, Graysville, MB  
John Wiebe, Carman, MB**

**Our special thanks to the team at the Health Science Centre, Winnipeg Rehabilitation Engineering Department, who have helped so many people. Their creative team takes our ideas and make them work.**

**Special thanks to the Department of Biosystems Engineering, at the University of Manitoba, under the direction of Dr. Danny Mann. Their research on safety aspects of modifications is invaluable.**





## HOW MANITOBA FARMERS WITH DISABILITIES BEGAN



Neil and Bernice Enns live on a farm just a few miles west from the Village of Elm Creek, MB. Although no longer farming, they have remained in the family home and enjoy the rural lifestyle. They are thankful and blessed with their four children and 12 grandchildren!

Neil is the founding President of Manitoba Farmers with Disabilities and maintains a passion for helping others recover after an accident. He is the Coordinator for all the events and maintains close contact with all our sponsors.

Neil's accident happened near the end of October, 1995, after harvesting. He and a co-worker were working at getting the combine cleaned and ready for storage.

"We were putting the combine away for the winter. My partner was sweeping out the hopper and I was down at the bottom taking the cleanings out of the auger. I didn't hear him when he passed behind me saying he was going to start the auger up. The motor was running and I was concentrating on the job. I just didn't hear him. He started the auger up and my arm got caught. I gave my arm a good tug and got it out, but unfortunately it was too late to save it. The hand was cut to the bone and my fingers were torn off. I was rushed to the hospital where the doctors amputated my right hand and a good part of my lower arm."

Neil was in hospital for a short time, and did very well in physiotherapy and occupational therapy through that winter. He adjusted to the prosthetic arm and began to do chores around the farm.

"That's when I discovered just how much I needed to modify my tools. I worked best as a right-handed person and was determined to come up with ways to make attachments to my prosthesis to continue doing work with my right arm."

During one of his visits with the doctor, he asked about support groups for amputees. The doctor said there wasn't one and encouraged him to start one. By November of 1997, there were 5 couples that met together once a month to encourage and learn from each other as well as share ideas on how to function with a disability. Before winter was over the group had grown to over 40 people from all parts of Manitoba. There was a need to bring disabled farmers together.



Over the next couple of years, the group began receiving requests to speak on farm safety at public engagements and schools. They told the stories of their accidents. There was a strong emphasis on taking safety more seriously in order to prevent similar accidents in the future.

In November 1998, an eight-member Board of Directors was elected to cover six regions in Manitoba: Central Plains, Eastman, Interlake, Parkland, Pembina Valley, and Westman. The organization became a registered charity as Manitoba Farmers with Disabilities.

Our organization was invited by Winnipeg Health Science Centre Physiotherapy Department to visit new amputees. They felt that when patients met with other amputees it often leads to healing that happens within. Sharing one another's pain can guide the way to hope, give courage, and a new sense of purpose.

Manitoba Farmers with Disabilities developed a support program to reach the whole family. It isn't just the injured person who is hurting – but the whole family! We hold safety training programs that are developed to demonstrate to children, youth and adults, how quickly an accident can happen. Through the use of our showcase using 1/16<sup>th</sup> scale farm machinery, we demonstrate the hazards of a tractor roll over without rollover protection equipment. We also show the dangers around a Power Take-off shaft, teach combine safety, as well as safe animal handling. We know that education on farm safety helps reduce farm injuries and fatalities.

Our goal is to educate the public about farm safety so that the agricultural industry will become a safer occupation for our future farmers. Through our prevention initiatives we offer safety training in schools, agricultural presentations, exhibitions and children's safety days.

All our programs and initiatives have been delivered through the dedication of our volunteers and collaborative arrangements with our sponsors and the Provincial Government. Each year we ask them to attend more events and give more of their valuable time and resources to farm safety. I am filled with gratitude, as each and every year each volunteer and sponsor has been more than ready to do what they can.

I would like to extend my gratitude to all those who contributed to this publication. A special thank you to Jill Stafford, our Executive Manager for her hard work, and creativity in designing the Assistive Tools Kit. It was exciting to see how it all came together. Please, don't stop creating new ideas as they benefit so many!

Neil Enns  
President & Coordinator



## ACKNOWLEDGEMENTS

The information provided in this publication would not have been possible without the financial support of Farm Credit Canada. We are grateful to have had this opportunity to work together to create a resource kit on assistive tools. We hope to be able to work together again.

Farm Credit Canada (FCC) is Canada's largest provider of business and financial services to farms and agribusiness. Operating out of 100 offices located primarily in rural Canada, FCC's 1,400 employees are passionate about the business of agriculture. A healthy portfolio of more than \$15 billion and 15 consecutive years of portfolio growth reflect their customers' success.

At FCC, corporate responsibility extends far beyond giving to the communities where their employees live and work. It's about Corporate responsibility rooted in their mission, vision and corporate values to serve the needs of the Canadian agricultural community.

FCC gives 1.5 per cent of their profits to charitable and not-for-profit community organizations through the donation of financial resources and in-kind services. Their community investment activities are closely aligned with agriculture, hunger-related issues and farm safety.

FCC helps promote farm safety to producers by sponsoring such programs as Canadian Agricultural Safety Week (CASW).

Why focus on safety?

FCC's business is based on sound risk management. Unnecessary risk just doesn't make good business sense. And the same can be said for farm safety. Risking an injury never pays off on the farm.

FCC's commitment to farm safety is all about protecting their families, their customers and their communities.



## ARM SOCK



**Purpose:** For use mainly in below-elbow prostheses.

**Description:** This arm amputee suspension gel sleeve is specially designed to be used for arm prostheses. It improves adhesion between the residual limb and the prosthesis.

The flexible lubricated sleeve helps moisturize the skin and protect against shearing, abrasion and friction. Ideal for prosthetic myoelectric and cosmetic arm prostheses.

The arm suspension gel sleeve provides optimal distribution of weight between upper arm and forearm, allowing dexterity and comfort while eliminating pressure on the elbow.

Obtained through most amputee suppliers.  
See Resource pages for more information

## POWERED SCREWDRIVER

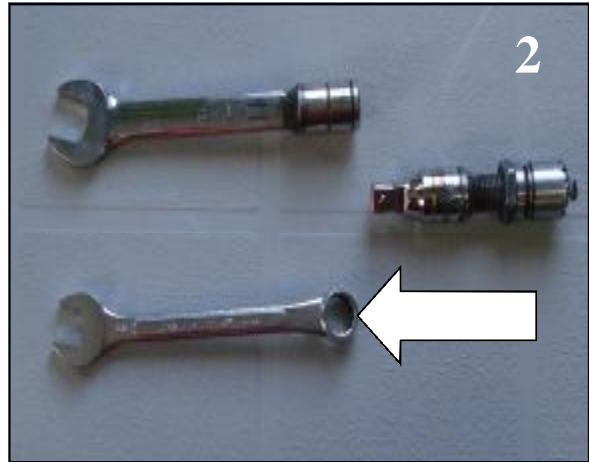


**Purpose:** For use of a screwdriver with one arm.

**Description:** A nut is drilled out to fit a 3/4" socket. The nut is fitted to a screwdriver tip, and placed into the socket. The nut and screwdriver tip are then fitted into an angle impact tool.

**Concept by:** Albert Penner  
Carman, MB

## WRENCH ATTACHMENTS



**Purpose:** Modifying wrenches for use with a prosthetic arm.

**Description:** There are three components to the wrench attachments. The base is designed with the prosthetic tip. A socket is welded to the short or long extension of any size drive (*Pic 1*).

Modifications can be done to variety of wrenches by cutting off one end of the wrench and welding on a socket (*Pic 2*).

*Pic 3 & 4* demonstrates how to adapt other wrenches to suit various jobs.

**Concept by:** Neil Enns  
Elm Creek, MB

## HAMMER



**Purpose:** Modified hammer for use with a prosthetic arm.

**Description:** This light-weight hammer is made by welding a 3/8 inch rod to the end of the hammer head. The bottom of the rod is threaded with a prosthesis tip.

Designed to accommodate a right-handed amputee.

**Concept by:** Neil Enns  
Elm Creek, MB

## HAMMER



**Purpose:** Modified hammer for use with a prosthetic arm.

**Description:** This light-weight hammer was modified for household purpose by welding a prosthetic attachment to the end of the hammer.

Designed to accommodate a right-handed amputee.

**Concept by:** Elizabeth DeVehr  
Oakbluff, MB

## GREASE GUN FLEX HOLDER



**Purpose:** Operation of a grease gun with a prosthetic arm.

**Description:** A 3/8 inch rod is cut to measure approximately 9 inches in length. Cut a piece of tubing 3 inch in length. Slot it to fit a grease gun flex hose. Weld to the stem at a 45 degree angle. Thread the opposite end of the rod with a prosthesis tip. This tool allows the individual to grease equipment with ease.

**Concept by:** Neil Enns  
Elm Creek, MB

## BUTTON HOLE TOOL



**Purpose:** An easy way to button clothing with the use of a arm prosthesis.

**Description:** Bend a thin piece of wire to fit around a button. Clasp the wire as shown in the pictures and hook button through button-hole.

**Submitted by:** Neil Enns  
Elm Creek, MB

## ARM WARMER



**Purpose:** To keep the arm warm when working outside.

**Description:** This arm warmer was designed by Neil. The complete unit is light weight and easy to adjust the temperature. An element pad is wired to the heat control which is powered by a battery (*Pic 1*). The element pad is attached to the prosthesis with Velcro strips. The wire is looped under the arm and through the prosthetic harness (*Pic 2*). Secure the wiring through the prosthetic harness. Heat control and battery are clipped to belt (*Pic 3*). The operator can adjust the heat with the control.

**Concept by:** Neil Enns  
Elm Creek, MB

**Control Setting:** Rehabilitation Engineering, Electronic Department  
Health Science Centre, Winnipeg, MB

## INDOOR WHEELCHAIR LIFT



**Propose:** Provides wheelchair access throughout the house.

**Description:** In order to limit the amount of space, a lift was designed to fit in the storage closet on each floor of the house. For safety purposes, the door remains closed while the lift is in use. (The door was left open for the purpose of the pictures). As the wheelchair backs into the lift, a thin metal plate flips up and in from the platform to prevent the wheelchair rolling forward.

This lift was installed in 1976.

**Submitted by:** Bernard Gehring  
Carman, MB

## GRASS TRIMMER with MODIFIED HANDLE



**Purpose:** Julien lost his right hand and part of his lower arm in a combine auger accident. He finds ways to modify tools that help make the job easier.

**Description:** First remove existing handle on the appropriate side of grass trimmer. Using a 3/8" shaft about 14 inches long, make a center pivot point. At one end, weld a prosthetic attachment directly into the existing tubing handle. Hold in place with a spring pin. It works with the Yardman model weed-eater (YM26BC). Different models may require other types of modifications due to shaft size, length and attaching method. The harness also improves handling and mobility.

**Designed by:** Julien Brais  
St. Joseph, MB

## GARDEN TRACTOR WINCH



**Purpose:** Albert lost his full left arm in a PTO accident. He finds using a tractor winch a safe and easy way to move equipment.

**Description:** By using existing holes at the back of a garden tractor, a bracket was secured on the bottom of a 2" square tubing (about 4' long) and bolted through the hitch. Metal braces were attached from the hitch to the main tractor frame.

A hand winch hook was attached to the boom. A cable and hook from the winch was drawn through a pulley at the top of the boom. The winch boom was attached to the tractor hitch with two ½" bolts on either side of boom. Another brace was attached approximately a foot higher up the boom secured by two ½" bolts on either side.

**Concept by:** Albert Penner  
Carman, MB

## GARDEN TROWEL



**Purpose:** For gardening

**Description:** This modified garden trowel allows Liz to work her indoor and outdoor plants. This type of modification can be done on a varied of gardening tools.

**Submitted by:** Elizabeth DeVehr  
Oakbluff, MB

## PROSTHETIC WORK HOOK—USING A ROLLING PIN



**Purpose:** Multipurpose

**Description:** Elizabeth finds using the prosthetic work hook the best for her needs. She made using a rolling pin look easy!

The rolling pin handle is guided with slight pressure. A person would only need to make slight adjustments in pressure to work with various types of dough and pastry.

**Submitted by:** Elizabeth DeVehr  
Oakbluff, MB

**Distributor:** Available through most prosthetic suppliers

## BROOM AND DUSTPAN



Check with distributor for changes in design.

**Purpose:** Household use

**Description:** The plastic dustpan and soft bristle brush with long plastic stems and handles make it easier to clean with the use of one hand. The brush handle clips on to the dustpan stem for storage. The dustpan has a flat bottom with shaped lip for efficient dust collection. Some models will have a trap lid. Check with the distributor.

**Submitted by:** Elizabeth DeVehr  
Oakbluff, MB

**Distributor:** Sammons Preston

## KITCHEN AIDS—ROCKING KNIFE & BREAD BOARD



**Purpose:** Household use

**Description:** Elizabeth would not be without this useful knife and bread board. The knife has a wide cutting edge which when used with a rocking motion, helps to slice the bread while keeping it in place.

The bread board has two useful features which can easily be modified at home. On one corner, three prongs are attached to help hold vegetables or fruit in place. On the other corner, two wedges are placed to prevent items from sliding away, as seen above.

**Submitted by:** Elizabeth DeVehr  
Oakbluff, MB

**Distributor:** Sammons Preston

## CROYDON CAN OPENER with STAND



Check with distributor for changes in design. Model may not be as shown.

**Purpose:** Household use

**Description:** The Croydon Can Opener and Stand is designed for use by individuals with use of only one hand or with limited grasping ability.

The unit consists of a wall-mounted stand that positions the can beneath the can opener blade, enabling the can to be opened with one hand using the built-in crank handle.

**DIMENSIONS:** Opens cans up to 4.5" in diameter and 6 " high.

**Submitted by:** Elizabeth DeVehr  
Oakbluff, MB

**Distributor:** Sammons Preston

## PEELER and ROCKER KNIFE



**Purpose:** Household use

**Description:** The 3-prongs on the cutting board helps hold the vegetable or fruit in place as Liz uses a regular peeler.

Once the vegetable is peeled, Liz has a special rocker knife that makes it safe and easy to cut into the desired pieces.

**Submitted by:** Elizabeth DeVehr  
Oakbluff, MB

**Distributor:** Available through various distributors

## ELECTRONIC PEDAL CONTROL



Electronic pedals when plugged in will by-pass the roller thumb switch.



Electronic pedals are transferable to other equipment.



**Purpose:** To replace the roller thumb switch on some equipment such as combine, windrower, front end loader.

**Description:** The wiring connections are made internally. Only a single cord is brought out of the foot switch. This eliminates a costly wire harness assembly.

**Distributed:** The electronic control pedals can be purchased from:  
Linemaster Switch Corporation  
29 Plaine Hill Road, P.O. Box 238  
Woodstock, CT 06281 0238 USA  
Phone: 860-974-1000, Fax: 860-974-0691

See next page....

## ELECTRONIC PEDAL CONTROL



Machinery that normally uses thumb switches to maneuver headers, are now controlled with the foot pedals - as shown in left picture.

Equipment that requires operation of electric solenoids to open hydraulic valves for raising or lowering headers or loaders. The foot pedals will take the place of the button switch on most machinery. The use of a prosthesis is only needed to move the machinery forward/backwards, and eliminates the use of the roller thumb switch.

Concept by: Julien Brais  
St. Joseph, MB

## HI FLY FIELDER BASEBALL GLOVE



**Purpose:** Playing Baseball with one hand.

**Description:** Unique ball catching systems based upon LaCrosse technology. Flexible mesh pocket allows for either forehanded or back-handed catching, eliminating the need for forearm rotation. Hi-Fly, Jr. for "T" ball players only (7 ounces, 10 inches long x 6 inches wide) Hi-Fly is for baseball or softball, (11 ounces, 12.8 inches long x 7.5 inches wide). Both systems have a 1/2 inch diameter threaded stainless stud which fits all standard body-powered, mechanical prosthetic wrists. Padded leading edge. Structural nylon construction. No cable is required.

**Submitted by:** Julien Brais  
St. Joseph, MB

**Distributed by:** TRS  
[www.oandp.com/trs](http://www.oandp.com/trs)

## GRAND SLAM



Right Hand Prosthesis



Left Hand Prosthesis



**Purpose:** Playing Baseball with a prosthesis.

**Description:** There are models for right or left handed batters. Both are models designed to fit aluminum bats with one inch diameter handles. High strength flexible coupling and long cylindrical channel allow for natural grip and powerful unrestricted swing and follow-through. Stainless steel 1/2 inch diameter threaded stud fits all standard body-powered, mechanical prosthetic wrists.

**Submitted by:** Julien Brais  
St. Joseph, MB

**Distributed by:** TRS  
[www.oandp.com/trs](http://www.oandp.com/trs)

### 3-WHEEL BIKE with ONE-HAND CONTROLS



**Purpose:** Designed for use by individuals with the use of one hand.

**Description:** Albert designed this bike for himself from spare bike parts.

The covered seat sits on a bicycle frame that was welded together. The 3-wheel bike has speed selection and brake controls that are operated by the right handle. This can be easily switched to accommodate a left-handed person. It is a safe and comfortable ride for a person with one arm.

**Designed by:** Albert Penner  
Carman, MB



### 3-WHEEL BICYCLE with ONE-HAND CONTROL



**Purpose:** Designed for use by individuals with the use of one hand.

**Description:** Jaun designs various types and styles of bicycles. The one pictured here has one-handed controls and a storage box on the back.

The bike seat is equipped with a high back rest to make long distance riding more comfortable.

**Designed by:** Jaun Neufeld Winkler, MB



## ROPE PULLER



**Purpose:** Designed to enable an amputee to pull/ hold a rope without slipping.

**Description:** By using a regular prosthetic hook, weld a extra 2 1/4 " piece of flat steel to the end of the hook. Be sure to position the welded steel insert to enable use of rope sized between 1/4 inch to 1/2 inch.

**Additional explanation of the tools use:** This tool was designed for a specific task. I use the tool for setting conibear traps. I use a four foot piece of rope to compress the springs, and this tool allows me to hold the rope while hooking the safety dogs on the trap. I would not recommend using this tool for other tasks, such as roping cattle. Once engaged it requires deliberate action to release. There is no emergency release!

**Concept by:** Jon Todd  
Portage la Prairie, MB

**Designed by:** Rehab Engineering Department  
Health Sciences Centre, Winnipeg, MB

## SALT BLOCK CARRIER



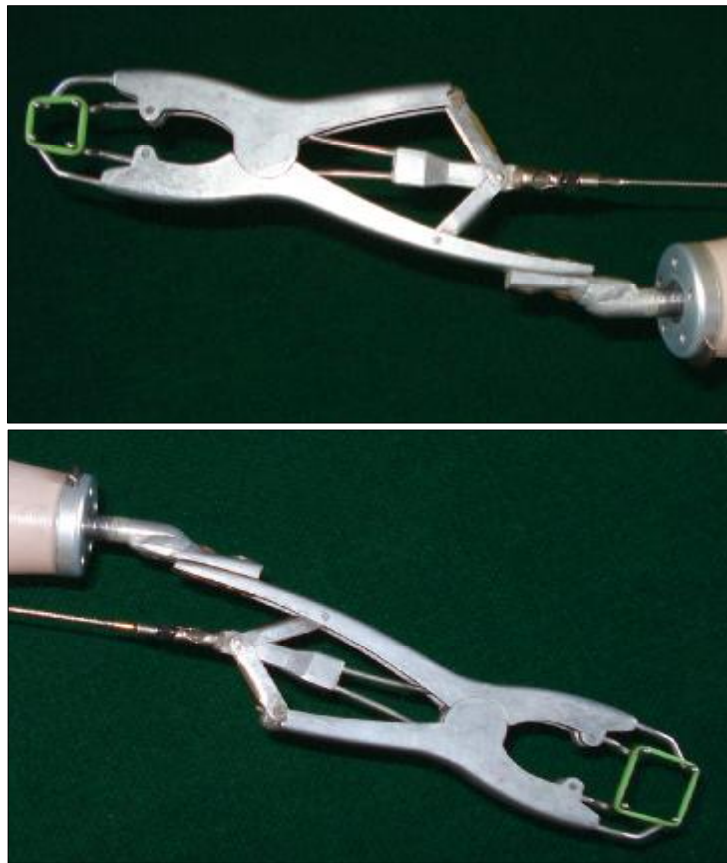
**Purpose:** For ease in handling salt block with one hand

**Description:**

This tool is simple to build and makes carrying salt blocks with one hand very easy.

**Submitted by:** Kevin Visscher  
Graysville, MB

## Calf Castrating Ring Pliers

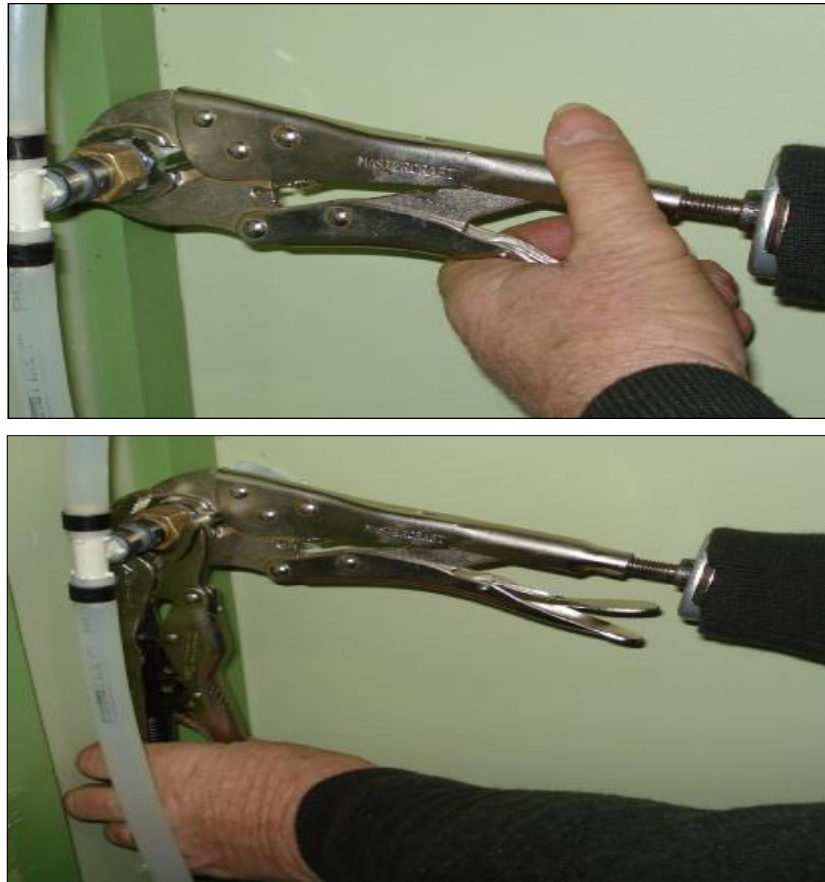


**Purpose:** One-Handed tool for castrating cattle with a prosthetic attachment.

**Description:** Attach a prosthetic tip to the plug pliers. The arm cable is attached to the prosthetic arm. Insert the tools. Place "O-ring" over the four pins on the tool. As you move your shoulder the O-ring expands. Place the stretched O-ring over the bull calf's sack. By relaxing the shoulder, the O-ring will tighten. Lift to remove the tool.

**Concept by:** John Wiebe  
Carman, MB

## VICE GRIPS



**Purpose:** Multipurpose

**Design Description:**

The machined tip that locks into the prosthesis is welded to the adjustable screw setting on the vice grip. Then it is attached to the prosthesis. It can be used in combination with other grips.

**Concept by:** Neil Enns  
Elm Creek, MB

## CHAIN SAW HOLDER



**Purpose:** To operate a chain saw with a right-hand prosthesis.  
Eliminates the need to switch arms.

### Design Description:

A machined metal block fits (*Pic 1*) around the handle of a chain saw. The block is tightened to the handle of the chain saw with 2 bolts (*Pic 2*). The operator can adjust the block to a comfortable position (*Pic 3*). Secure the block before you begin work. The extended stem is adapted with a prosthetic tip (*Pic 4*). Always use safety when in use.

**Concept by:** Neil Enns  
Elm Creek, MB

**Designed by:** Rehab Engineering Department  
Health Sciences Centre, Winnipeg, MB

## CHAIN SAW HOLDER



**Purpose:** To operate a chain saw with a right-hand prosthesis.

**Description:** This device clamps onto the main control handle, holding down the throttle control lock. Throttle operation is with an auxiliary control mounted on the loop handle adjacent to the chain brake. The throttle is operated with the left hand, enabling the user to keep the saw in a natural position to the right side of the body. As Jon is an above elbow amputee, this device is only useful for bucking logs. A below elbow amputee may find the device more useful. Always use safety when in use. *Not recommended for cutting a tree down safely.*

**Concept by:** Jon Todd  
Portage la Prairie, MB

**Designed by:** Rehab Engineering Department  
Health Sciences Centre, Winnipeg, MB

## STANDARD SHIFT ATTACHMENT



**Purpose:** For a right-handed amputee for shifting a standard.

### Design Description:

Fiberglass is molded over a form that fits the shifter knob. Neil used a drinking cup because of the tapered end. This prevents the cup from sliding off the shifter knob when in use.

Attach a 3/8 inch rod approximately 5 inches long on to the cup. The extended stem is adapted with a prosthetic tip. A clip can be attached to the side of cup for working the high-low range button (not shown).

**Concept by:** Neil Enns  
Elm Creek, MB

**Designed by:** Rehab Engineering Department  
Health Sciences Centre, Winnipeg, MB

## STEERING WHEEL APPARATUS



**Purpose:** For use by double arm amputee.

**Description:** John Froese is a double arm amputee. He had his vehicle installed with a steering-wheel apparatus to enable him to drive.

These accessories were made and installed in the mechanical shop at the Health Sciences Center.

A small flat bar was screwed to the ignition so the car can be started by pushing on the bar. The signal lever has a steel bar attached to work the windshield wipers by simply pushing on the bar.

The steering wheel spinner base is clamped to the steering wheel and the hoop can be put in or taken out by pushing a small button that's on the base.

**Submitted by:** John Froese  
Altona, MB

**Designed by:** Rehab Engineering Department  
Health Sciences Centre, Winnipeg, MB

## WIPER CONTROLS



**Purpose:** Operation of a control wiper switch on highway tractor with prosthetic right arm.

**Description:** Designed for shifting a highway tractor using the right hand. The tool attaches with a prosthetic tip. The extension on the end of the cup is for accessing wiper controls. The “finger” is also useful for flipping toggle switches. Pictures 3 & 4, show a variety of wiper attachments.

**Concept by:** Jon Todd  
Portage la Prairie, MB

**Designed by:** Rehab Engineering Department  
Health Sciences Centre, Winnipeg, MB

## HIGHWAY TRACTOR SHIFTER



**Purpose:** Operation of a highway tractor with a prosthetic right arm.

**Description:** Designed for shifting a highway tractor using the right hand. The tool attaches with a prosthetic tip. The extension on the end of the cup is for accessing wiper controls (see Wiper Controls on page 36.)

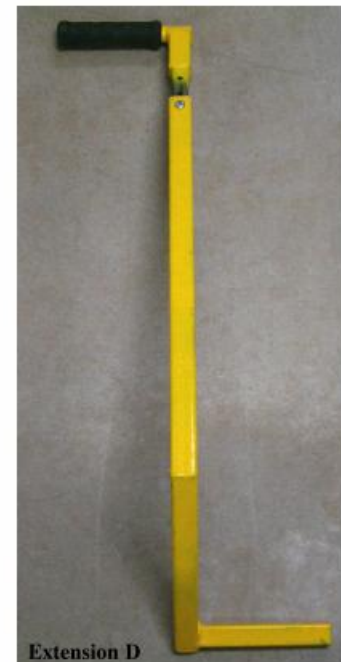
This tool works very well on horse-shoe shaped shifter heads. It was made in the late nineties and works on transmissions that allow pre-selection of range shifts and splits. Jon used it on 13, 15, and 18 speed transmissions. Now that shifter heads are more triangular shaped, it would need to be redesigned.

The finger at the end is made from a piece of pipe cut in half lengthwise. The halves are inverted, then welded together resulting in a U-shape top and bottom. The finger is very useful for flipping toggle switches on the dash.

**Concept by:** Jon Todd, Portage la Prairie, MB

**Designed by:** Rehab Engineering Department  
Health Sciences Centre, Winnipeg, MB

## PEDAL EXTENSIONS



The pedal extension hand control were designed to be attached and removed without damaging the tractor. Making this an ideal remedy, if you want to trade in or sell your tractor. It is not a permanent alteration. It can be attached to either the pedal face or the pedal arm rather than to the consol of the tractor.

There are six different designs. Depending on type of tractor, the operator will choose the one that best fits the make and model. The hand control must not interfere or obstruct with the operator's ability to operate the equipment safely. To attach the pedal extensions see couplers on next page.

**Designed by:** Department of Biosystems Engineering  
University of Manitoba, Winnipeg, MB

**Research Paper:** Evaluation of Mechanical Tractor Pedal Extensions.  
S.A.Kelso, A.M. Stangherlin, D.D. Mann

## PEDAL EXTENSION COUPLERS



**Coupler A**



**Coupler B**



**Coupler C**



**Coupler D**



**Coupler E**



**Coupler F**

## SHOVEL ATTACHMENT—Right Hand



**Purpose:** For right-handed amputee.

**Description:** Take a round metal sleeve approximately 10 inches long that will slide over a shovel handle. Weld one end of the 3/8" universal to the sleeve.

The top end of universal weld a short piece approximately 1 inch of threaded 3/8" rod. Thread the connector that attaches to your prosthesis to the 1 inch threaded rod and lock into your prosthesis.

**Design by:** Neil Enns  
Elm Creek, MB

## SHOVEL ATTACHMENT—Left Hand



**Purpose:** For left-handed amputee.

### Design Description:

Take a 9" long x 1 1/4" wide flat iron light weight. Drill a 3/8" hole approx 1/2" in from the end of flat iron on both ends. Then measure 2" from end and bend down to 90 degree on both ends.

You now have a 5" space inside the bend which will fit over a D shovel handle grip. Center metal piece and weld a 1" long x 3/8" thick threaded rod.

The individual can attach the prosthetic connector to rod and lock into prosthesis.

If shovel handle grip does not have a hole, drill a 3/8" hole to fit attachment. Then slide metal piece over handle and fasten with a 5 1/2" bolt through handle.

**Design by:** Brian Palas  
Oakville, MB



## ONE-HAND BAT KEYBOARD



**Purpose:** Typing with one hand.

**Description:** Infogrip's **BAT Personal Keyboard** is a one-handed compact input device that replicates all the functions of a full-size keyboard. The BAT is easy to learn and use. Letters, numbers, commands and macros are simple key combinations "chords". Designed to reduce hand strain and fatigue and increase productivity when used with graphic or desktop publishing software. Macintosh version is NOT OS X compatible.

**Designed by:** Infogrip  
[www.infogrip.com](http://www.infogrip.com)  
Copyright © 2003 Infogrip, Inc. All rights reserved.

**Submitted by:** Neil Enns  
Elm Creek, MB

## RESOURCES



## CONTACTS AND RESOURCES

### Rehabilitation Engineering Department Health Sciences Centre

The Rehabilitation Engineering department, located in Winnipeg's Health Sciences Centre, assists clients gain the highest possible level of independence through the use of assistive technology devices.

Assistive Technologies Products Services provides specialized electronic and mechanical aids for adults with physical disabilities. These aids include automotive adaptations, scooter and wheelchair modifications and seating, communication aids, environment controls, and many other devices to enhance daily living.

Opportunities to improve function and quality of life are what we're all about! The Assistive Technology staff pride themselves on their problem-solving abilities. Whether our clients live in houses, apartments, personal care homes, or hospitals, we endeavour to increase each individual's level of independence. We don't see problems - we see opportunities for improvement.



Back Row – L to R

Wayne Lipischak, Richard Rodd, Lori Knott, Dennis Stanley

Front Row—L to R

Ed Slyker, Mick Williams, Bill Brereton, Brad Masiowski  
Paul Tustin (missing from picture)

## CONTACTS AND RESOURCES

### DESIGNS BY QUAD-TRAK



The tractor lift is designed by Tracy and his father. Tracy suffered a spinal cord injury as the result of a fall. He broke his neck at the C5/C6 level, which left him paralyzed. He works with his father on a farm in Mississippi.

His website shows how a determined spirit and a creative family were able to develop designs for lifts on tractors, modifications to ATV's and more. Check out his website. [www:quadtrak.com](http://www:quadtrak.com)

## CONTACTS AND RESOURCES

### AgrAbility



Bobby, at the age of 58, suffered a stroke and was left with his left-side paralyzed. He runs an agricultural operation, with registered quarter horses and cattle. AgriAbility helped Bobby gain access to his tractor by adding an extra step



Charles has below the chest paralysis, as a result of a vehicle accident. The team at AgrAbility worked with his vocational rehabilitation counselor, and designed a sling-lift with hand controls. Charles is now able to independently maintain his land and pasture areas

**California AgrAbility Project**  
Farm Safety & Rural Health  
University of California  
Dept. of Biological & Agricultural Engineering  
One Shields Ave  
Davis, Ca 95616-5294

Phone: 1-530-752-1613  
Fax: 1-530-752-2640  
Toll free: 1-800-477-6129  
Contact: Isabel Hernandez  
[lhernandez@ucdavis.edu](mailto:lhernandez@ucdavis.edu)  
[www.calagrability.ucdavis.edu](http://www.calagrability.ucdavis.edu)

## CONTACTS AND RESOURCES

### Life Essentials Manufacturers of all types of lifts



**COMBINE LIFT**



**COMBINE LIFT**



**PLATFORM LIFT**



**TRACTOR LIFT**



### Life Essentials

8796 S. US 231

Brookston, IN 47923

Phone: 765-742-6707

Email: [lfeessentials@earthlink.net](mailto:lfeessentials@earthlink.net)

Web site: [www.lifeessentialsweb.com](http://www.lifeessentialsweb.com)

## CONTACTS AND RESOURCES

### **Farm Credit Canada | Financement agricole Canada**

1800 Hamilton Street, P.O. Box 4320  
Regina, Saskatchewan S4P 4L3

Phone: 1-306-780-8100

Fax: 1-306-780-8919

[www.fcc-fac.ca](http://www.fcc-fac.ca)

### **Info Grip**

1794 East Main Street  
Ventura, CA. USA, 93003

Phone: 1-805-652-0770

Fax: 1-805-652-0880

[www.infogrip.com](http://www.infogrip.com)

### **Heath Science Centre**

#### **Rehabilitation Engineering Department**

MH036 - 59 Pearl St.  
Winnipeg, MB R3E 3L7

Electronics Section 1-204-787-2367

Mechanical Section 1-204-787-2370

Assistive Tech [AT@hsc.mb.ca](mailto:AT@hsc.mb.ca)

### **Manitoba Farmers with Disabilities**

Box 367, 128 Gladys Street  
Elm Creek, MB  
R0G 0N0

Toll Free: 1-866-680-6393

Phone: 1-204-436-3181

Email: [jill.stafford@mts.net](mailto:jill.stafford@mts.net)

[www.fwdmanitoba.com](http://www.fwdmanitoba.com)

### **National AgrAbility Project**

Contact: Paul Jones  
Website on modification  
University of Wisconsin.

Email: [jonesp@purdue.edu](mailto:jonesp@purdue.edu)

[www.agrabilityproject.org](http://www.agrabilityproject.org)

[www.agrability.org](http://www.agrability.org)

### **Purdue University**

Breaking New Ground Resource Center  
225 S University St  
West Lafayette IN 47907-2093

Phone: 1-765-494-1191

[field@purdue.edu](mailto:field@purdue.edu)

[www.farmsafety.org](http://www.farmsafety.org)

[www.breakingnewground.info](http://www.breakingnewground.info)

### **Sammons Preston**

**755 Queensway East Unit 27**

**Mississauga, ON L4X 4C5**

Contact: Christina Tode,  
Aid to daily living Rehab Supplies

Phone: 1-800-665-9200

Email: [CustomerSupportca@Patterson-Medical.com](mailto:CustomerSupportca@Patterson-Medical.com)

[www.sammonspreston.ca](http://www.sammonspreston.ca)

### **TRS**

3090 Sterling Circle, Studio A  
Boulder, Colorado USA 80301 2338

Toll Free: 1-800-279-1865

Phone: 1-303-444-4720

[www.oandp.com/trs](http://www.oandp.com/trs)

### **University of Manitoba**

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**Helping farm families face the challenges of  
injury, illness, and disability**



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