



## **Pig and Lamb Weighers**

**Mechanical Model 663g**

**Electronic Model 663ge**

**Instruction Manual  
& Operating Guide**



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## Pig and Lamb Weighers - Models 663g & 663ge

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## Safety Notes and Warnings

- Ensure the operator in charge of the pig and lamb weigher is an experienced stock person who can maintain a high standard of animal welfare.
- Ensure that there is sufficient space in the area designated for the crate to allow the operator to work safely and efficiently.
- The adjoining Race and Penning to the weigher should be of sufficient build for the safety of both animals and operators.

### Training

Do not attempt to carry out any procedure on a machine unless you have received the appropriate training or read the instruction manual.

**Note:** Check also the instruction leaflet provided by **Salter Brecknell** (Electronic weigh head manufacturer) provided with this product for details on EMC compliance and declaration of conformity.

Retain all instructions in a safe place for future reference.



# Introduction and Intended Use

Ritchie weighing models 663g (mechanical) and 663ge (electronic) were designed for, and intended to be used by, the agricultural industry purely for the weighing of pigs, lambs and sheep. The cage is designed to give maximum safety and to minimise stress in both the animal and the operator.

**These weighers should only be used by an experienced stock person, who can maintain a high standard of animal welfare.**

## Features

- Stable cage floor during animal entry and exit.
- Pedal operation (from either side of weigher) weighs the animal. Single lever opens the exit gate. The operator need not move from one position.
- Up and over sliding entry gate
- Self locking hinged exit gate
- Fold away transport handles
- 150 kg (330 lb) capacity

**Deviations from the intended use should not take place without the notice and approval of David Ritchie (Implements) Ltd.**

## Specifications

	<b>663g</b>	<b>663ge</b>
Internal Length (mm) .....	1280	1280
Internal width (mm) .....	410	410
Internal height (mm) .....	765	765
Weight .....	91kg	91kg

**663g** - Salter Spring balance Weigh head, capacity 150 kg (330 lb).

**663ge** - Salter Electronic Weigh head no. LS300, rated to IP65. Fitted with internal battery and supplied with charger unit. Functions include on/off zero, lbs/kgs, print and hold facilities.



# Overview



Fig 1



## Preparation for Use

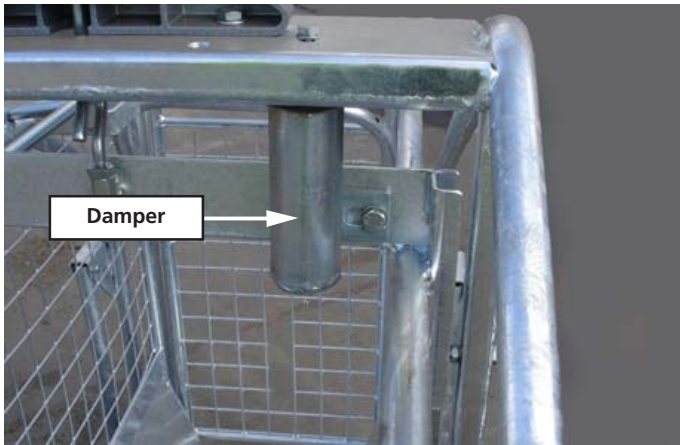


Fig 2

**Note: Model 663g only** - The Damper should be half filled with Universal oil prior to use, Fig 2.  
Check periodically that this level is maintained.



Fig 3

**Cage Floor Adjustment Screw** - Adjust if necessary to allow the foot lever into position with no movement of the inner cage, Fig 3.

The weigher should be positioned on an even level site, and may be joined to a race or pen system if required. Lugs are provided at each end of the weigher for this purpose, Fig 1. Fold away transport handles are also provided for manoeuvrability.

Both Spring Balance and Electronic weigh heads may be angled slightly toward the operator if required by mounting the head in the alternative holes provided in the cross member, Fig 4 (arrowed).

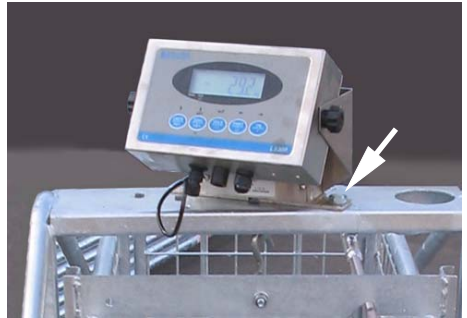


Fig 4



Fig 5

### **Exit Gate Release Handle**

Lift handle clear of retaining lug and push forward to open exit gate, Fig 5.





## Operating Instructions

The Ritchie Pig and Lamb weigher can be easily operated from either side by one operator.

Before admitting an animal to the weigh cage check that the weigh scale is zeroed by exerting pressure on the foot lever.

*To adjust the weigh scale:-*

**Model 663g** - turn the adjuster screw located at the top of the scale head, Fig 6.

**Model 663ge** - follow the instructions on page 12 - 'Preparing to Weigh'.

After zeroing the scale, release pressure on the foot lever.

### To Admit Animal

Slide the entry gate upwards, Fig 7, to allow the animal to enter onto the stable floor of the weigh cage, then lower the gate to close and lock behind the animal.

### To Weigh Animal

Push down on the foot lever.

### To Release Animal

Remove pressure from the foot lever to stabilise the cage floor, lift the handle clear of the retaining lug and push forward to open the exit gate, Fig 5.



Fig 6



Fig 7



# Electronic Weigh Head LS300



Fig 8

The LS300, with its specially designed animal averaging software, has been designed to give a quick and easy method for obtaining an accurate weight of a live animal, even if the animal is moving around.

The indicator comes as standard with an inbuilt rechargeable battery and a back-lit display to allow you to use it in poorly lit areas and where mains power may not be available.

## Installation

Unpack the indicator and components from the box.

Charge the indicator as instructed opposite.

When the indicator is fully charged, attach it to the load cell assembly with the knobs provided.

Connect the load cell cable to the left hand socket on the underside of the indicator and switch on the unit.

## Recharging the indicator

Disconnect the load cell cable and remove the indicator from the load cell assembly.

Attach one end of the charger unit to the centre socket on the underside of the indicator and the other end to a power socket (indoors).

*It will take around 12 hours to fully charge the battery.*



## Scale Operation



Allows the indicator to toggle between kg and lb.

**OFF**



Short press to zero any weight presently displayed. Long press to switch scale off.

**O**



Activates animal averaging function. Allows an animal to step on the scale, once the weight gets within an allowable tolerance band the scale will display the average weight of the animal.

This reading will remain on the scale after the animal has been removed.

By pressing the Hold key for a second time, this will release the held weight shown on the display and return the scale back to displaying live weight.



Allows the displayed weight to be sent to a printer (if fitted).



Used to switch on scale.



## Preparing to Weigh

Switch on the indicator by pressing the **On** key  
(The display will count down from 5 to 1 before displaying Zero).

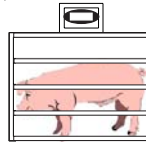


With no animal in the weigher exert pressure on the foot lever to release the cage floor until the weight is displayed, then press the **Zero** key.  
(Display will zero off any weight shown on the display).  
Release the foot lever.  
(Display will show negative weight).



## Normal Weighing

Move animal into the weigher, press down on the foot lever to release the cage floor until the weight is displayed.  
(The display will show actual weight of the animal).

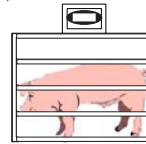


## Weighing using Hold function

Press the Hold key  
(Hold annunciator will flash).



Once the animal is positioned correctly in the weigher the indicator will automatically calculate the animal's average weight, even if the animal is moving around.  
Once calculated, the hold annunciator will stop flashing and the animal's weight will be displayed.



This weight will remain on the display until the **Hold** key is either repressed or the scale is switched off.

The Hold key can also be pressed when the animal is already on the platform. This allows the operator to quickly resample the animal's weight if the first reading was thought to be incorrect.

## To release the held weight

Press the **Hold** key again to release the hold function.  
(The scale will return back to displaying the live weight).



## Turning scale off

The indicator will automatically turn off after 10 minutes if not used, but a long press on the **OFF** key will manually switch off the scale.



O

## Warnings

### Safe installation Safety



For your protection all mains (110V or 230V) equipment used out of doors or in wet or damp conditions should be supplied from a correctly fused source and protected by an approved RCD to BS7071 or BS7288 or IEC1008-2-2 BS EN 61008: 1995.

The mains lead must be connected to a supply outlet with a **protective earth contact**. The electrical supply at the socket outlet must provide over current protection of an appropriate rating.

**IF IN DOUBT SEEK THE ADVICE OF A QUALIFIED ELECTRICIAN.**

Pluggable equipment must be installed near an easily accessible socket outlet. Permanently connected equipment must have a readily accessible disconnect device incorporated in the fixed wiring.



**To avoid the possibility of electric shock or damage to the machine, always switch off the machine and isolate from the power supply before carrying out any routine maintenance.**

## Safe Use

### Caution - Cleaning the Indicator / Weigh Head



Harsh abrasives, solvents, scouring cleaners and alkaline cleaning solutions, such as washing soda, should not be used especially on the display window. Under no circumstances should you attempt to wipe the inside of the weigh head.

The outside of the product is waterproofed to IP65 and should be wiped down with a clean cloth, moistened with water containing a small amount of washing up liquid or proprietary detergent.

**Note:** When the electronic weigh head is not in use store indoors in dry conditions to prevent moisture damage.



# Maintenance and Lubrication

## Electronic Weigh Head (663ge)

Store indoors in dry conditions when not in use

## Spring Balance Head (663g)

Cover Weigh Head when not in use

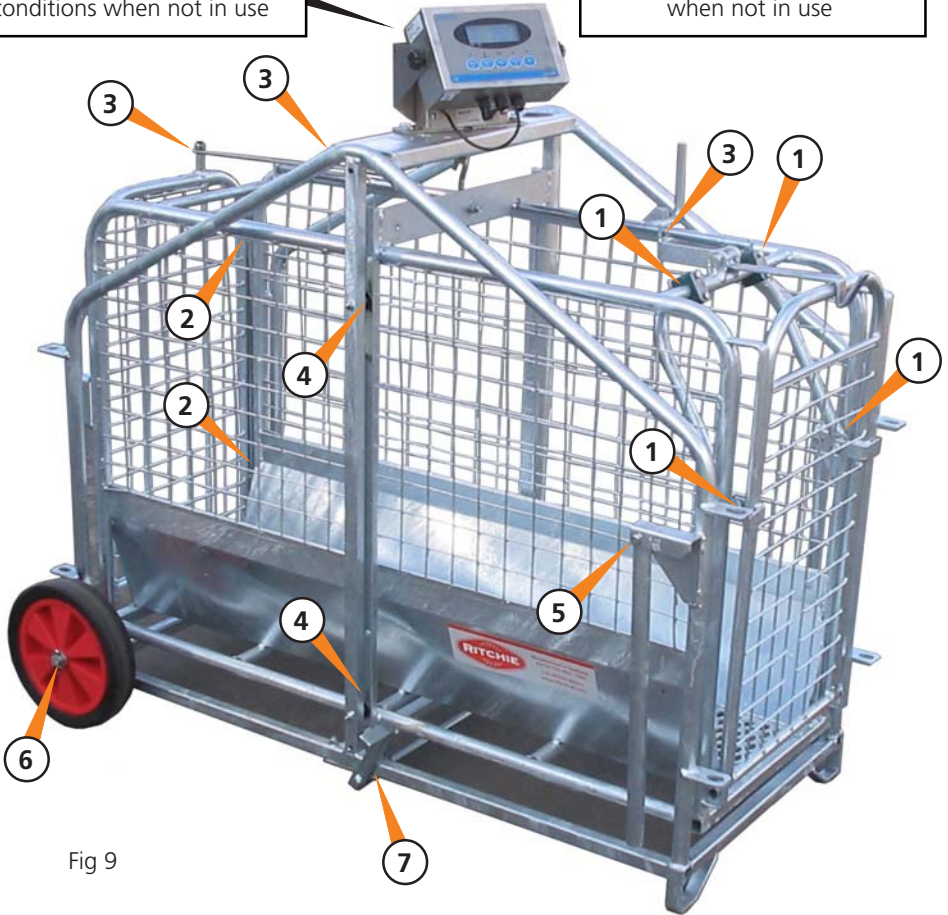


Fig 9

Oil **WEEKLY** during operation:-

- ① Entry Gate Pivot Points
- ② Exit Gate Hinge Pin
- ③ Exit Gate Release Slide and Pivot Mechanisms
- ④ Weigh Cage Bearing Slides
- ⑤ Transport Handle Pivot Points
- ⑥ Wheels
- ⑦ Foot Lever Pivot and Bushes







*the perfect partner*

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