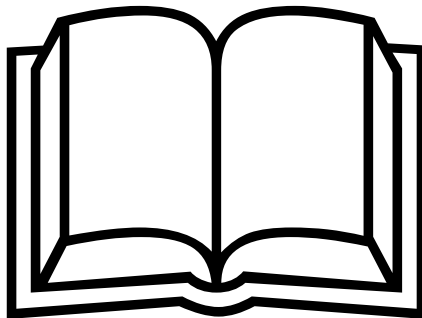


*Accu-Cast*TM



January 11, 2006



WELCOME TO PRAIRIE HYDRAULIC EQUIPMENT LTD.

Established in 1978 and conveniently located in Calgary's Foothills Industrial Park; we provide a full range of services to the hydraulic industry including repair, installation, maintenance, and fabrication. Our shop, fully equipped for machining, honing, lathe work, and a full range of testing equipment includes the following:

MACHINE SHOP

- 2 Lathes • Milling Machine • 150 Ton Press
- Torque Wrench – can develop 100,000 foot pounds, capable of removing large piston nuts
- Fabrication Shop – equipped with stick and mig welders

HONING

- Capable of honing cylinders from 2" to 21" diameter and up to 40 feet long

CYLINDERS

Cylinders are disassembled and all dimensions are measured (eg: Cylinder ID, Piston OD, Rod OD, and Gland ID). Rods are rolled to check for straightness and all cylinders are tested after reassembly.

HYDRAULIC PUMPS, MOTORS, VALVES, ETC.

- Equipped with a 175 horse power test bench and a lapping machine
- All pumps and motors are bench tested before being shipped

SNOW PLOWS AND SANDERS

We offer complete sales and service on a full range of VIKING plows and sanders. As well as "Accu-Cast" Sanding and Liquid application Systems and "Blade Saver" Power Float Systems, for winter sanding trucks. These systems are designed and built in Calgary, for extreme winter weather conditions.

PARTS DEPARTMENT

- Carries a variety of parts, seals, fittings, and hoses
- Can make 4 wire hose up to 1 1/4" diameter
- Dealer for PERMCO pumps and motors, DELTA Q Axial piston pumps, Parker pumps and motors, WHELEN Emergency Lighting

SALES DEPARTMENT

- Fully experienced to assist in design and fabrication

SUPERIOR CUSTOMER SERVICE

- 24 hour Emergency Callout Service, 7 days a week
- Limited 30 day warranty on repairs
- Experienced staff with a broad base of hydraulic system experience

FOR ALL OF YOUR HYDRAULIC EQUIPMENT NEEDS

Please call us at Tel. 403-279-2070 Direct line 1-800-363-0091 Fax 403-236-2658

Or Email info@accucastsystems.com



Warranty Statement

Accu-Cast® warrants electronic and hydraulic components supplied by *Accu-Cast*® to be free from defects in material and workmanship for a period of three years from date of receipt. All other equipment and components will reflect the standard warranty conditions of the manufacturer. This warranty does not cover damage or failure resulting from neglect, misuse, accident, lack of proper maintenance, improper installation (unless installed by a PHE technician), redesign of assemblies or components or any other cause beyond the control of *Accu-Cast*®

Warning:

In the past it has been found that from time to time people have drilled holes in our control consoles for the purpose of mounting radio microphones and other such items. As a result of this we have had drill filings and in some cases the actual mounting screws interfering with electronic components. **Actions such as the above will void the warranty.**

The obligation of *Accu-Cast*® under this warranty is expressly limited to replacement or repair of parts shown to be defective by our inspection. All other damage and claims, statutory or otherwise, are expressly waived by the purchaser. *Accu-Cast*® is not responsible for consequential damages or contingent liabilities arising out of failure of any product or component part.

The defective part must be returned freight prepaid to the manufacturer within 30 days after discovery of the defect. Permission to return a part for inspection must be granted in writing by an *Accu-Cast*® representative. An *Accu-Cast*® warranty claim number must accompany any returned part. *Accu-Cast*® will furnish without charge, FOB our shop, a replacement for any part of our manufacture found to be defective. *Accu-Cast*® will make final determination as to whether repair or replacement will be made. If a replacement part is supplied, it will be of equal or superior quality, but may be of more current design.

Components supplied by *Accu-Cast*® that are of other manufacture shall be subject to the warranty of that manufacturer unless otherwise specified.

Labor to replace or repair *Accu-Cast*® approved components will be covered for a period of one year from date of delivery, FOB - our facility. Labor for replacement of faulty parts that are necessarily replaced in a shop other than at *Accu-Cast*® will be paid at a rate not exceeding 75% of the normal retail labor rate charged by that shop. *Accu-Cast*® will determine the maximum amount of time that will be paid for this replacement using industry standards as a guideline.



P.H.E. Claim number _____

Date of Claim _____

Date Purchased _____

ALL INFORMATION REQUESTED BELOW MUST BE SUPPLIED OR YOUR CLAIM WILL BE DENIED.

PRODUCT _____ SERIAL# _____

MODEL # _____

DEALER WHERE PRODUCT WAS PURCHASED (IF OTHER THAN P.H.E.)

_____ PHONE # _____

PROBLEM _____

REPAIR ACTION REQUIRED _____

PARTS REQUIRED _____

LABOUR REQUIRED _____ HRS RETAIL LABOUR RATE \$ _____ HR.

FOR P.H.E. USE ONLY

P.H.E. APPROVAL _____ DATE _____

PARTS REQUIRED _____

LABOUR _____ HRS. @ \$ _____ PER HR. (75% OF RETAIL LABOUR RATE)

PARTS _____

MAIL OR FAX TO: PRAIRIE HYDRAULIC EQUIPMENT LTD. 7525 51STREET. SE
CALGARY ALBERTA T2C 4A6 TELEPHONE.403-279-2070 TOLL FREE 1-800-363-0091
FAX 403-236-2658



SANDING SYSTEM MODEL DESIGNATION

SERIES AC 3000 or 5000

MODEL **PA** **4** **V** **5** **32** **U** **F** **32** **R**

PUMP SELECTION

D= DELTA Q
P= PERMCO
O= OTHER
PA= PARKER

PUMP SIZE IN IN³/REV

VALVE SELECTION

V = VOAC
A = APITECH
E = ENERPAC
R = REXROTH
G = GRESEN

CONSOLE SELECTION

5 = AC 5000
3 = AC 3000

ELECTRONICS

10 = 1000V
32 = 3000V 2.16
33 = 3000V 3.1

LIGHTING RELAY BOX

VALVE SECTIONS
NUMBER OF 4 WAY
REQUIRED
(1ST NUMBER)

NUMBER OF 3 WAY
REQUIRED
(2ND NUMBER)

OPTIONS
F = POWER FLOAT
W = PRE-WET

TANK STYLE

U = UPRIGHT
S = FRAME MOUNT
R = ROUND FRAME MOUNT
S2 = 2 PIECE FRAME MOUNT



This manual has been created for the express purpose of aiding the field mechanic in troubleshooting and general repairs to the Accu-Cast[®] 3000 and 5000 series Sand and Salt Spreader systems.

Since the beginning Accu-Cast[®] has made every effort to keep all of its products “backwards compatible” so that no model or series ever becomes “obsolete”.

This manual reflects that principle, in that it can in most cases be used for not only the current models but for older models and series as well.

We understand that on a scale of one to ten reading shop manuals for entertainment is probably right down there with watching paint dry or grass grow, but a little time studying this book will pay off in spades in the future when it comes time to do a little maintenance on your system.

Accu-Cast[®] manufactures two different types of electronic boards for our systems. The 1000V is a very simple unit that is used for straight manual or ground speed oriented systems. This board is backward compatible to not only our older 1000B, but also to all of the systems that were sold by us in years gone by.

Our new 3000V board, which incorporates our computer controlled gate, can be used as a direct replacement for our very successful 2000V unit or to replace faulty electronics in many of our competitor’s products.

All of the above described Accu-Cast[®] Electronic printed circuit boards have been designed and manufactured with the service person in mind. Every component is protected and fused so that it is very difficult to harm one through testing and/or handling. We have also used “LED’S” extensively to aid in troubleshooting the system should a problem occur. Every input and every output has a corresponding LED. This makes diagnostics a breeze.

Your new Accu-Cast[®] system should give you many years of trouble free performance; however should you have a problem that you can-not solve on your own, we are here to help.

Please do not hesitate to call us at any time.

Tel. 403-279-2070 Toll free in Canada 1-800-363-0091 Fax. 403-236-2658

Email info@accucastsystems.com