

# **USER'S MANUAL**



Designed by Pig Breeders for Breeders



# Agro-Technological Products and Solutions www.ro-main.com

© All rights reserved. No copy or reproduction in whole or in part of this manual may be reproduced by any means without prior written consent of **RO-MAIN**. For any information about Patents, Patent Pending, Intellectual Property and Trademarks, please contact **RO-MAIN**, Agro **Technological Development**.

# TABLE OF CONTENTS

SECTION 1 – INTRODUCTION			
SECTION 2 – CAUTION & WARNING			
2.1	SAFETY MEASURES	7	
SECTIC	N 3 – OPERATION INSTRUCTIONS	9	
3.1	GETTING STARTED	9	
3.2	BOAR LOADING PROCEDURE	11	
3.2	$\partial$		
3.2	or of the second s		
3.3	SOW STIMULATION		
3.4	UNLOADING THE BOAR AND PARKING THE CART		
	ON 4 – COMPONENTS		
4.1	ITEMS SUPPLIED WITH YOUR CONTAC-O-MAX SR.		
4.2	STAINLESS STEEL BOX		
	.1 Emergency button		
4.3	BATTERY CHARGER		
4.4	CART BATTERY		
4.5	ELECTRONIC BOX		
4.6	MANUAL CONTROL		
4.7	ANTENNA		
4.8	REMOTE CONTROL		
	.1 Remote control #6 and #7 programming instructions		
4.9	ADJUSTABLE WINDOW ROD		
4.10	NON-SKID FLOOR PLATES	22	
4.11	WINDOW PANEL	23	
4.12	CROSSBAR		
4.13	ARTICULATION		
4.14	BRAKE/STEERING SYSTEM	25	
SECTIC	N 5 – WASHING AND MAINTENANCE	26	
5.1	WASHING	26	
5.2	MAINTENANCE	27	
5.2			
5.2			
5.2			
5.3	NYLON ROLLER ADJUSTMENT		
5.4	DRIVE CHAIN ADJUSTMENT	32	

5.5	BRAKE/STEERING SYSTEM ADJUSTMENT	33
5.6	ΓIRE/WHEEL REPLACEMENT	34
SECTION	N 6 – TROUBLESHOOTING	35
6.1	F YOUR CONTACT-O-MAX SR. DOES NOT PERFORM AS IT SHOULD	35
6.1.1	Check the Battery Voltage	35
6.1.2	2 If voltage runs lower than 11.5 volts	35
6.1.3	Replace Remote Control Batteries	36
6.1.4	Voltmeter Connection	36
6.2 l	POOR DRIVE MOTION	36
6.3	F YOUR CONTACT-O-MAX SR. MOVES TOO SLOWLY AND PULLS TO ONE SIDE	36
SECTION	N 7 – SPARE PARTS	37
LIMITED	WARRANTY	38

# **SECTION 1 – INTRODUCTION**

#### CONGRATULATIONS for choosing the CONTACT-O-MAX Sr. Boar Cart.

Your CONTACT-O-MAX Sr. is a very easy to use and safe remote-controlled boar cart. It is motorized to easily transport the boar from sow to sow, permitting direct, efficient and sustained snout-to-snout contact, to optimize post-weaning and AI sow stimulation. Moreover, it allows a single operator to easily and efficiently perform by himself all the tasks of sow and gilt stimulation, heat detection, insemination, and heat return check.

This revolutionary leading edge sow stimulation and heat detection technology was invented and developed in 1997, by experienced hog breeders from Quebec, Canada, and since then, this amazing product has known remarkable success in a very large number of pig barns around the world.

Your CONTACT-O-MAX Sr. sturdy stainless steel structure and top quality mechanical, electrical and electronic components, require only a minimum of maintenance, and ensure many years of efficient and worry-free use.

Your CONTACT-O-MAX Sr. is highly maneuverable and easily turns 90° alley corners, passing from a 30" alley to another 30" alley (76 cm X 76 cm).

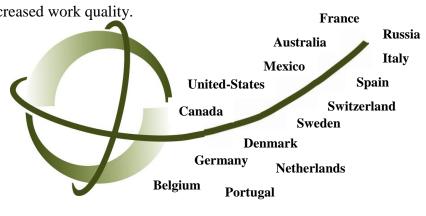
Your CONTACT-O-MAX Sr. is also suitable for carious alley dimension combinations, for example, passing from a 24" alley to a 36" one (61 cm X 91 cm).

#### Maximum Efficiency

- Quick post-weaning sow stimulation, requiring only 10 to 15 seconds per sow, twice a day.
- Precise determination of the beginning and end of heat cycles.
- Easy early detection of heat returns.
- Significant decrease of unproductive days.
- Increased fertility rates.
- Improved working techniques.

#### Maximum Profitability

- Decreased working hours and increased work quality.
- Decreased accident risks.
- Decreased staff training time.
- Decreased weekend labor.
- One single worker operation.
- Quick payback.



Nov.-09

This manual contains preventive safety measures that must be strictly respected to prevent accidents or serious injuries when using your CONTACT-O-MAX Sr. boar cart. Moreover, this instruction manual explains how to avoid damages to the cart or its components. It also offers useful recommendations that will permit you to get a maximum of results from your boar cart.

Before using it for the first time, make sure that all users have read this manual and its safety measures attentively. We suggest that you keep it accessible to everyone at all times. In the event that your CONTACT-O-MAX Sr. should be moved to another barn, it is imperative that this manual accompanies the cart. Take note that the information, specifications, photos and drawings contained in this manual are subject to change without prior notice.

It is very important that you become familiar and that you thoroughly understand the following warning and caution symbols that appear throughout this manual:



STOP: This symbol indicates an important safety message. Read carefully all safety measures to prevent accidents or serious injuries.



WARNING: This symbol indicates that misuse or improper handling of the product may cause damages to your boar cart and, or its components.



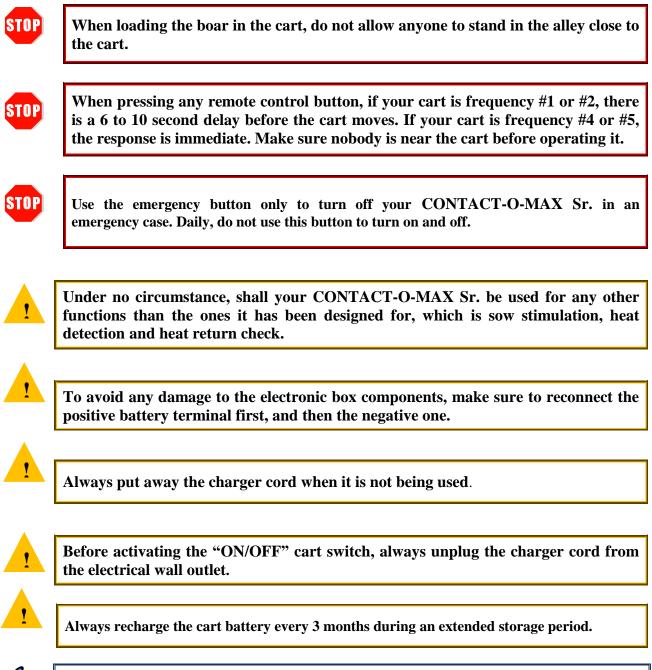
NOTE: This symbol indicates a useful recommendation.

# 2.1 SAFETY MEASURES

The following safety measures are important to prevent accidents or damages to your boar cart.

Always recharge the cart battery in a dry and well ventilated area.
Your CONTACT-O-MAX Sr. must only be operated by qualified personnel who have read this manual, received proper training, and who have become familiar with its safety measures.
Familiarize yourself with all the functions of the cart before using it.
Communicate all these safety measures and operation instructions to all personnel who will be using the cart.
Never allow a child or any untrained adult to operate your CONTACT-O-MAX Sr.
Make sure that alleys are unobstructed and that there is no one in the way, when the cart is being operated.
To avoid serious injuries, never put your hands or feet in the cart when the boar is inside.
Before performing repairs or preventive maintenance on your boar cart, make sure to work from a dry floor, and always disconnect the negative battery terminal first, and then the positive one.
Always wear protective clothing and safety glasses when washing the cart or performing maintenance procedures.

# **SECTION 2 – CAUTION & WARNING**



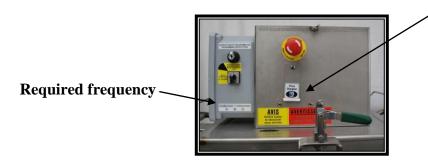
For the well-being of the boar, always return it to its pen immediately after heat stimulation or detection.



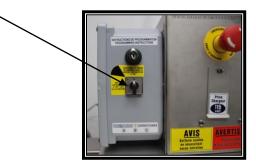
Before using your CONTACT-O-MAX Sr. for the first time, adjust the lateral nylon rollers (see section 5.3) to prevent the cart from catching and bouncing against the stalls.

#### 3.1 GETTING STARTED

1) Disconnect the charger cord, put it away, and close the charger outlet cover.



2) Turn "*ON*" the cart switch (key switch is optional).



3) Press remote or manual control *"Forward" (B)* or *"Backward" (A) button* to operate the cart, and simply release button to stop.



(See section 4.6)



Nov.-09



When pressing any remote control button, if your cart is frequency #1 or #2, there is a 6 to 10 second delay before the cart moves. If your cart is a frequency #4 or #5, the response is immediate.

> Make sure nobody is near the cart before operating it.



To avoid any damage to the charger cord or to the charger outlet, it is recommended to pull the plug instead of the cord, when disconnecting the charger.



When a remote control is lost or becomes defective, you may still operate the cart, using its manual buttons.

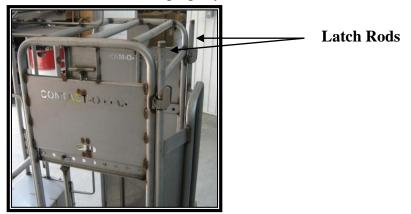


# **SECTION 3 – OPERATION INSTRUCTIONS**

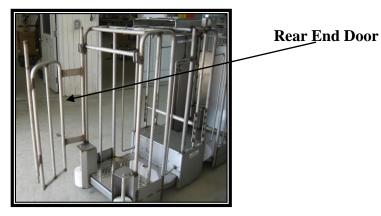
#### **3.2 BOAR LOADING PROCEDURE**

#### 3.2.1 Boar Loading

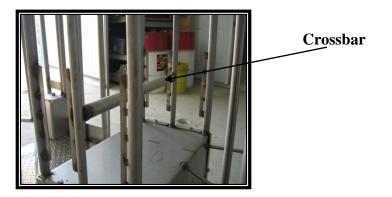
- 1. Bring your CONTACT-O-MAX Sr. close to the boar pen gate.
- 2. Make sure front door is properly latched.



3. Open **rear end door wide open**. Make sure the door will not close by itself when the boar approaches the cart to board it.

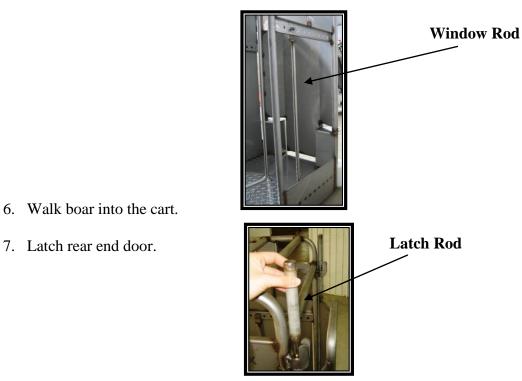


4. Remove spring-loaded crossbar. (section 4.12)

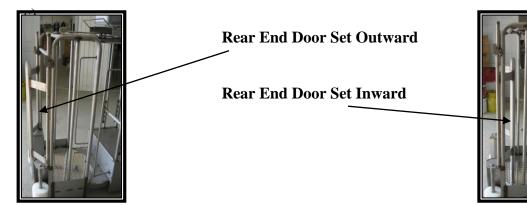


# **SECTION 3 – OPERATION INSTRUCTIONS**

5. Adjust window rod to optimize boar snout exposure. (section 4.9)



- a) For a large boar, install the rear end door outward, as illustrated (left).
- b) For a small boar, install the rear end door inward, as illustrated (right).



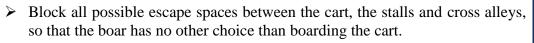
8. Install **crossbar** to prevent the boar from lying down.



#### 3.2.2 First-Time Boar Loading Tips

To make 1<sup>st</sup> time boar loading easier:

- Two days prior to loading, move the boar to a stall for acclimation to more limited space.
- The second day, reduce the boar's morning feed portion, and spread some feed on the floor of the boar cart.
- Bring the boar cart to the boar stall.
- Open both rear and front end doors. Make sure that the doors will not close by themselves when the boar approaches the cart to board it.
- Remove the window panel (section 4.11) to avoid that the boar feels trapped, and also remove the crossbar that prevents the boar from lying down (section 4.12).
- Adjust the window rod (section 4.9) to optimize boar exposure, without permitting it to escape through this opening.



- Slowly walk the boar into the cart, and with the help of another employee, gently close the front and rear end doors at the same time.
- ➢ If the boar is nervous, wait until it calms down before operating your CONTACT-O-MAX Sr.

# On the 2<sup>nd</sup> or 3<sup>rd</sup> day, the boar will easily board your CONTACT-O-MAX Sr. and will enjoy the ride.

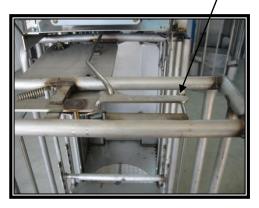


Make sure that nobody stands in the alley or near your CONTACT-O-MAX Sr. during the boar loading procedure, or when the cart is being operated.

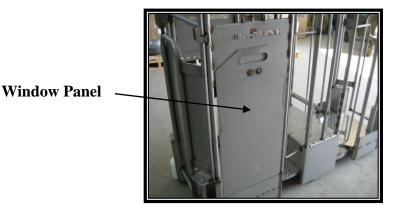
# 3.3 SOW STIMULATION

You are now ready to proceed to post-weaning stimulation, heat detection and stimulation during insemination, or heat return check.

- 1. Bring your CONTACT-O-MAX Sr. to the breeding section.
- 2. Before turning any alley corner, **unlock the cart articulation system**.



3. Position the **window panel** (section 4.11), to block the boar's view on the side opposite to the sows you wish to stimulate.



- 4. Turn the selected alley corner and **align the cart** alongside the first stalls.
- 5. Once properly aligned, lock the articulation system.
- 6. Stimulate one sow at a time, allowing for a good sustained 10 to 15 second **SNOUT to SNOUT contact.** We also recommend the use of the insemination saddle on the back of the sow, when a more thorough stimulation is required.

# **SECTION 3 – OPERATION INSTRUCTIONS**

#### 3.4 UNLOADING THE BOAR AND PARKING THE CART

- 1. First, remove the **crossbar** (section 4.12).
- 2. Unlatch and open the front door.
- 3. **Unload** the boar.
- 4. **Put back** the crossbar into place.
- 5. **Park** your CONTACT-O-MAX Sr. where required. Leave the remote control and the insemination saddle with the cart.
- 6. **Turn "OFF"** the cart switch.
- 7. **Plug in** your CONTACT-O-MAX Sr. charger until next use.



Your CONTACT-O-MAX Sr. is not a stall. For the well-being of the boar, always return the boar to its pen immediately after the stimulation and heat detection process.



# 4.1 ITEMS SUPPLIED WITH YOUR CONTAC-O-MAX SR.

The following items are supplied with your CONTACT-O-MAX Sr., at time of delivery:

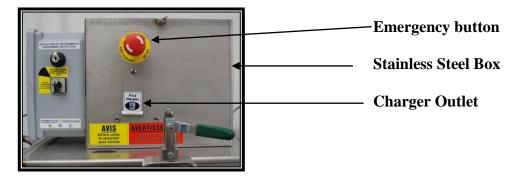
- ➢ 1 User's Manual
- I Quick-Start operation instructions sheet (plasticized)
- 1 Insemination saddle
- 2 Remote controls
- 2 Remote control battery sets(3 per set)
- ➤ 1 Window panel
- > 1 Spring-loaded crossbar (to prevent boar from lying down)
- ➢ 1 Charger cord
- > 2 Window rods (to prevent boar from escaping)



# **Read carefully your User's Manual before using your CONTACT-O-MAX Sr.** for the first time.

### 4.2 STAINLESS STEEL BOX

The stainless steel box contains the charger and the cart battery and the emergency button..



#### 4.2.1 Bouton d'urgence

Push firmly on the button to stop all movement and power of your CONTACT-O-MAX Sr. To activate the emergency button, turn the button to the right until the release of the button.



Use the emergency button only in an emergency case or non-response of your remote control and / or of the manual forward / backward button. Daily, do not use the emergency button to turn on and off the CONTACT-O-MAX Sr.

#### 4.3 BATTERY CHARGER

This **115V/230V built-in charger** supplies current to a 12 V gel battery (5 amps).







**Charger Cord Types:** 







European

North American

Australian

Your CONTACT-O-MAX Sr. battery charger stops charging automatically when the battery is fully charged, which eliminates any risk of battery overcharge.

#### Warning LED's

The yellow LED goes ON when the battery is charging.

The green LED stays ON when the battery is completely charged.

The green LED flashes when the battery is not connected, or not properly connected.



Warning LED's

Always leave the charger plugged in when your CONTACT-O-MAX Sr. is not being used, and make sure the cart switch is turned "OFF".



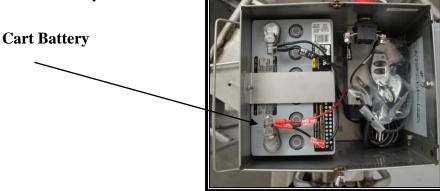
- > Always unplug the charger before turning "ON" the cart switch.
- > Always unplug the charger before washing, moving, repairing or performing maintenance on your CONTACT-O-MAX Sr.



To avoid any damage to the charger cord or to the charger outlet, it is recommended to pull the plug instead of the cord, when disconnecting the charger.

#### 4.4 CART BATTERY

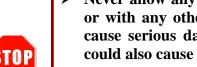
Your CONTACT-O-MAX Sr. 12 V gel battery is maintenance free and allows for 10 to 15 hours of autonomy.





Before charging the battery for the first time, read carefully the safety measures on the battery.

Never run down your CONTACT-O-MAX Sr. battery.



- > Never allow any contact of battery terminals with the stainless steel box or with any other conductive material. A short-circuit could arise and cause serious damages to the electrical or electronic components, and could also cause serious personal injuries.
- Make sure to not reverse terminal connection when replacing the battery.



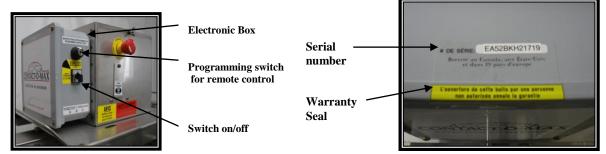
Always replace your CONTACT-O-MAX Sr. battery by one of origin, to maintain the same performance and to avoid damages to other components.

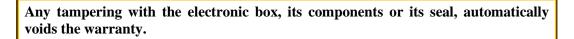


Always recharge your CONTACT-O-MAX Sr. battery every 3 months, during an extended storage period.

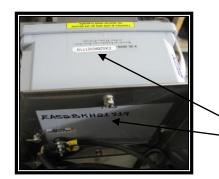
# 4.5 ELECTRONIC BOX

The plastic **electronic box** is sealed and waterproof. It is anchored to the back of the stainless steel box and controls all your CONTACT-O-MAX Sr. functions. (key switch is optional).

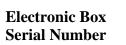




It may occur that the serial number shown on the electronic box is different from the one found inside the stainless steel box, because the electronic box has been replaced over the years. In this case, always refer to the **original serial number** shown inside the **stainless steel box**, to identify matching cart components for after sales service, or when ordering spare parts.



Original Cart Serial Number

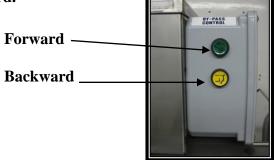




# 4.6 MANUAL CONTROL

2

These buttons located on the electronic box side can also be used to move the cart **forward** or **backward**.



# 4.7 ANTENNA

On frequency #6 or #7 carts, the antenna is nested inside the plastic electronic box, and on frequency. It transmits remote control signals to the electronic box.

## 4.8 **REMOTE CONTROL**

Your remote control allows you to easily move your CONTACT-O-MAX Sr. from sow to sow, for stimulation, heat detection, insemination, and heat return checks.

Frequency #



Your 4-button remote control features 2 forward buttons that control the same function, and 2 backward ones. This type of remote control is exclusive to frequency #6 or #7 carts.

You can use in the same building, up to 3 CONTACT-O-MAX Sr. of the same frequency either #6 or #7. Each remote is paired with its own CONTACT-O-MAX Sr. You can use in the same building, up to 6 CONTACT-O-MAX Sr; 3 frequency #6 and 3 frequency #7. If you need more than 6 CONTACT-O-MAX Sr. contact your dealer or Ro-Main directly.

#### Backward Forward

#### 4.8.1 <u>Remote control #6 and #7 programming instructions</u>

#### **Programming:**

- 1. Turn switch "ON".
- 2. By using the programming switch, turn the key to the far right and hold it in position for 3 seconds. Then release.
- 3. Immediately press and hold any button on the remote control for 3 seconds. Then release.
- **4**. Wait 10 seconds before using the remote control again.
- **5**. Repeat these steps for all remote control programming with either frequency 6 or 7 associated with your Contact-O-Max.

#### **Deprogramming:**

- 1. Turn switch "ON".
- **2**. By using the programming switch, turn the key to the far right and hold it in position for 3 seconds. Then release.
- **3**. Wait 3 seconds without touching any button.
- **4**. Turn the key to the far right and hold in position for 3 seconds. Then release.
- **5**. Wait 10 seconds and all remotes control will be deprogrammed.



Respect the times allowed.



Keep remote controls dry and dust-free at all times.

- Avoid pressing too hard on your remote control buttons to avoid premature wear.
- > Never place your remote control in lower coverall pockets, to avoid accidental crushing against stalls.
- > Replace remote control batteries when signal becomes weak, or when the cart does not respond properly.



It is recommended to use your remote control on supplied neck string to prevent accidental dropping.

#### 4.9 ADJUSTABLE WINDOW ROD

The **window rod** prevents the boar from escaping through the cart window. The opening must be large enough to allow a good snout to snout contact with the sows, and for maximum stimulation through the pheromones contained in the boar's saliva.

#### Adjustable Window Rod

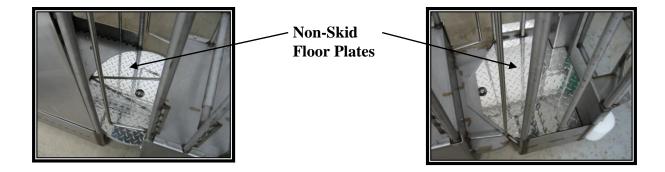


**Slanted stalls** require a larger opening of the cart window, to allow for good snout to snout contact between the boar and the sow.

#### 4.10 NON-SKID FLOOR PLATES

2

These **non-skid aluminum floor plates** allow for better boar feet stability.



# 4.11 WINDOW PANEL

This **panel** is designed to focus the entire boar's attention on one sow at a time, and to prevent undesired stimulation of nearby sows across the alley. It efficiently limits the boar's view field to optimize direct snout to snout sow stimulation.

The **panel** must be installed on the window opposite to the side where the boar needs to stick out its snout to stimulate the sows.



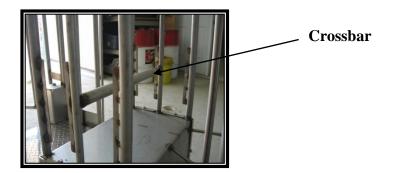
Window Panel



Pull up "T" Latch rod to remove panel.

## 4.12 CROSSBAR

This spring-loaded **crossbar** prevents the boar from lying down. Set it up at the proper height, just under the boar's belly once the boar has boarded the cart.





It is important not to set the bar too high, to avoid hurting the boar's belly.



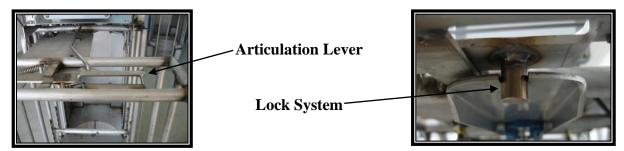
Before using your CONTACT-O-MAX Jr. for the first time, make sure to adjust the nylon rollers to suit your alleyways and barn equipment, for proper operation alongside your stalls. (See section 5.3.)

# 4.13 ARTICULATION

Your CONTACT-O-MAX Sr. is highly maneuverable and easily turns 90° alley corners, passing from a 30" alley to another 30" alley. (76 cm X 76 cm). This cart is also suitable for various alley dimension combinations, for example, passing from a 32" alley to a 27" one. (80 cm X 68 cm).



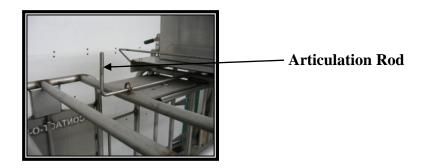
To articulate the cart, stand behind its rear end, and **pull back the articulation lever**, while swinging the cart sideways with the other hand. Once the 2 cart sections are properly realigned, the articulation system **automatically locks** by itself.



Central drive wheels allow for easy 360° cart pivoting.



The cart can also be articulated from the front end. Simply **push the articulation rod to unlock articulation.** 



# 4.14 BRAKE/STEERING SYSTEM

The Contact-O-Max Sr. brake/steering system is highly efficient in steering and keeping the cart gliding alongside the stalls on either side of the alley. Simply **engage or disengage the brake lever**. When the cart right side brake lever is engaged, the cart keeps steering to the right and vice versa.



**Disengaged Lever** 



**Engaged Lever** 



For brake lever adjustment, see section 5.5

#### 5.1 WASHING

Before washing the CONTAC-O-MAX Sr.:

- > Make sure that the stainless steel box lid is well closed and secured.
- > Always unplug your CONTACT-O-MAX Sr. from the electrical wall outlet.
  - Always wear rubber gloves and safety glasses when washing your boar cart.

#### **CONTACT-O-MAX Sr. Washing Tips:**

- You can use a hose to wash your CONTACT-O-MAX Sr., and you can add mild soap or disinfectant to the water.
- While washing your CONTACT-O-MAX Sr. make sure that the water pressure is controlled to avoid risks of accidents or injuries.
- Reduce the water pressure when washing the motor, the electronic box, and the stainless steel box. Recommended pressure is 50 psi.

# 5.2 MAINTENANCE

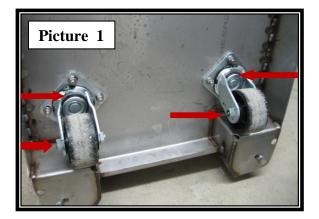
#### 5.2.1 <u>Preventive Maintenance Chart</u>

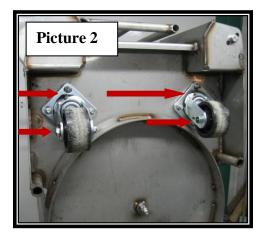
Your CONTACT-O-MAX Sr. lubrication and preventive maintenance must be done in respect of the following schedule. Failing to do so, may void *warranty*.

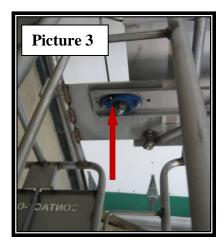
Component	Picture	Qty	Maintenance	Frequency
Drive Chain	7	1	Chain Oil BWD 40 Check Tension	Quarterly Quarterly
Caster Wheel	1 & 2	4 Brackets 4 Bearings	Grease Wash	Quarterly Occasionally
Drive Wheel & Gel Tire	7	2	Maintenanc	ce-Free
Articulation Bearing (top)	3	2	Grease	Quarterly
Articulation Bolt (bottom)	6 & 7	2	Grease	Quarterly
Articulation Rod	5	1 Rod 2 Lubrication Nipples	Grease	Quarterly
Break Lever & Rod	4	2	Light Lubricant	Quarterly
Cart Battery		1	Maintenanc	e-Free
Nylon Rollers		4	Maintenanc	e-Free

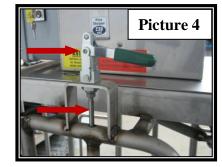
Lubricate (Ex. WD-40)
Grease
Lubricate with oil (Chain oil)

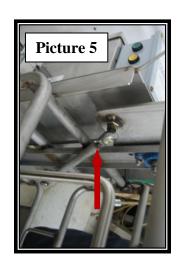
# 5.2.2 <u>Lubrication Points</u>

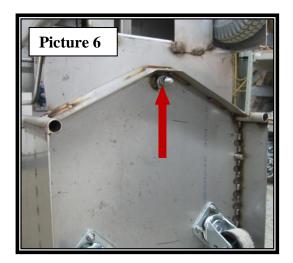


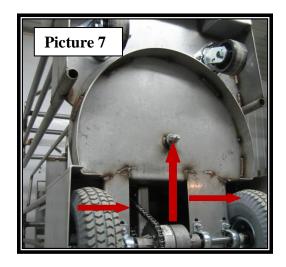












# 5.2.3 <u>Important Maintenance and Safety Recommendations</u>

_		
(	General	> When operating, washing or doing maintenance on your CONTACT-O-MAX Sr,
1	Information	always wear working gloves, boots and safety glasses to avoid risks of accidents or
		injuries.
		> Make sure that there is no piece of clothing such as sleeves, coat, scarf, laces, etc., or
		any other object that could catch in the cart's mobile parts, which could cause serious
		bodily injuries.
		> Never remove the "CAUTION" or "WARNING" stickers from your CONTACT-O-
		MAX Sr. or from its components. Replace immediately any damaged or missing
		sticker.
		To avoid accidents, injuries or damages to your CONTACT-O-MAX Sr.,
		proceed as following before doing any maintenance or repairs on it. First, turn
		the cart switch "OFF", disconnect the negative battery terminal, and then disconnect
		the positive one.
		*
		To avoid damages to the electronic box components, make sure to reconnect the positive battery terminal first, and then the negative one.
		<ul> <li>Before turning your CONTACT-O-MAX Sr. front end down against the floor for</li> </ul>
		easier reach of the drive components, bring the cart to an unobstructed, dry and level
		area.
•	Cart Switch	> Always turn "OFF" your CONTACT-O-MAX Sr. switch when you are not
		using it, or before charging the batteries, washing or performing maintenance
		on it.
I	Emergency	> Use in an emergency case only. Daily, do not use to turn on and off your
ł	button	CONTACT-O-MAX Sr.
I	Battery	> Always disconnect the battery charger before fixing or washing your boar cart.
	Charger	▶ Leave the charger connected at all times when the cart is not being used.
	8	> To avoid any damage to the charger cord or to the charger outlet, it is recommended
		to pull the plug instead of the cord, when you disconnect the charger.
	Remote	Keep your remote control dry and dust-free at all times.
	Control	<ul> <li>When replacing batteries, make sure your hands are clean, to avoid leaving a greasy</li> </ul>
	0 0 1 0 1	film on the batteries, which may seriously affect their lifespan.
		<ul> <li>Regularly check for dust build-up inside your remote control, and clean up contacts</li> </ul>
		with a cotton tab soaked in rubbing alcohol.
		<ul> <li>As soon as wear shows on the rubber membrane, replace it to extend the lifespan of</li> </ul>
		your remote control.
		Avoid pressing too hard on the buttons to avoid premature wear.
		<ul> <li>Replace batteries when signal is weak, or when the cart does not respond properly.</li> </ul>
	Electronic	$\succ$ Any attempt to tamper with the electronic box or to break its seal, automatically
	Box	voids the warranty.
	Stainless	<ul> <li>Before washing the cart, make sure the stainless steel cover is properly closed and</li> </ul>
	Stanness Steel Box	secured.
	Cart Battery	<ul> <li>Immediately recharge it after each use. Never lie it down on its side.</li> </ul>
		Never run it down. Always applage it with a bettery of origin
		Always replace it with a battery of origin.



Always replace damaged or worn parts by parts of origin. When doing maintenance or repairs on your boar cart, run a meticulous routine check of all components.

# SECTION 5 – WASHING AND MAINTENANCE

#### 5.3 NYLON ROLLER ADJUSTMENT

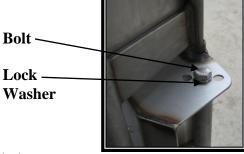
Prior to using your CONTACT-O-MAX Jr. for the first time, nylon roller **height** and **in/out** adjustments must be done, to ensure that your cart rides smoothly down the alleyways, and to prevent it from catching and bouncing against stalls and barn equipment.

#### **In/Out Setting**

1. Remove roller shaft **bolt and lock washer**.

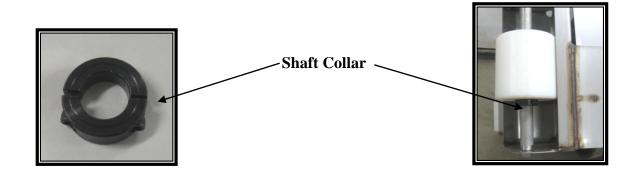
- 2. Align **roller shaft** with proper top and bottom plate holes.
- 3. Put **bolt and lock washer** back and tighten up.





# **Height Setting**

1 Loosen shaft collar hexagonal screws. (2 Allen screws)





Shaft collar for adjustment are optional. PVC tubing may be used instead as well.

2. Adjust roller to proper **height** and tighten up 2 screws.

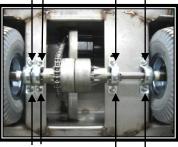
#### 5.4 DRIVE CHAIN ADJUSTMENT

1. Tip cart, **front end down against the floor** as illustrated.



2. Loosen axle plate nuts.





Axle Plate Nuts

3. Adjust drive chain tension by **sliding the axle perpendicularly on its 2 plates**. Make sure that wheels are perfectly aligned with the cart.



Wheels must be perfectly aligned with the cart

4. To avoid friction and premature wear, make sure that tires have enough clearance from the differential plates,

5. Tighten up axle plate nuts.



To increase safety when doing maintenance on your boar cart, turn "OFF" the cart switch, unplug the negative battery terminal first, then the positive one.

# SECTION 5 – WASHING AND MAINTENANCE

# 5.5 BRAKE/STEERING SYSTEM ADJUSTMENT

- 1. Disengage brake lever.
- 2. Loosen brake rod locknut.
- 3. Screw in or screw out brake rod for proper brake shoe pressure against the tire.
- 4. Tighten up rod locknut when adjustment is completed.



**Avoid excessive brake shoe pressure** against tire. Cart must glide smoothly alongside stalls without too much friction and without bumping and bouncing against troughs, stalls, etc.

5. When disengaged, the **brake lever is properly adjusted**, if the cart left side lever points to 11:00 o'clock am, and the cart right side lever points to 1:00 o'clock pm.



Lever points to 11:00 o'clock am.

Lever points to1:00 o'clock pm.





# **SECTION 5 – WASHING AND MAINTENANCE**

# 5.6 TIRE/WHEEL REPLACEMENT

- 1. As a preventive safety measure, turn «OFF» the cart switch, and disconnect the battery terminals. Always disconnect negative battery terminal first, then the positive one.
- 2. Tip your CONTACT-O-MAX Sr., front end down against the floor as illustrated, for easier access to drive wheels.

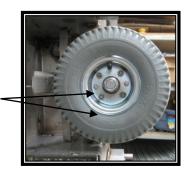
3. Loosen wheel plate bolts and remove **plate**.

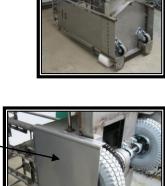
4. Remove wheel nuts, lock washers and wheel from axle.

Wheel Nuts and Lock Washers

5. Reassemble in the reverse order and tighten up wheel nuts.









#### 6.1 IF YOUR CONTACT-O-MAX SR. DOES NOT PERFORM AS IT SHOULD.

If you hear a "Click, Click" sound coming from inside of the stainless steel box, go through the following troubleshooting steps of this section:



Before running any battery check, make sure that both positive and the negative terminals are properly connected.

#### 6.1.1 <u>Check the Battery Voltage</u>



First, make sure that the battery is fully charged.

Use a digital voltmeter to check **the battery voltage:** 

- a) Turn "**ON**" the cart switch (section 4.5). Bring the cart front end against a wall to prevent it from moving forward. **Connect the voltmeter** to the battery terminals.
- b) Press one of the manual buttons on the side of the electronic box, and at the same time, check if the battery voltage drops. The voltage **should not read under 11.5 volts.**

#### 6.1.2 If voltage runs lower than 11.5 volts

**Plug** charger and check if it's working well (See Section 4.3). Connect voltmeter to the battery terminals. If **charger works well**, voltage increases on the voltmeter and if not, replace it by a charger of origin.



If everything works well, go to 6.1.3, and if not, go directly to 6.1.4.

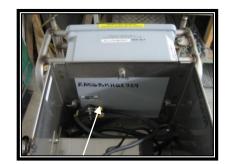
# SECTION 6 - TROUBLESHOOTING

#### 6.1.3 <u>Replace Remote Control Batteries</u>

If it still does not work, replace remote control with one of the same frequency.

#### 6.1.4 Voltmeter Connection

Connect voltmeter to the **2 nuts** (yellow connectors) **inside the stainless steel box,** to check the electronic box voltage.



**2 Yellow Connectors** 

X

The electronic box voltage should read almost the same as the battery voltage.

- a) If **voltage is OK**, your cart motor may prove to be defective.
- b) If there is no voltage, your electronic box may prove to be defective.



For any other questions, please contact your service technician.



Always replace defective parts by parts of origin.

#### 6.2 **POOR DRIVE MOTION**

If your CONTACT-O-MAX Sr. experiences drive **motion difficulties**, repeat step 6.1.1 and 6.1.2, then,

- a) Check drive **wheels** for damage or obstruction.
- b) Check **castor wheels for** damage or obstruction, and **grease** if necessary. (Section 5.2.2).
- c) Check if drive tires are properly **fixed to the hub.**
- d) Check axle and **differential** for damage or wear (Section 5.4)
- e) Check if **drive wheel axle is perpendicular to axle plates, and** if **axle nuts** are tight enough.

# 6.3 IF YOUR CONTACT-O-MAX SR. MOVES TOO SLOWLY AND PULLS TO ONE SIDE.

- a) Check if **break rod is properly disengaged on the side it pulls.** (Section 4.13.2)
- b) Remove wheel plate on same side, and check if break shoe is properly disengaged.

# **SECTION 7 – SPARE PARTS**

# PART#

#### DESCRIPTION

1.	SEE6000006X	Remote Control Frequency # 6
2.	SEE7000006X	Remote Control Frequency #7
3.	CSASX0016	Spring-Loaded Crossbar
4.	CSPAR0029	Nylon Roller
5.	SAW0000002A	Castor Wheel With Bracket
6.	SAXG000015X	Grey AI Saddle
7.	SEB0000005X	4-Button Remote Control Batteries (3 per set)
8.	SEB0000001P	12 V Cart Gel Battery
9.	SEE0000004X	12 V / 24 V Battery Charger
10.	SEXC000007X	Canadian / US Charger Cord
11.	SEXE000007X	European Charger Cord
12.	SEXA000007X	Australian Charger Cord
13.	SAW0000009A	Flat-Proof Gel Tire & Wheel Hub Assembly
14.	SAX0000002S	Brake/Steering Lever
15.	CSASX0012	Window Rod
16.	CSADX0003	Drive Wheel Hub Kit
17.	SAX0000004S	Axle Bearing
18.	SEEP000006R	4-Button Remote Control Rubber Pad
19.	SEM0000002A	Leeson Drive Motor
20.	SAX0000006A	Drive Chain Rivet Link # 40
21.	SAX0000012A	Drive Chain RivetLink # 40 (24 1/2")
22.	SAX1000006A	Drive Chain Split Link # 40
23.	SES0000014P	Emergency button

# CONTACT-O-MAX Sr. STAINLESS STEEL

# LIMITED WARRANTY

# This limited warranty is exclusive to the CONTACT-O-MAX Sr.'s first buyer, from the date of delivery.

#### **RO-MAIN** guarantees that its products are free from defects in material and workmanship \*.

#### \* This warranty is limited to the following Terms and Conditions:

- 1 year: Electrical and electronic components, 12V battery, charger, motor, drive components, and stainless steel structure. The manufacturer reserves the right to repair or replace any defective parts.
- > 90 days :Remote control (frequencies #4 and #5)
- ➢ 30 days: Remote control (frequencies #1 and #2)

#### THIS WARRANTY DOES NOT COVER:

- ➢ Normal part wear
- > Any damage or malfunction caused by negligence, misuse, abuse, accident or improper maintenance.
- Any damage directly or indirectly linked to any addition or modification done to the Contact-O-Max Sr. boar cart, without prior written consent of the manufacturer.
- > Any damage caused by any use other than the usual sow stimulation or heat detection of sows in a pig barn.
- On-site repairs and service cost.
- Any spare part freight cost
- > Any repair that has been done or attempted to, by non-authorized person.
- Remote control batteries.



# Any tampering with the electronic box, its components or its seal, automatically voids the warranty.

**Limited liability:** The products sold by Conception Ro-Main Inc. or any of its authorized agents are not recognized as being approved or certified by any regulatory body. The purchased products are installed and used at the buyer's own risk. Conception Ro-Main Inc. exempts itself from any liability in relation with the use of the products, and without any limitation. In no case shall Conception Ro-Main Inc., its shareholders, its administrators, its employees, its agents, its subsidiaries, joint ventures or any other related societies, be held responsible for any direct, indirect, punitive, special, secondary or consequential damages in relation with the purchase, transport, installation or products use (including profit, loss or any other economic advantage) following a warranty breach, even if Conception Ro-Main Inc. had already been notified of damage possibility. Conception Ro-Main Inc.'s products are designed to be handled, used and installed by qualified personnel, in accordance with Conception Ro-Main Inc.'s documentation including the manuals, instructions and policies. The information contained in the documentation, manuals, policies and instructions are known to be true and reliable, but can be modified without prior notice.

#### For any question or comment, please first contact your authorized dealer.



Conception RO-MAIN Inc. 999, St-Georges, C.P. 187 Saint-Bernard, Quebec Canada, G0S 2G0 Tél.: 418.475.6566 E-Mail: info@ro-main.com