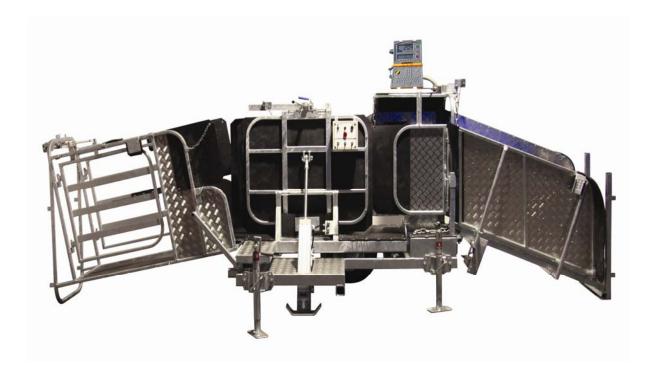


# Sheep Handler

Auto Weigh Crutch and Dag - User Manual



#### **PUBLISHED BY**

Gallagher Australia PTY Limited 14 Somerton Park Drive, Campbellfield VIC 3061 www.gallagherams.com Copyright© Gallagher Group Limited 2012. All rights reserved. Patents Pending.

Gallagher Sheep Handler – Auto Weigh Crutch and Dag Manual Edition 1.0 - August 2012

DISCLAIMER: While every effort has been made to ensure accuracy, neither Gallagher Group Limited nor any employee of the company, shall be liable on any ground whatsoever to any party in respect of decisions or actions they may make as a result of using this information. In accordance with the Gallagher policy of continuing development, design and specifications are subject to change without notice. Developed and manufactured by Gallagher Group Limited, an ISO 9001:2000 Certified Supplier.

# **Table of Contents**

Introduction	4
What is the Sheep Handler?	4
Benefits of using the Sheep Handler	6
Scenarios for use	8
Recommendations for the construction and use of the	
surrounding yards and races	9
Power and compressed air requirements	11
Scales and RFID reader requirements	12
Positioning the Sheep Handler	12
Assembling the Sheep Handler for use	13
If Transportation Kit is fitted	13
Connectors	15
Setting up the Sheep Handler for use	16
Communications	17
Adjusting the Sheep Handler width	18
Operating Controls	19
Pull/Push Switches	22
Using the Remote Control	23
Using the Sheep Handler	24
Automatic Release Mode	25
Manual Release Mode	27
Switching between Modes	29
Sensors and Gates	29
Care and Maintenance	30
Warranty	32

## Introduction

Welcome to the Gallagher Sheep Handler – Auto Weigh Crutch and Dag user manual. This manual relates to model number SG05794. In this manual you will find instructions on using the Sheep Handler as well as hints to help you resolve any problems you may encounter.

## What is the Sheep Handler?

The Sheep Handler is a sheep handling unit containing an integrated weighing platform, catch and rollover function which will connect with a variety of weigh scale indicators. Pneumatically operated gates and clamps allow stock to be secured, handled and drafted. The rollover mechanism allows for crutching, belly and footwork. Catch and draft functions can either be controlled automatically, by setting up conditions in the weigh scale indicator, or manually by the stock handler. A panel reader can be attached to allow reading of Electronic ID (EID) tags.

The drafting gates automatically draft stock based on criteria recorded or weight. The conditions for drafting are set up in the weigh scale indicator attached to the Sheep Handler. Drafting can also be controlled manually by the operator. The Sheep Handler is easy to transport with its own transportation kit (purchased separately SG05795) and easily set up for use and packed up for transport.

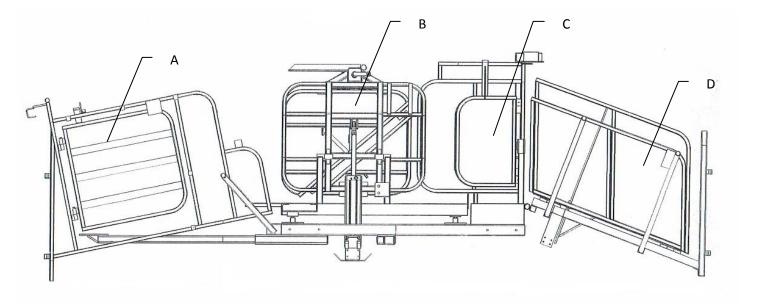
The Sheep Handler's extremely sturdy and strong construction makes the unit durable and long lasting and because of the rubber walls and floor your stock are safer from potential harm.

In summary, The Sheep Handler with Drafting enables you to carry out a range of activities including:

Automatic Electronic ID (EID) Tag Reading, Weighing, Drafting and with the Clamp and Rollover function: Dagging, Crutching, Eye Wigging and Foot Work. The Sheep Handler can also be partially operated from a distance using a remote control.

\_\_\_\_\_

The different parts of the Sheep Handler are shown in the diagram below:



- A. Drafting Gates
- B. Main Clamp/Rollover
- C. Entry Gate
- D. Lead up Race/ Ramp Clamp

(Transportation kit not displayed)

# Benefits of using the Sheep Handler

The benefits you will receive from using the Sheep Handler include the following:

#### • Save time and labour

One person can operate the Sheep Handler using the remote control. This means that you will still be in control of its operation while at a distance. Additionally, as you control the gates by using the remote control (two way only straight and left), the physical demands of operating gates, particularly drafting gates, is removed.

#### • Improve work efficiency

Increase the speed of a variety of stock management tasks and also drafting throughput as the process can be automated. This means stock (and people) spend less time in the yards.

#### • Decrease the incidence of injuries for stock and operators

The Sheep Handler's solid manufacture and rubber lined walls reduces the chance of injury from collisions or general usage. Additionally, the unit holds sheep secure reducing the handling aspect and potential injury to persons.

#### Quiet operation

The innovative construction of the Sheep Handler and the pneumatic operation means that it is exceptionally quiet when working. This reduces the stress on you and stock. Stock will flow better and will enter the unit more readily as a result.

#### Carry out several stock management tasks at the same time

The Sheep Handler with a reader set up (panel and reader) can automatically read EID tags, weigh and then draft without you having to control it. All of these actions can be preprogrammed into a weigh scale indicator which will communicate with the Sheep Handler. This gives you the freedom to move away from the weighing and drafting area, to organise stock at the same time as these actions are occurring - all with the ability to stop and hold an animal at the push of a button on the remote.

#### • Easy allocation and drafting of stock into different management groups

Providing your brand and model of weigh scale indicator supports it, it is a simple process to allocate animals into groups so that they can be managed separately. This could include such things as: the division into different groups by weight to allow priority feeding, or the drafting out of ewes with multiple pregnancies.

#### • Improve stock flow through the weighing and drafting system

As there is less human involvement in the weighing and drafting process stock feel less threatened and more inclined to move freely through the system.

## Decrease drafting and weighing operator errors and hit the correct target market weight when drafting

As the weighing and drafting processes are automated there is less chance of error. In addition, accurate weighing and drafting ensures that all stock fall into the correct groups to ensure they achieve premium prices at sale.

## **Scenarios for use**

The flexible nature of the Sheep Handler allows you to carry out many activities simply and easily. These include:

#### **Automatically**

- Weighing animals and releasing them, or drafting them using the weight groupings you have set up in your weigh scale indicator.
- Reading EID tags and weighing animals, then drafting using the weight groupings you have set up in your weigh scale indicator (draft by weight).
- Reading EID tags then drafting using a set of conditions you have set up in your weigh scale indicator (draft by list) (the range of options will be dependent on the brand and model of the attached weigh scale indicator).

#### Manually

- Controlling the movements of animals out of the Sheep Handler yourself.
- Overriding an automatic setting to retain an animal in the unit so that you can examine it for some reason, or draft it in a different direction from the automatic setting.
- Temporarily pause an automatic operation so that you can resolve issues.
- Secure animals for tagging, drenching, docking, dagging etc.

# Recommendations for the construction and use of the surrounding yards and races

(adapted from "Behavioural Principles of Livestock Handling" by Temple Grandin)

#### Race construction leading up to the Sheep Handler

#### **Sides**

Sheep have a wide visual field. The width is affected by the amount of wool they have on their head and ranges from 191 to 306 degrees. Any handling races, including the race leading up to the Sheep Handler, should have solid side walls to prevent animals from seeing distractions outside the race. Any moving objects, (e.g. people, flapping objects or a coat hung on a race fence) seen through the sides of a race can cause balking or frighten sheep. Solid side walls are especially important if animals are unaccustomed to the facility.

#### Layout

Curved single file races are recommended for moving sheep up to the Sheep Handler. A curved race is more efficient for two reasons. Firstly, it prevents the animal from seeing what is at the other end of the race until it is almost there. Secondly, it takes advantage of the natural tendency of sheep to circle around a handler moving along the inner radius of the race.

#### Width

Ideally the race will be designed in a way that organises sheep into single file by the time they reach the junction with the Sheep Handler. This helps to ensure that only one sheep enters the Sheep Handler at a time and makes stock flow smoother. As sheep can be of varying sizes, (e.g. adult sheep and lambs), it is useful to have a race with adjustable sides in the final lead up (the last 180cm). However if the race width is fixed, approximately 50 cm is the recommended width. This is the same dimension as the internal edge of the Sheep Handler entry gate surround.

#### **Materials**

The materials the surrounding races are made of have the potential to affect the reliability of the RFID reader. Metal components are best avoided if possible, particularly if they rub together, as this can cause interference in the signal between the reader and the EID tag.

#### Vision and lighting

Where the Sheep Handler is positioned illumination should be uniform and diffuse, much like a bright cloudy day. Shadows and bright spots should be minimised. Sheep have a tendency to move from dim areas to brighter areas, provided the light is not glaring in their eyes. Situate the Sheep Handler to take advantage of natural light. Skylights, combined with other natural lighting, can even out light levels so consider installing translucent polycarbonate roofing and or walls if the area is dark.

#### Noise

In facilities where livestock are handled, loud or novel noises should be avoided because they distress livestock. The sound of metal clashing together can cause balking and agitation. As the Sheep Handler is constructed and lined to ensure its operation is very quiet but the noise level in the surrounding yards should be considered. The compressor providing air for the Sheep Handler is best located at a distance to reduce noise levels. Rubber stops on gates in the yards around the Sheep Handler will help reduce noise.

#### The effects of pain or fright

Research indicates that sheep can remember a painful or frightening experience for many months. The fact that the Sheep Handler has been designed with the comfort and safety of stock in mind will help to ensure animals' experience is positive. This will aid in the smooth entry and flow of stock through the system on future occasions. It is also worthwhile keeping in mind that livestock which have had gentle handling in the past will be less stressed when they are handled in the future. Think about how your actions will affect your future interactions with stock and the efficiency of the operations you wish to carry out.

Power and compressed air requirements

Both 12 volt power and compressed air are necessary to operate the Sheep Handler. An air

supply is needed to operate the ramp clamp, main clamp, belly access and draft gates.

**Power requirements** 

The Sheep Handler is powered by an onboard 12V Battery. There is also a 230V to 12V DC

charger and adapter for use in dry weather. This comes as part of the package when you buy

the Sheep Handler and can be connected to your AC power supply (input range 100 - 240V

AC). With this connected you can charge the onboard battery and also using the connecters

on the box to charge your weigh scale indicator at the same time.

If you have a weigh scale indicator or a RFID reader attached they could be powered by the

Sheep Handler as there are two 12V outputs available.

Note: If you are wanting to read EID tags then make sure you keep the power supply 1m,

or more, away from the panels to avoid interference with the RFID reader antennae.

**Compressed air requirements** 

Once the compressor is connected and running you will see the gates move to their starting

positions and gauges move. For best results, a minimum 12 cfm, 125 psi compressor should

be used. The air runs directly into a filter and through an oiler which maintains the rams and

pneumatic lines.

Note: Refer to the maintenance guide in this manual for further information.

11

# **Scales and RFID reader requirements**

The Sheep Handler has been specifically designed to operate with the Gallagher TSi, Ruddweigh 800, Gallagher Weigh Scale Indicator W810 and Gallagher Weigh Scale Indicator W610. (Please note: Drafting by list is not available on the Weigh Scale Indicator W610.) It will also operate with some other brands of weighing indicators - your Gallagher Territory Manager will know which are compatible. RFID (radio frequency identification) antennae can be fitted to a pivoting stand. An RFID controller BR (G03111) or R (G03113) unit is needed to communicate with the antennae. The antennae will recognise EID which are either HDX (half duplex) or FDX (full duplex), and those which are inserted as implants or boluses (however these are less commonly used).

## **Positioning the Sheep Handler**

It is recommended for best performance that the Sheep Handler is set up on a level, flat surface. Ideally for permanent installations, a concrete pad of approximately 2m (wide) by 5m (length) should be laid to fit the Sheep Handler. A permanent mounting also allows for the optimisation of surrounding yards and races to efficiently feed stock into the weighing and drafting set up.

# **Assembling the Sheep Handler for use**

- Position the Sheep Handler on flat level ground
- Fold down the stabiliser legs on the main platform so that the Sheep handler is level





# If Transportation Kit is Fitted

Disconnect and remove draw bar by removing the pin and sliding the draw bar out. To remove the wheels, remove the pins and slide the out in the same way





• Disconnect the chains holding up the lead up ramp and draft gates and lower both to the ground.

\_\_\_\_\_





• Once the entry ramp is lowered slide the ramp to the right to centralize the ramp for operation and insert the pin to lock it into position.

# Caution: The ramps are heavy. Take care when lowering the ramps.

- Attach the plant pole to side of the unit and set up your shearing plant if required.
- Attach panel reader (if used) and Gallagher weigh scale indicator to the unit. Refer to the section on weigh scale indicator setup for more information on choosing the correct scale settings.
- Connect airlines and 240v power to the unit.

## Connectors



#### A. 4 pin Amphenol connector

Use the lead supplied in the module enclosure to connect the Sheep Handler's load bars to the weigh scale indicator.

#### B. 2 X 2 pin GME connectors

These are 12V output or inputs. If 240V mains power is connected these can be used to charge your weigh scale indicator or reader. You can also connect an external battery and run the unit from an external battery. In the module enclosure is a lead to connect to the weigh scale indicator in order to charge it.

#### C. RS232 Serial Port

This connects the Sheep Handler to the scale indicator so that the handler can receive drafting commands. There is a serial lead in the module enclosure. When the Sheep Handler is communicating with scale the amber LED will be flashing.

### D. 240V input

Connect extension lead here to power the unit.

# Setting up the Sheep Handler for use

Before using the Sheep Handler ensure that you have the following correctly attached:

- Power
- Compressed air
- Scales (if weighing animals)
- EID Reader (if scanning tags)

#### To attach a weigh scale indicator:

Attach the weigh scale indicator to the scales mount on the top of the mount post.

Attach the RS232 cable (communications cable) to Port 1 on the weigh scale indicator. This cable will transmit the drafting decision data from the scale indicator to the unit, so that the drafting gates can be set up.

#### To attach EID Reader:

If weighing animals with EID tags attach the RFID panel to the pivoting stand on the unit and mount the reader controller to the panel. Connect the panel cable to the controller.

Connect the RS232 cable (communications cable) between the RFID reader and Port 2 on the weigh scale indicator.

## Communications

## Setting up your W810 weigh scale indicator to communicate with the Sheep Handler

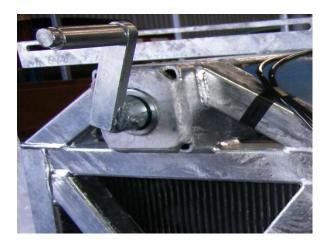
- Connect the Sheep Handler to the scale using the RS232 serial lead provided in the module enclosure.
- Switch your scale on and turn the dial to 'S'.
- Using the arrows scroll down to communications then press 'Select".
- Change the 'Port 1' setting to 'Drafter Special 2' or 'Drafter Fast'.
- If using EID change the Port 2 setting to 'EID standard'.
- Then push OK. This will take you back to the previous screen.
- Turn the dial back to A for Auto.
- The amber LED should now be flashing on the module box.

# Adjusting the Sheep Handler width

The Sheep Handler's Main Clamp and Ramp Clamp have adjustable side panels that can be adjusted to different positions.

#### **Main Clamp**

The main clamp is adjusted by winding the handle above the clamp to the desired position.



#### **Ramp Clamp**

The ramp clamp is adjusted by removing the pins and sliding the wall of the ramp to another position, there will be holes in the adjustment where the pins can slide back into to secure the sliding wall.



**Operating Controls** 



There are six toggle switches, two push/pull switches and a push button used to control the Sheep Handler.

• The three bottom switches (LEFT, CENTRE, and RIGHT) and allow manual control of the draft gates.

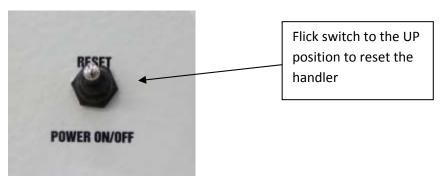
These switches need to be in the UP position to draft in Automatic Release Mode.



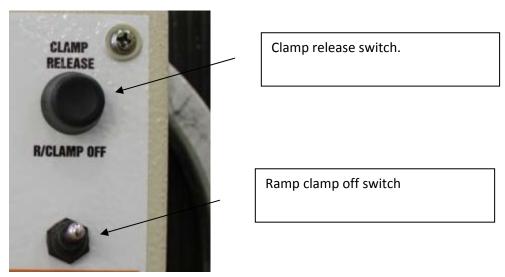
AUTO MANUAL switch. For Manual Release Mode ensure the switch is in the down position. The RED MANUAL RELEASE ON LED will be illuminated. This allows the sheep to be captured and worked on. Any draft signal from the scale will be stored and acted upon when the switch is placed in Auto Release Mode. In Auto Release Mode the switch should be in the UP position. The RED MANUAL RELEASE ON LED will not be illuminated.



 RESET switch. Switch to the DOWN position to close the ramp clamp, entry gate and main clamp stopping sheep from entering the unit. SWITCH to the UP position to reset the unit ready to receive an animal.



• **CLAMP RELEASE switch.** Use to open the clamp while holding the button. This allows an animal to be advanced in the clamp if caught too early.



- **R/CLAMP OFF switch.** This allows the user to turn the Ramp Clamp off or on.
- **POWER ON/OFF Button.** This turns the unit off or on. The button will be illuminated green when the unit is on.

# Pull/Push Switches

These switches operate the rollover function and belly access.

#### BELLY CRUTCH

Pull to open and access sheep - push to close.

#### • ROLLOVER

Pull to roll over and push to return to upright position.



IMPORTANT: Ensure the operator is in a safe position to avoid the rollover mechanism

# Using the Remote Control

The Sheep Handler comes with a remote control. This is necessary to operate the unit from a distance.

The remote control can be operated from within a 10m radius of the unit, which allows you to carry out tasks at a distance while still maintaining control of the unit operations.

#### **Button functions**

The unit can operate in two modes: Automatic Release Mode and Manual Release Mode.

The four buttons on the remote are used to operate the Sheep Handler and drafting gates in these two modes.



- **Button number 1** is used for the clamp release.
- Button number 2 is used to switch the unit from Automatic Release Mode to
  Manual Release Mode and vice versa. In Automatic Release Mode the unit will
  automatically release animals, without user intervention, depending on the draft
  command from the scale indicator. In Manual Release Mode, the Sheep Handler
  will hold the animal until the user changes the mode or releases the animal using
  the clamp release button.
- Button number 3 operates the left draft gate.
- Button number 4 resets the unit.

# Using the Sheep Handler

To turn the Sheep Handler on press the green button located in the centre of the control box. The green power light will illuminate.

The Amber LED mode lamp on the power box (ref:P15) will start flashing to indicate that the unit is ready and communicating with the scale. The unit is now ready to operate.



NOTE: When starting a new session or turning the machine on for the first time toggle the RESET switch to the down position and return it to the up position, this will ready the unit for operation.

The Sheep Handler can be run in two different modes: Automatic Release Mode or Manual Release Mode. The one you select will depend on whether you want it to run independently or not. In either case if there are no animals in the unit the Sheep Handler will automatically allow animals in and catch them. However, if it is in Manual Release Mode you will be in control of when they are released and the direction the drafting unit will release them in, whereas in Automatic Release Mode the settings you enter into the scale indicator will determine how the unit and drafting will operate.

## **Automatic Release Mode**

When the Sheep Handler is operating in Automatic Release Mode the RED LED lamp on the front of the control box will be **off**.



Red LED light off when in automatic release mode.

Following are some ways you can use the Sheep Handler while in Automatic Release Mode:

- Weighing animals and releasing.
- Weighing animals and drafting using weight conditions specified in your weigh scale indicator (draft by weight).
- Reading EID tags, drafting and/or weighing using conditions specified in your weigh scale indicator (draft by list or rules).

Note: For instructions on how to set up and use your scale and/or RFID reader you will need to refer to the appropriate user manual.

#### To weigh and release animals

Set up the weigh scale indicator so it is ready to weigh animals automatically. The RED LED will be off indicating that you are in Automatic Release Mode and the Amber communication light will be flashing.

The ramp clamp and main clamp will be open. The first animal will pass through the ramp clamp and be captured by the main clamp. When the animal has been successfully weighed the weigh scale indicator will beep, the main clamp will release and the animal will be released.

Note: If a second animal presents whilst an animal is in the main clamp, it will be held by the ramp clamp until the main clamp is free.

#### To weigh and draft animals (draft by weight)

Set up the weigh scale indicator so it is ready to weigh animals automatically and specify the weight limits for each group.

Ensure the RED LED is off to indicate that you are in Automatic Release Mode.

The ramp clamp and main clamp will be open. The first animal will pass through the ramp clamp and be captured by the main clamp. When the animal has been successfully weighed the weigh scale indicator will beep. The weigh scale indicator will display both the animal's weight and the direction it will be drafted in. The main clamp will release and the animal will be released.

#### To draft animals by list or rules

If you are using EID tags you can draft animals either by a predefined list or by rules depending on which weigh scale indicator you are using. To do this, ensure you have set up the RFID panel and controller correctly. Refer to the user manual for your weigh scale indicator to set up draft by list or rules. You can choose to draft without weighing by unplugging the load bar cable from the scale. You can also weigh whilst drafting by rules or list by leaving the load bar cable plugged in.

Set up the weigh scale indicator so it is ready to draft animals automatically either by list or rules. Plug the load bar cable into the indicator if wanting to weigh or the weight is part of your draft criteria.

Ensure the RED LED is off to indicate that you are in Automatic Release Mode.

The ramp clamp and main clamp will be open. The first animal will pass through the ramp clamp and be captured by the main clamp. When the animal has been successfully read, the

weigh scale indicator will beep (if weight is being recorded) and the display direction the animal will be drafted. The weight will also be displayed if weight is being recorded. The main clamp will release and the animal will be released.

Note: If a second sheep presents whilst a sheep is in the main clamp, it will be held by the ramp clamp until the main clamp is free.

## Manual Release Mode

Use this mode when you would like to run the unit yourself. The entry will still automatically let animals in and hold them in the unit, but you will be in control of when they are released and the direction they are released in.

#### To hold an animal in the Sheep Handler

You can use either the remote or the control box to manage the release function if you would like to hold an animal in the unit. This is useful if you want to examine an animal or use the roll over function to treat the animal.

The unit will capture the animal and hold until you release the animal with the remote or clamp release button the control box.

The RED LED mode lamp will be lit when in this mode.

Once you have dealt with the animal hold the clamp release button until the animal is clear this will hold the clamp open while the sheep is released, the main clamp will stay open once the sheep has been seen by the exit sensor. The clamp will then capture the next animal.



Hold this button to release an animal manually.

#### To manually set the drafting direction

Use the draft switches on the control box to set the drafting direction if you would like to override an automatic drafting decision or you are in Manual Release Mode and you are making all of the drafting decisions yourself.

Wait for the unit to capture the animal then switch the appropriate gate switch to set up the drafting direction. Once the drafting gate has set to the desired direction, hold the clamp release button to release the animal.



Once the animal has been seen by the exit sensor the clamp will remain open and the next animal will be captured.

#### Using without weighing (no scale attached)

Occasionally you may wish to use the Sheep Handler without the weigh scale indicator attached, (e.g. you want to dag your sheep). The Sheep Handler can still operate without the weigh scale indicator.

To set up the Sheep Handler without the weigh scale indicator simply run the Sheep Handler in Manual Mode. You do not have to connect the weigh bars or RFID leads.

# **Switching Between Modes**

The Sheep Handler can be constantly switched from Automatic Release Mode to Manual Release Mode, if you are operating in Automatic Release Mode and wish to hold an animal for treatment you can press the mode button on the remote or switch the toggle on the control box, the RED LED will light up to indicate Manual Release Mode, this will hold the animal until you switch back to Automatic release Mode or if you wish to remain in Manual Release Mode (e.g. to treat the next animal as well) press the clamp release button until the animal is seen by the exit sensor, the clamp will then capture the next animal.

## **Sensors and Gates**

The Sheep Handler has three sensors

#### The Ramp Clamp Sensor

The Ramp clamp is activated by the sensor at the top of the entry ramp, this sensor will activate the ramp clamp if there is an animal in the main clamp.

#### • The Main Clamp Sensor

The Main Clamp Sensor operates the Main Clamp when an animal is seen, capturing the animal in the Main Clamp.

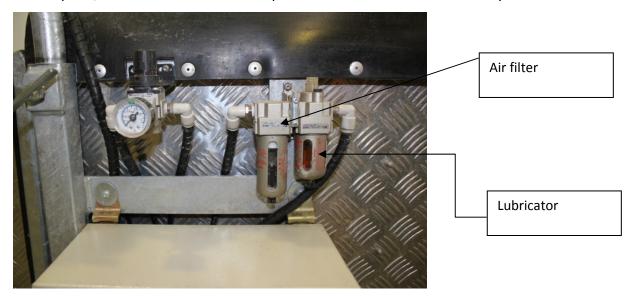
#### The Exit Sensor

The Exit Sensor signals that animal has left the unit and triggers the Ramp Clamp to release and allow the next animal into the Main Clamp.

## Care and Maintenance

The Sheep Handler is of robust design so that it can withstand typical farming conditions. As a result it is resilient in most situations. However, following the instructions below will help you to get the best results from your unit and to avoid damaging it.

- Replace oil in the airline lubricator when the oil is low (pneumatic tool oil)
- Empty the airline filter
- Grease the grease nipples using multi-purpose grease there are eight nipples in total two on the ramp clamp pivot, two on the entry gate, two on the rollover pivot, and two on the main clamp. This should be done before every use.



#### **Cleaning instructions**

It is inevitable that dung and other dirt will be tracked through the unit during routine use. It is best to clear the build up of these materials from some key areas regularly so that the unit will operate effectively:

- **Under the floor.** A build-up of material may touch the floor and affect the unit's weighing accuracy.
- Around the gate and clamp areas. Material gathering here may hamper gate movement.
- It is acceptable to clean the unit down with a high pressure hose but DO NOT use the high pressure hose on the control or module enclosures. Doing so could force water into the electronics.

• Washing the unit down at a car wash station where you can apply soapy water etc. under control of the operator is acceptable as long as the above notes are taken into account when rinsing the unit down.

#### **Parts replacement**

The following parts can be replaced:

- Load Cells
- Circuit Board(s)
- Air Control Valves
- Air Cylinders or Rams
- Sensors

Contact the Gallagher Service Centre on 1800 425 524 for more information.

#### **SPARE PARTS:**



Gallagher Part Number: 4T3231 # 10mmHose - 1/4 BSPT



Gallagher Part Number: 4T4086 # Speed Coupler ARO 210 1/4 in BSP



Gallagher Part Number: 4T8108 # AIR ARO ¼ Male to ¼ BSPT Male

TWO YEAR WARRANT	Υ
REGISTER ONLINE AT V	www.gallagherams.com

MODEL	
SERIAL NO	
DATE PURCHASED	

#### SELLING DEALER STAMP

This product is guaranteed free from defects in material or workmanship for a period of one year from date of purchase by the end user. Gallagher will repair or replace at their option any faulty product returned to them or their Dealer within this time period.

Freight/forwarding costs incurred by the Customer in the warranty process remain the responsibility of the Customer. This warranty does not cover damage (including subsequent corrosive damage) due to:

- Unauthorised repairs
- Modifications
- Failure to follow care and maintenance guidelines described in the User Manual
- Physical Mishandling
- Lightning Strike
- Floods, fires or acts of God
- Use of an arc welder on Load Bars or equipment or steelwork attached to Load Bars Gallagher, their Distributors, and their Dealers accept no responsibility for the misuse of this product.

Gallagher, their Distributors, and their Dealers accept no responsibility for any accident caused subsequent to any tampering with or modification to or for the misuse of this product.

Gallagher, their Distributors, and their Dealers accept no liability for consequences and/or secondary damages or losses of any kind sustained directly or indirectly, a result of failure or defect in any product, material, installation or service.

#### **AUSTRALIA**

Gallagher Australia Pty Ltd, 14 Somerton Park Drive, Campbellfield, Melbourne, Victoria, 3061

PLEASE READ INSTRUCTIONS CAREFULLY BEFORE USE.
PLEASE COMPLETE DETAILS AND KEEP WITH YOUR RECEIPT — IT IS YOUR PROOF OF WARRANTY