

# PAN CAROUSEL

## Operator's Manual - Original Instructions

PanCarousel-om-04-Jan2016DS



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<b>WARRANTY &amp; LIABILITY</b>	



This machine has been carefully designed and constructed to provide you with many years of dependable service. It has been built to meet or exceed current UL or CSA standards. With proper care in operation and maintenance, this machine will assist you in maximizing your efficiency.

To ensure the utmost value and performance from your machine, please read this manual carefully to be sure correct operation procedures are followed.

This manual provides you with operation, troubleshooting, and maintenance procedures for your machine. However, if help is needed or if any of these procedures are unclear, please contact Vidir at 1-800-210-0141.

## SERIAL NUMBER

Please be sure to record the serial number for any future service calls and parts ordering.

Serial No. \_\_\_\_\_

## IMPORTANT CAUTION NOTICE:

Vidir has made every effort to protect operators and others from injury due to mechanical parts movement and electrical safety. As with any mechanical device, the operator is responsible to inspect the condition of the machine prior to use and adhere to safe operating procedures at all times.

A factory approved Preventative Maintenance is recommended every 12 months or 100 hours, whichever comes first.

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**service@vidir.com**

**Head Office  
Vidir Machine Inc.**

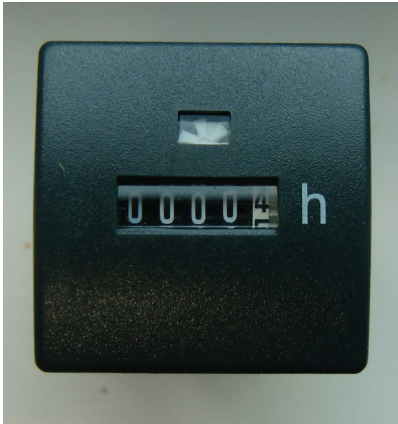
Box 700  
Arborg, Manitoba  
Canada R0C 0A0  
Service: 1-866-821-2647  
Toll Free: 1-800-210-0141  
Phone: 1-204-364-2442  
Fax: 1-204-364-2454  
Service Fax: 1-204-364-3072  
Installation: 1-204-641-1222

**U.S. Office  
Vidir Inc.**

19 East Lehman St.  
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Service: 1-866-821-2647  
Toll Free: 1-866-898-4347  
Phone: 1-717-270-1000  
Fax: 1-717-270-1001



## Hours Counter



Vidir has installed an hour counter into our machine products. This counter will assist you to determine when Preventative Maintenance is to be scheduled (100 hours of machine use, or 12 months, whichever comes first).

Please contact Vidir Service for additional information on this feature.

## Important Safety Instructions

Read this manual carefully to ensure familiarity with the controls and the proper use of the equipment.

The warnings and precautions contained in this manual **DO NOT** cover all potential dangers, and hazards that may be encountered.

This manual is intended to provide basic safety guidelines for proper operation, maintenance, and servicing of the machine.

### WARNING – Risk of injury

- Installation and service of this machine should be performed by qualified service personnel.
- Only properly trained service personnel should have access to the interior components of the machine.
- Electrical connections should be performed by qualified electricians.
- Operation must be performed by trained personnel. Never allow children or unauthorized persons to operate the machine.
- DO NOT post the security password where unauthorized users will have access to it.

### DANGER – To reduce the risk of electrical shock:

- Keep cord away from heated surfaces or areas where it can be easily damaged.
- Do not change current limit ratings of overload protectors. For further instruction please contact our service line.
- Turn all switches to the off position and disconnect power to the machine before cleaning, maintenance, or repairs.
- Risk of electrical shock – Connect this machine to a properly grounded outlet only. See grounding instructions.
- Keep the area of operation clear of all persons and potential hazards.
- Always shut off the main power switch before servicing the machine.
- Keep all guards and shields in place

Use this machine only for its intended purpose as described by these instructions.





Do not use attachments not recommended or approved by the manufacturer.

Never operate this machine if it has been damaged, has a damaged electrical cord, or if it is not working properly. Keep all guards and shields in place.

Keep area clean and organized during operation.

**For further instruction please contact our service line.**

## Safety Hazards

	<p>Safety Hazard - Read Manual</p>	<p>-read and understand operator's manual and all other safety instruction before using this machine.</p>
	<p>Safety Hazard - Entanglement</p>	<p>- loose clothing or jewelry could become entangled or drawn in.</p>
	<p>Safety Hazard - Crushing/Rolling</p>	<p>- rolled material may present a hazard of crushing; rolled material may present hazard of rolling over toes or hands when loading/unloading the machine.</p>
	<p>Safety Hazard - Electrical shock/ Electrocution</p>	<p>- electrical circuits contain high voltages and may cause shock or electrocution;</p>

Cease all operation and lock out machine in any case where the machine is not operating as designed and call Vidir Service.

## Machine Limits

Machine Load Limits: 750 lbs/carrier -evenly distributed - unbalanced load 1300 lbs - max vertical load 13,000 lbs (includes carrier & loaded items).

## Electrical Specifications

Machine Power Requirements: Please see machine label for electric power requirements.

### FEATURES:

This machine is equipped with a Master Switch. This switch is highly visible and easy to reach. It shuts off all power to the machine. Ensure the Master Switch is in the OFF position before working on the machine, to prevent accidental operation of the machine.

### NOTE:

All relays and transformers are located in the electrical box behind the control panel. These can be accessed by removing the screws that secure the control panel cover to the box. Ensure the Master Switch is in the OFF position before removing the control panel.

### CAUTION:

If the motors start to overload and stop during the operation of the machine remove pressure from the Push Button. Do not try to force the machine. Do not continue to activate and deactivate an overloaded motor. This will cause excessive wear and motor overheating. Correct the load conditions on the machine before trying again. Refer to the section on loading the machine.

### ATTENTION:

The machine should have a dedicated circuit.

## Grounding Instructions

This product must be grounded. If it should malfunction or break down, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This product is equipped with a cord having an equipment-grounding conductor and a grounding plug. The plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.

**DANGER** – Improper connection of the equipment-grounding conductor can result in a risk of electric shock. Check with a qualified electrician or service person if you are in doubt as to whether the product is properly grounded.

Do not modify the plug provided with the product. If it will not fit the outlet, have a proper outlet installed by a qualified electrician or service person.

This product must be connected to a grounded metal, permanent wiring system, or an equipment-grounding conductor must be run with the circuit conductors and connected to the equipment-grounding terminal or lead on the product.



## **Building Requirements**

The machine must be bolted to the floor before it is loaded. It is the responsibility of the building owner to ensure the building structure is adequate for the machine installation.

Electrical - please see machine label for electric power requirements. A dedicated power line and circuit breaker using machine suitable conductor wire connections and ampere rating is recommended. The machine has been designed to be hardwired to this electrical service. Once installed, an electrician must be available to hardwire the service to the junction box provided at the top of the machine. (Bottom junction boxes for floor wiring are available by special order at time of order placement.)

## **Installation Requirements**

Vidir provides the installation equipment. This installation equipment requires a local electrical circuit at the machine installation site. Your electrician may need to run a temporary service line before the installers arrive. Installer waiting time will be billed at the going rate.

A forklift and operator should be available to unload the machine from the truck and deliver the components to the installation site as required by the installers. Additional forklift time may be required during machine setup.

Installers require a floor plan of the area with the installation location for each machine model clearly marked.

A sign-off sheet has been provided for the Store Manager to indicate approval of the placement of the installed machine. Once completed, our installers are available to bolt down the machine under the manager's supervision.

An electrician must be scheduled to connect electrical service to all machines upon completion of installation. The installation crew will then test run the carousels and do a final check.

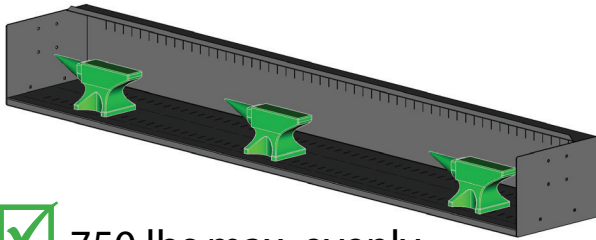
## Loading the Carousel

1. To load the carousel, lower the desired pan to the best working height
2. Place items onto the pan. It is preferable to distribute the weight evenly throughout the pan.

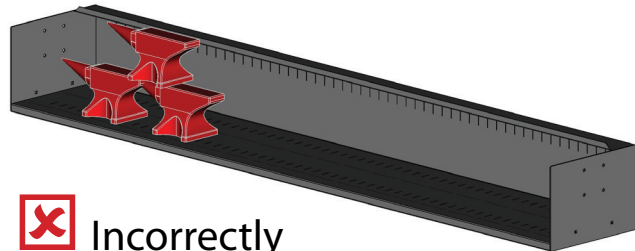
**\*\* Important Notice\*\***

**LOAD ONLY EVERY 4<sup>TH</sup> PAN WHEN FILLING EMPTY CAROUSEL**

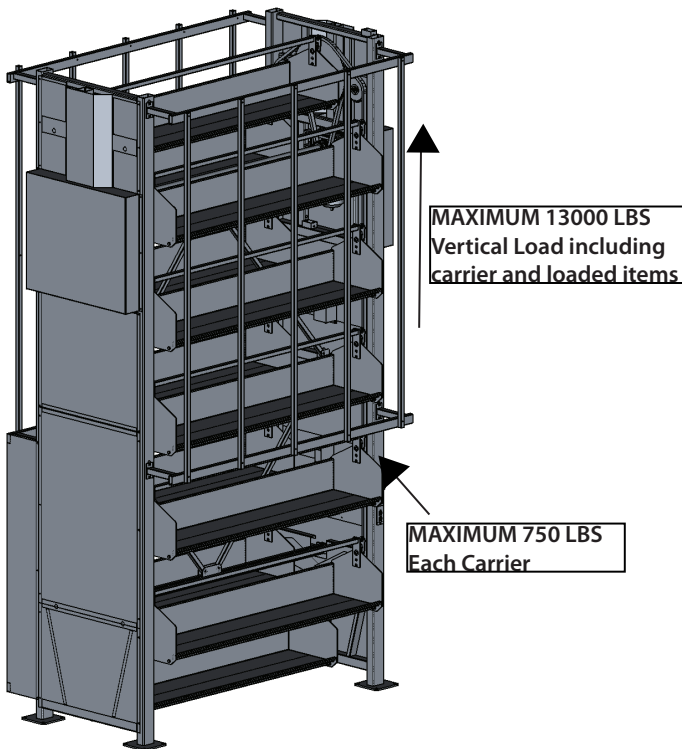
**KEEP LOAD DISTRIBUTED EVENLY AT ALL TIMES**



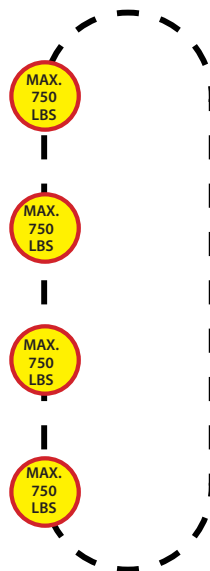
750 lbs max. evenly distributed on carrier



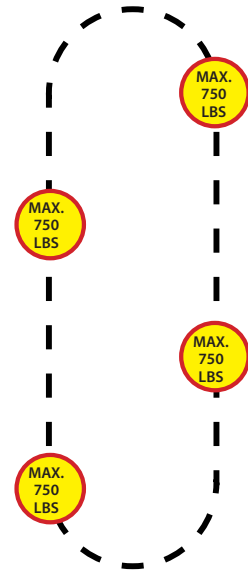
Incorrectly loaded carrier - do not attempt



MAXIMUM UNBALANCED LOAD 1300 LBS



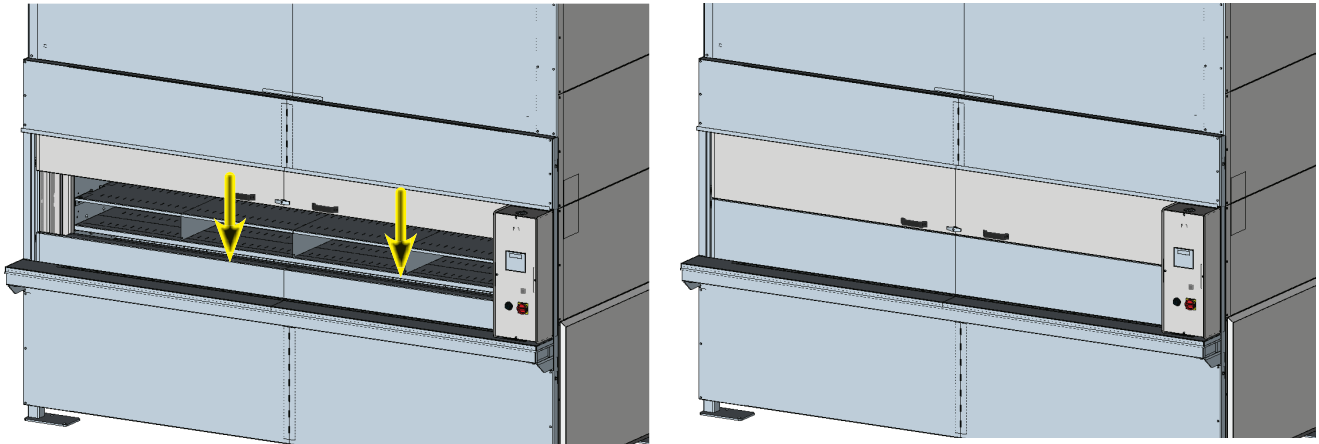
BALANCED LOAD



# OPERATING INSTRUCTIONS

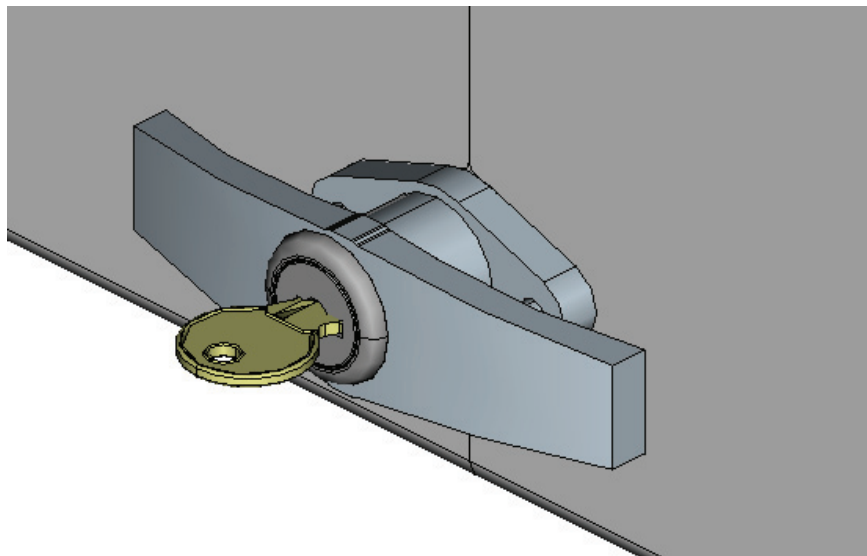
## Carousel Bi-Parting Door Option

The pan carousel is available with a bi-parting lockable security door.



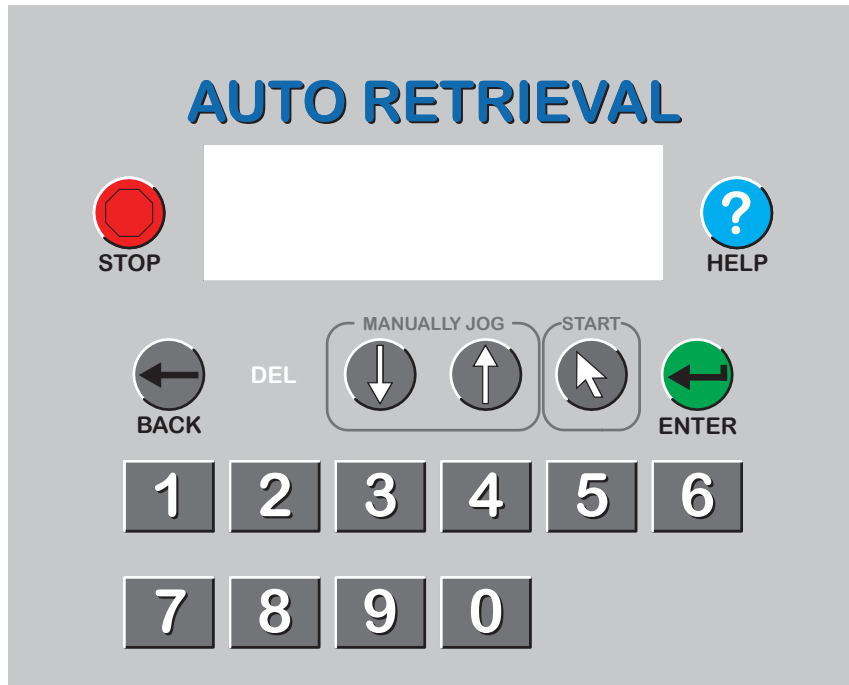
To lock the door:

The T-handle is rotated 90 degrees to engage a 2 point locking system. A keyed cylinder is used to lock the handle in position when the 2 locking points are engaged.



## Auto-Retrieval Console Option (v5)

This machine is equipped with an advanced 16-bit microprocessor P.L.C. unit and a user-friendly interface to facilitate operations. Simply enter your desired shelf and watch the machine do the work for you.



Red Key - Stop auto-retrieval, Reset fault, Move cursor left

Green Key - Start auto-retrieval

Manually Jog (Up arrow) - Manually jog carousel up, Increment data

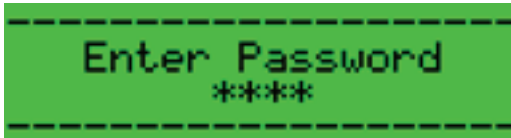
Manually Jog (Down arrow) - Manually jog carousel down, Decrement data

Blue Key - Access Help Menu, Move cursor right

Grey keys-Data entry

## Password Protection Option

Unless this option is disabled from the Master Menu, this feature will be active. This unit is equipped with a "Password Protection" feature. Every time the machine is turned off or is unused for a user-defined time, the machine prompts the user to:



To enter the password press:

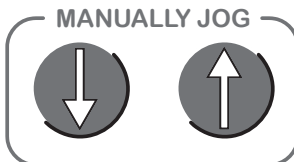


(The factory default is 4321)

You have now gained access to the machine and may select your desired shelf.

## Manual Operation

To operate the machine manually after entering the password press:



## Automatic Operation

To have the machine automatically retrieve your desired shelf (i.e. 14) press:



Your carousel is now travelling to the desired shelf. To stop carousel at any time, press:

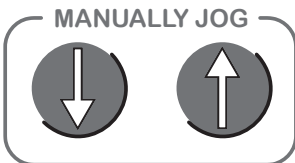


## Help

Helpful information specific to each screen is stored in the display. To access the help functionality at any time, press:



To view scroll the help text up and down, use the arrow keys.



To go back to the previous screen press:



## Master User's Menu

This unit may be better tailored to suit the user of the machine. To bring up the master user menu at the same time press:



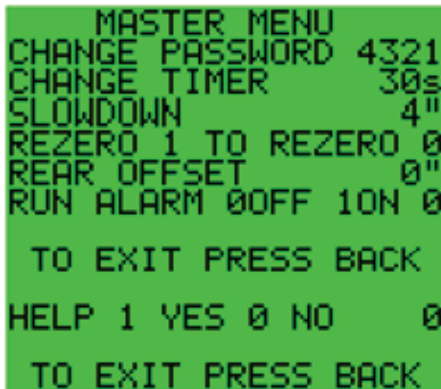
The following will appear:



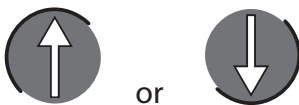
To enter the master password press:



The following then appears:



To navigate through the full list press:



To change a setting, press:



until the appropriate setting is flashing with a box a highlighting it.

## Master User - Change Password

This machine is equipped with password protection. It enables the user to enter a password before using the machine.

To change the password that is used to access your machine (i.e. 1234) press:



## Master User - Change Timer

This machine is equipped with a timer that forces a user to re-enter a password if the machine is inactive for a pre-determined amount of time. The value can be from 1-999 seconds. If a value of 0 is entered the password is rendered inactive.

To change the timer value (i.e. 135 seconds) press:



NOTE: Factory preset is 120 seconds. If the machine will be located in a publicly accessible location we recommend a time of 30 seconds. The manufacturer or its agents cannot be held responsible for any injuries to anyone of any kind howsoever caused. The operator is solely responsible for safe operations and mechanical and electrical condition of the machine at all times.

## Master User - Slowdown

This machine is equipped with a slow down setting that slows the carousel down prior to coming to a complete stop. This reduces the amount the carousel can over-travel the desired location. The setting is in inches.

To change the slowdown value (i.e. 6 inches) press:





## Master User - Re-Zero

Upon initial setup and over time the carousel may need to be re-zeroed. To accomplish this line up the highest numbered shelf on the carousel to your desired pick height. When you have reached it access the master menu as described above.

To re-zero the carousel press:



## Master User - Rear Offset

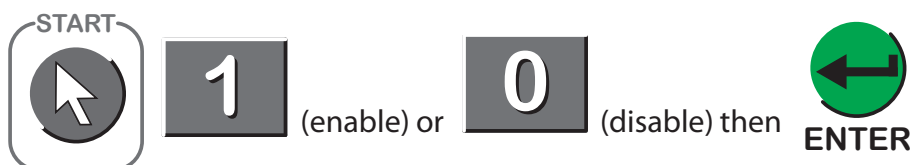
The rear offset is the shortest distance, in inches of chain travel, between the front and rear auto-retrieval destinations. This setting is not applicable if the machine has no rear access.

To change the rear offset value (i.e. 12 inches) press:



## Master User - Run Alarm

To enable/disable the persistent beep that is heard when operating the machine. Press:



## Master User - Help

If the keypad has a help button then set 1 for yes and if there is no help button set 0.

## Error Messages



To clear this error, remove any items in the path of the safety light curtain, then press ENTER to return to the previous screen.

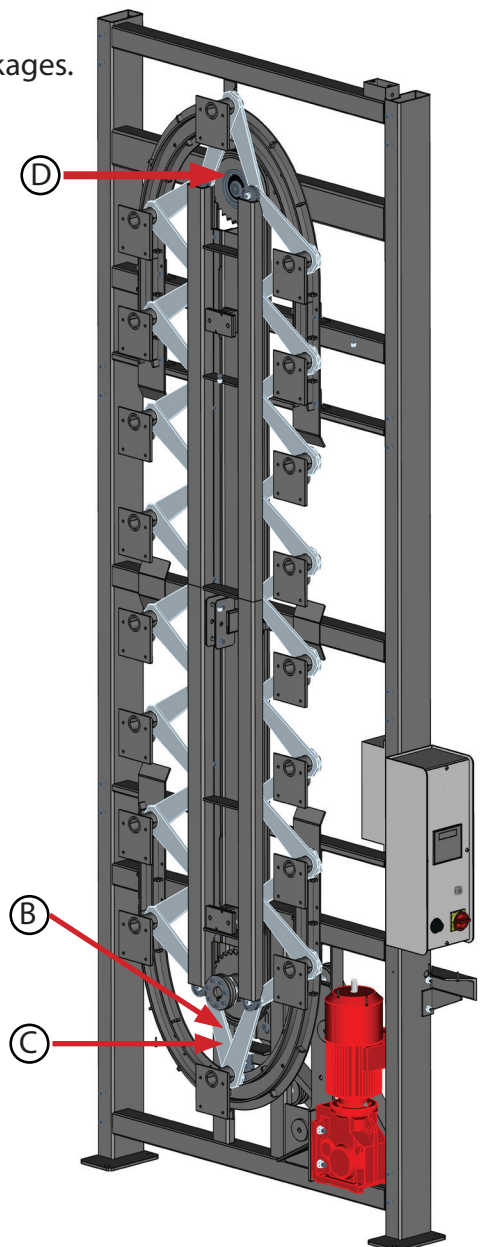
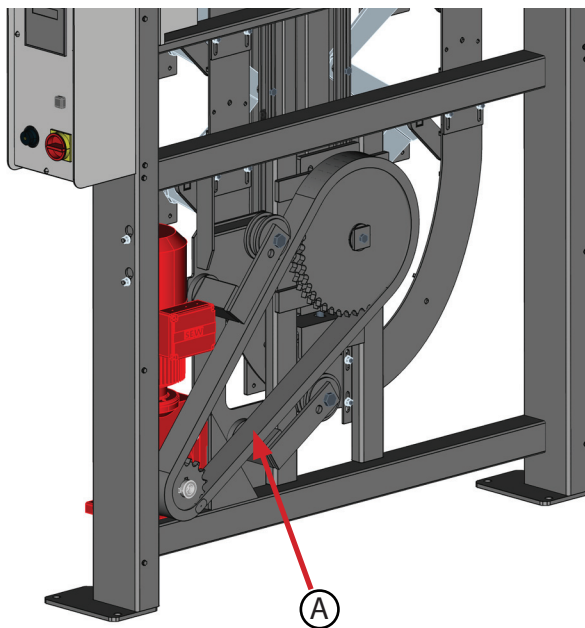
To avoid encountering this error, do not break the light curtain beam while the machine is moving, or attempt to start the machine while the light curtain beam is blocked.

# MAINTENANCE

## Maintenance Procedures

1. To correct squeaking, oil with lightweight W30 oil.
2. Check for oil leaks around gearbox.
3. Inspect drive chain (A) for wear, proper alignment, and tension (Slack adjusters to take-up chain slack).
4. Inspect main load chain (B) and tighten if it is too loose. (With the carousel loaded, the chain should not sag away from the bottom sprocket at all. See diagram for location of tightening bolt (C)). Bottom track must also be moved down if chain is adjusted.
5. Do a visual inspection of arms and linkages. Ensure they are not bent or damaged.
6. Inspect the snap rings (D) that hold the sprockets in place. Make sure snap rings are fully snapped into position.
7. Inspect all bearings including the ones on the arms and linkages.

**NOTE: Oil the chains with light weight W30 oil.**  
**- apply oil to chain using an oil soaked sponge**  
**- Wipe with dry rag to remove excess oil.**



## Pan Carousel Preventative Maintenance & Inspection Checklist

Company	City	Province	Date
Store No.	Serial No.	Model/Type	
Current Hour Meter Reading			
Service Company:		Store Signoff:(Print)	
Service Technician (Print):		Store Title:	
Service Tech Signature:		Store Signature:	

Check: **INSPECTION** (complete inspection line items only)  or  
 PM PREVENTATIVE MAINTENANCE (complete all inspection & PM line items)

**Preventative Maintenance is Recommended Every 100 Hours or 12 Months. Inspect both sides of the machine.**

The inspection of all hooks, bolts, pins, mounting hardware, chains and the overall condition of these components are critical to ensure machine safety, and integrity of the preventative maintenance process. Initialling each line as indicated below confirms these items have been thoroughly inspected for defects.

	✓ Indicates item is inspected and in good condition ✘ Indicates item requires additional service	Service	Initials
INSPECTION	- Verify drive chain and sprocket alignment and proper slack adjuster function, adjust as needed.		
	- Visually inspect bearing and fasteners for damage and general condition.		
	- Check all sprocket set screws are tight and sprockets have not moved.		
	- Visually inspect load chain for wear and damage; tighten and lube as required; note: lower guide track will also need adjusting if chain is adjusted.		
	- Inspect sprocket set screws to ensure they have lock-tight applied to the threads and are tight.		
	- Check the chain connector link cotter pins for wear.		
	- Check condition of pan arms and rollers.		
	- Inspect drive chain and sprockets for debris - clean debris as necessary.		
	- Check pan alignment plates, adjust if needed.		
	- Inspect sprocket set screws to ensure they have lock-tight applied to the threads and are tight.		
	- Verify drive sprocket alignment and proper tension of drive chain.		
	- Ensure all covers and guarding are in place and secure.		
	- Ensure there are no foreign objects projecting into the machine operating path.		

Required Components

**Application .. Description**

- Gear box .....80/90 W oil
- Chain .....30W oil
- Spray can of lithium grease

**Conclusion:** This unit has been inspected and serviced for safe operation and is operating as intended by the manufacturer.

Comments and Parts Used (If any): \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

## Pan Carousel Preventative Maintenance & Inspection Checklist

Company	City	Province	Date
Store No.	Serial No.	Model/Type	
Current Hour Meter Reading			
Service Company:		Store Signoff:(Print)	
Service Technician (Print):		Store Title:	
Service Tech Signature:		Store Signature:	

Check: **INSPECTION** (complete inspection line items only)  or  
 PM PREVENTATIVE MAINTENANCE (complete all inspection & PM line items)

**Preventative Maintenance is Recommended Every 100 Hours or 12 Months. Inspect both sides of the machine.**

The inspection of all hooks, bolts, pins, mounting hardware, chains and the overall condition of these components are critical to ensure machine safety, and integrity of the preventative maintenance process. Initialling each line as indicated below confirms these items have been thoroughly inspected for defects.

	Description	Service	Initials
<b>INSPECTION</b>	✓ Indicates item is inspected and in good condition		
	✗ Indicates item requires additional service		
	- Ensure front table mounting hardware is secure to machine (if equipped).		
	- Ensure loctite is on set screw threads for the drive sprocket. Ensure key is in place and sprocket is in alignment.		
	- Verify all bolts, and nuts for tightness (visual).		
	- Visually inspect load chain sprockets for wear, mis-alignment or tilt (without removing covers).		
<b>PM</b>	- Instruct all operators and managers how to load carousel correctly.		
	- Inspect motor/gearbox mounting bolts, ensure they are secure.		
	- Check gearbox for oil leaks and check/add oil as needed.		
	- Check and lube all pan arms and pivot points.		

- Required Components
- Application .. Description**
- Gear box .....80/90 W oil
  - Chain .....30W oil
  - Spray can of lithium grease

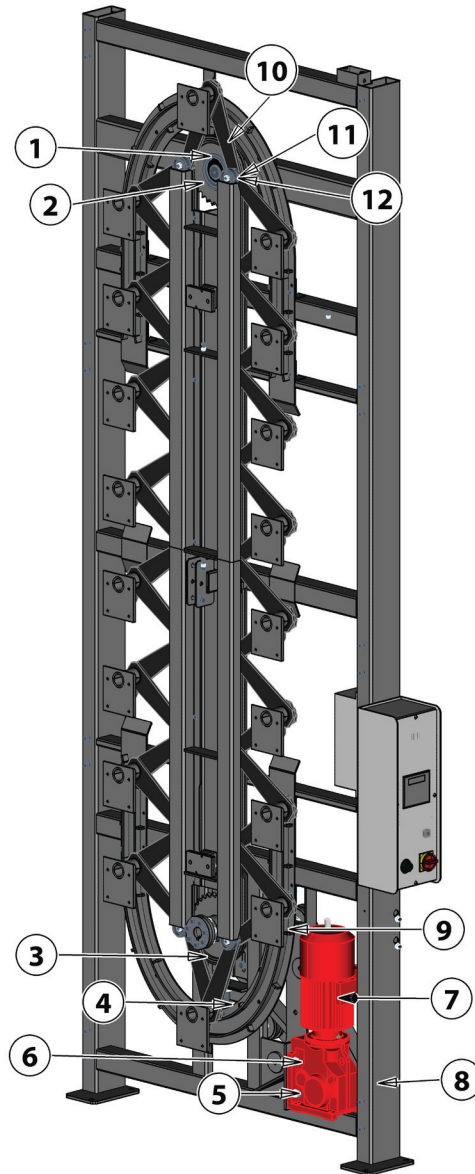
**Conclusion:** This unit has been inspected and serviced for safe operation and is operating as intended by the manufacturer.

Comments and Parts Used (If any): \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Fax completed form to 1-204-364-3072 Attn: Service Manager or e-mail to service@vidir.com



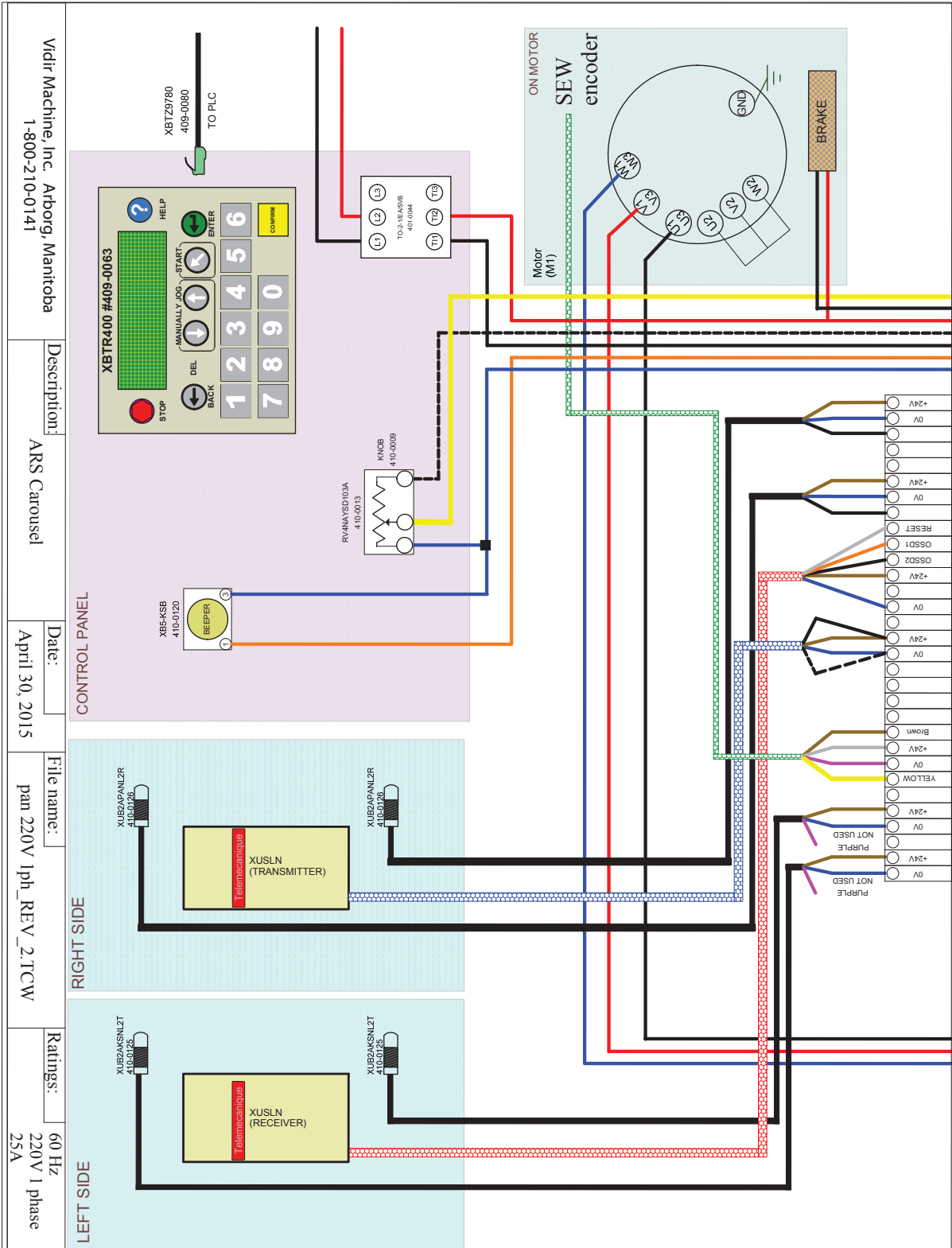
Item#.....	Description .....	Part
1.....	Ring snap int. 4-3/8 #R3000 .....	116-0021
2.....	.80C30 6310 sprocket with bearing .....	2-57020
3.....	*Chain, pan crsl 18x12x18 .....	2-68173
4.....	3/4 X 5 hex bolt full thread gr5 unc.....	001-0181
5.....	1/2 Flange nut gr5 unc004-0017 .....	
6.....	1/2 X 2 1/2 hex bolt gr5 unc.....	001-0149
7.....	SEW motor/gearbox assembly .....	407-0053
8.....	Pan drive chain 18x122-65227 .....	
	..... Pan drive Chain 24x18.....	2-65226
9.....	Sprocket d80b42 x 1-5/8 kw 2ss.....	120-0177
10.....	Plate, load arm 18x12 mkll.....	2-63296
	..... Plate, load arm 24x18 mkll .....	2-64061
11.....	Pan chain load bushing.....	2-57875
12.....	Chain guide wheel pan .....	2-57981
	not shown .2" external snap ring .....	116-0006

\*Please call Vidir Service with machine model number, and serial number to verify correct part #.

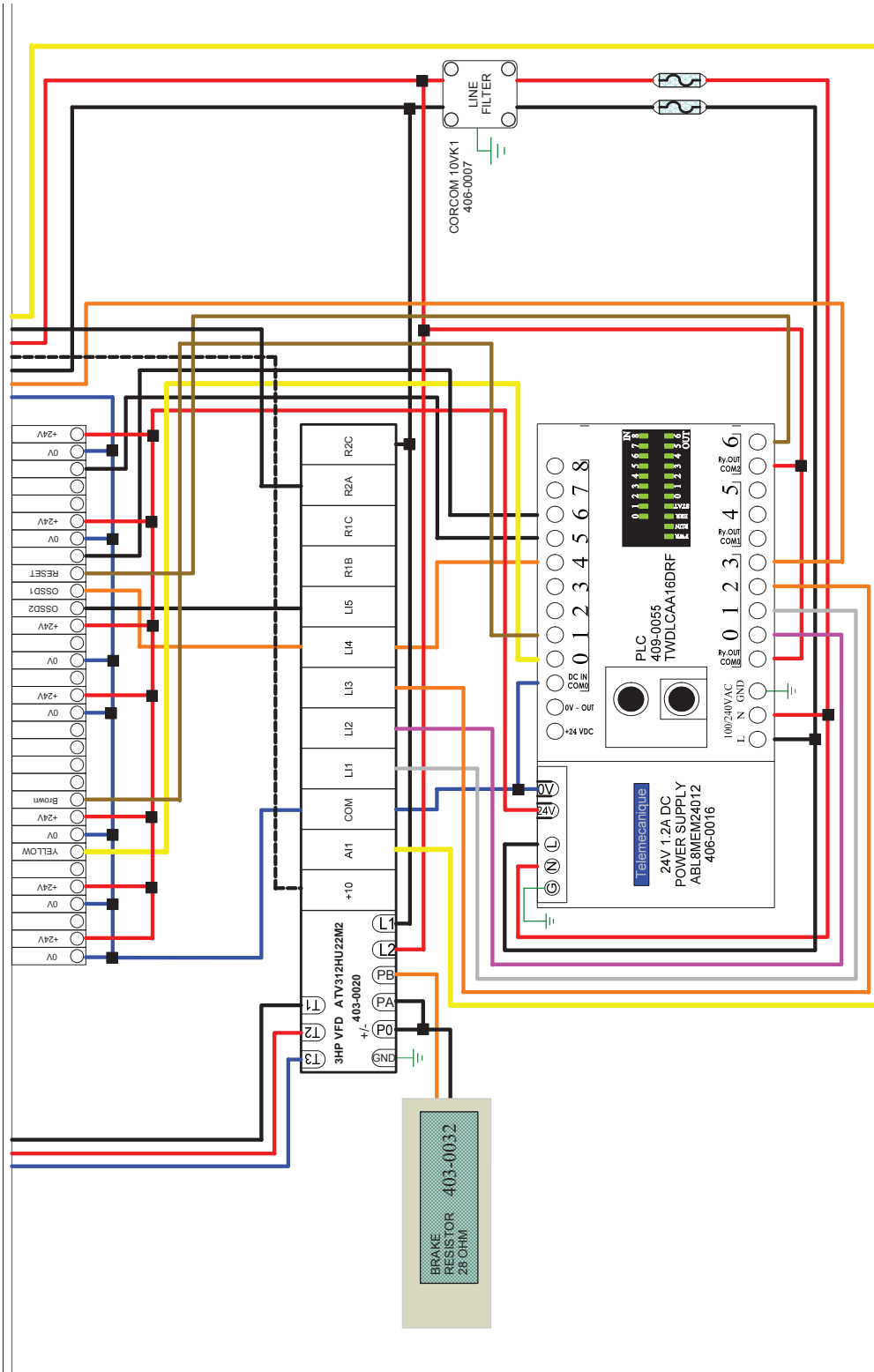
Symptoms/Problems	Solution
Carousel will not run.	<ul style="list-style-type: none"> <li>A. Re-enter the security code.</li> <li>B. Check if the master switch is on.</li> <li>C. Check and reset circuit breaker.</li> <li>D. Make sure the machine load is evenly balanced.</li> </ul>
Motor Lugs down or breaker trips.	<ul style="list-style-type: none"> <li>A. Make sure machine load is evenly balanced.</li> <li>B. Check and reset circuit breaker.</li> </ul>
Carousel is noisy.	<ul style="list-style-type: none"> <li>A. Have machine inspected if it makes excessive noise.</li> <li>B. Check for correct pan alignment.</li> </ul>

NOTE: If a PLC is Present:

- The Large PLC requires 2 amp Fuses
- The Large PLC will be used in Carousels which MAY or WILL HAVE a computer used in conjunction with them.







ELECTRICAL BOX

Description: Pan Carousel 220 Volt 1 Phase 1-800-210-0141	Date: April 30, 2015	File name: pan 220V 1ph_REV_2.TCW	Ratings: 60 Hz 220V 1 phase 25A
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## **WARRANTY & LIABILITY**

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### **Vidir Machine Inc. Warranty Agreement and Limitation of Liability**

1. Vidir Machine Inc. ("Vidir") warrants solely that the equipment shall be free from any defect due to faulty workmanship or material deficiency at the time of delivery to the buyer thereof (the "Buyer") and for a period of one year therefrom.
2. All work except minor repairs or adjustments to the equipment furnished on an emergency basis, will be performed during regular working hours. If the Buyer requests that repair work be performed outside of regular working hours, it is the responsibility of the Buyer to pay the difference between regular and premium labour rates at the then standard hourly billing rate.
3. This warranty shall be voided by any modifications to the equipment or any use of the equipment for any purpose other than that for which it was specifically intended.
4. This warranty is the only warranty made by Vidir. The Buyer hereby expressly waives any obligations or liability, including liability for loss or damages due directly or indirectly, any obligations including, without limitation, loss of use, revenue, or profit, shipping and handling, and injury to person or property.
5. It is the responsibility of Buyer to know, understand and comply with the work and safety laws and regulations in effect and governing Buyer's use of the equipment. To the extent governing law requires inspections, records keeping and/or after-purchase modifications to the equipment, it is the responsibility of the Buyer to arrange for and comply with such requirements and any associated costs are the sole responsibility of the Buyer. Vidir assumes no responsibility or liability for Buyer's performance under or compliance with such laws and regulations.
6. If the equipment is found by the Buyer to be defective, the Buyer must notify Vidir within a period of 30 days of discovery of the defect.
7. The Buyer is expected to provide access to all equipment covered by this warranty. Vidir shall not be responsible for any expense incurred in removing, replacing, or refinishing any part of the building structure necessary for the performance of Vidir's obligations under this warranty.
8. In the event that any alterations, additions, adjustments or repairs are made by others without Vidir's prior written consent, Vidir may, at its option, immediately terminate this warranty by providing written notice to the Buyer.
9. In the event Vidir is required to make emergency calls, repairs and/or replacements under this warranty occasioned by the Buyer or any user's negligence, improper operation or misuse of the equipment or by fire, explosion, flooding, the elements, strikes, labour troubles, vandalism, riots or civil commotion, or by any cause beyond Vidir's control. The Buyer shall reimburse Vidir for such emergency calls, repairs and/or replacements in accordance with the then current rates for such services.
10. Vidir's liability for injury to persons or property shall, in any event, be limited to that caused directly by its negligence. Vidir shall not be liable, however, on any account, for any damage or loss to the Buyer or its dealers, representatives, affiliates or agents resulting from business interruption, inconvenience, loss of profits, or special or, indirect or consequential damage. Vidir shall not be deemed to guarantee or warrant the continuing operation or operating efficiency of the equipment covered, nor shall Vidir be liable for any breakdowns thereof or for any damage to any other property of the Buyer not covered by this warranty but resulting from any breakdowns in or operating mishaps of the equipment covered.
11. Should any payment due by the Buyer become thirty days or more delinquent, Vidir may terminate this warranty by written notice, and all moneys owed Vidir shall be immediately payable on demand.
12. This warranty is not transferable or assignable by the Buyer.
13. Vidir reserves the right to determine, in its sole and absolute discretion the best means and methods to be employed for any corrective or repair work deemed necessary by Vidir pursuant to this warranty.