



Combi Clamp

Model No. 4669G

**4669G, 4669G-300, 4669G-800 & 4669G-800LB,
669G-500, 669G-700**

**Instruction Manual
& Operating Guide**

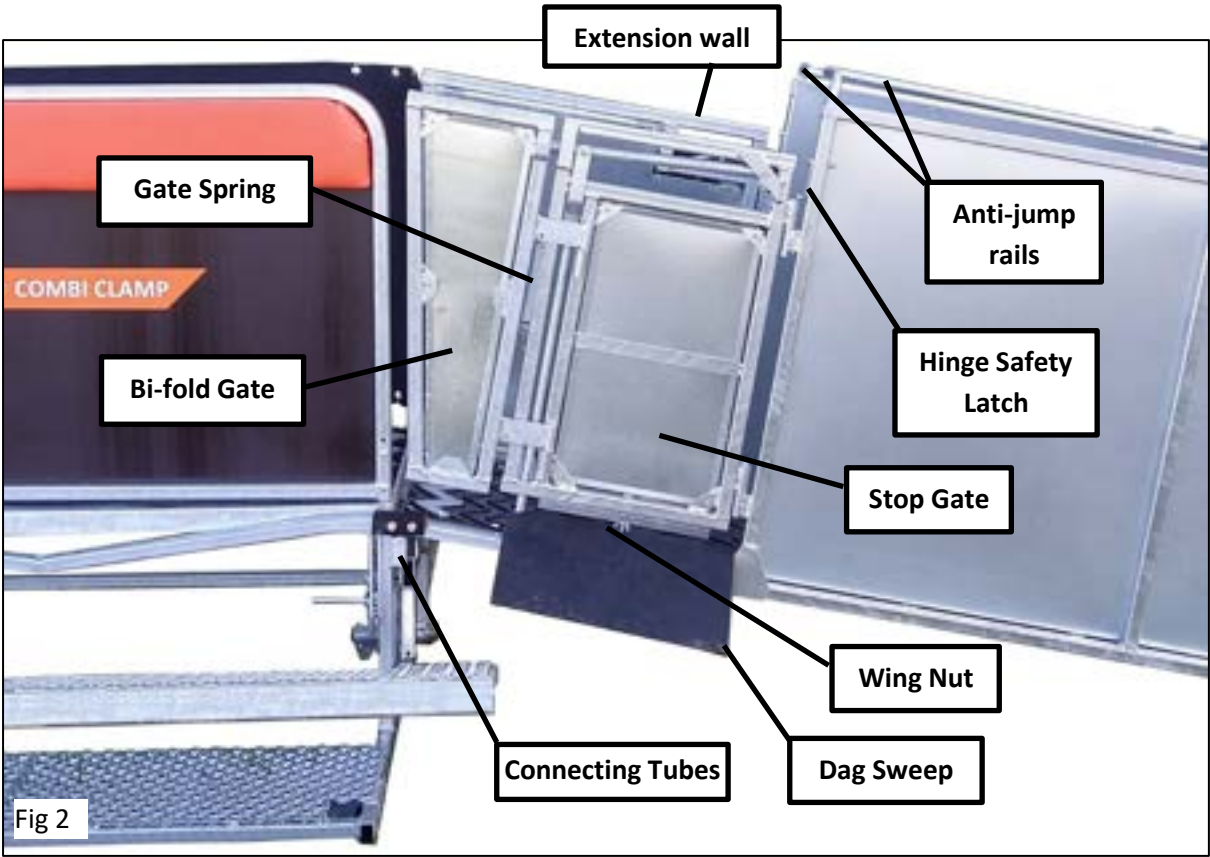
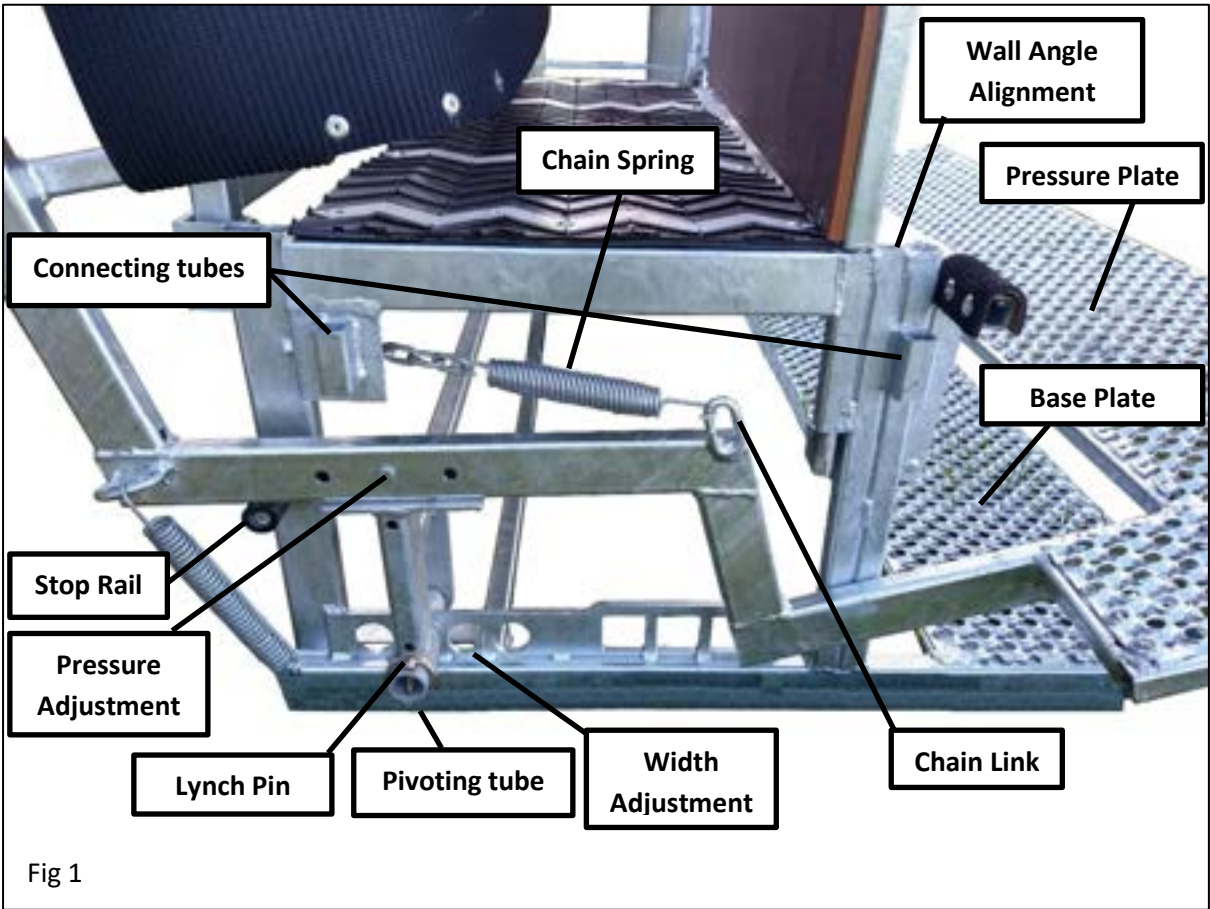
Contents

General Overview	3
Setting Up your Combi Clamp.....	4
Foot Positions for Operation.....	8
Setting up the Weighing frame (4669G-800/4669G-800LB).	11
Auxiliary Frame (4669G-600)	13
Tru-test Weigh Indicators	14
ATV Trailer Set Up (669G-700)	15
Optional Curved Race (669G-500)	18

Revisions:

Rev 0 – 17/03/2022

General Overview



Setting Up your Combi Clamp

SAFETY: - Always have an experienced stock person using the Combi Clamp and wearing protective footwear.

When moving the Combi Clamp, always lock the Pressure plate down by lowering the Locking Bar.

Weights (unladen)

Combi Clamp..... 122 kgs

Approach Race 90 kgs

3 Way Shedder..... 62 kgs

Draw bar 10 kgs

Axle 23 kgs

Lead up ramp 87 kgs

Auxiliary Frame 20 kgs

To make the unit lighter for handling, remove the gates from the approach race, and lift the cushion wall from the Combi Clamp.

Where to set up:-

Firstly, decide from which direction you want the sheep to enter the Handler from. Think about which hand you want to use for this task, and relate this to having the sheep run through the clamp from either left to right side or visa-versa.

The first time that you use the Combi Clamp, we recommend that you place it going out the side drafting gate of your race, or if you have someone to chase up for you, it could be placed going straight ahead out of the drafting race.

How to set up:-

Remove the gates off the Handler's approach race, to make it easier to move.

Remove the spring on the Bi-fold gate first. Push the spring towards the outside of the gate with your left hand, then hold it with the right hand while you pull the hook out of the hole with your left hand. Remove the

gates by swinging up the hinge safety catches first. Jam the Approach Race tightly into the gap left by the open, or removed, drafting gate.

Slide the Handler around by holding the front edge of the pressure plate. Move it into position lining it up as close to the Approach Race as possible, facing the Handler, stand astride the Approach Race, where the gates are removed. Pick it up by the base and line the Race Hooks up with the Connecting tubes, on the Handler, if the Handler is not quite lined up, lower one hook into the closed connecting tube, then pull the Handler towards you, to line up the other hook.

If using curved races, place these into the gap left by the open or removed drafting gate, position the approach race at the end of the curves, then attach to the Handler. Join the race to the curves, using the long pins provided. Check the angle of the Handler, ensuring that the sheep entering the Handler will have a clear view of the sheep that have already exited the Handler. This will draw the approaching sheep into the Handler. Reattach the Race gate. (Swing the safety catch out, to clear the top of the hinge, then swing back down again, one gate is swung).

The extension wall, Fig 2. goes on the far side of the race, the Stop gate on the side closest to you. Attach the Bi-fold gate to the hinges on the outside of the Stop gate.

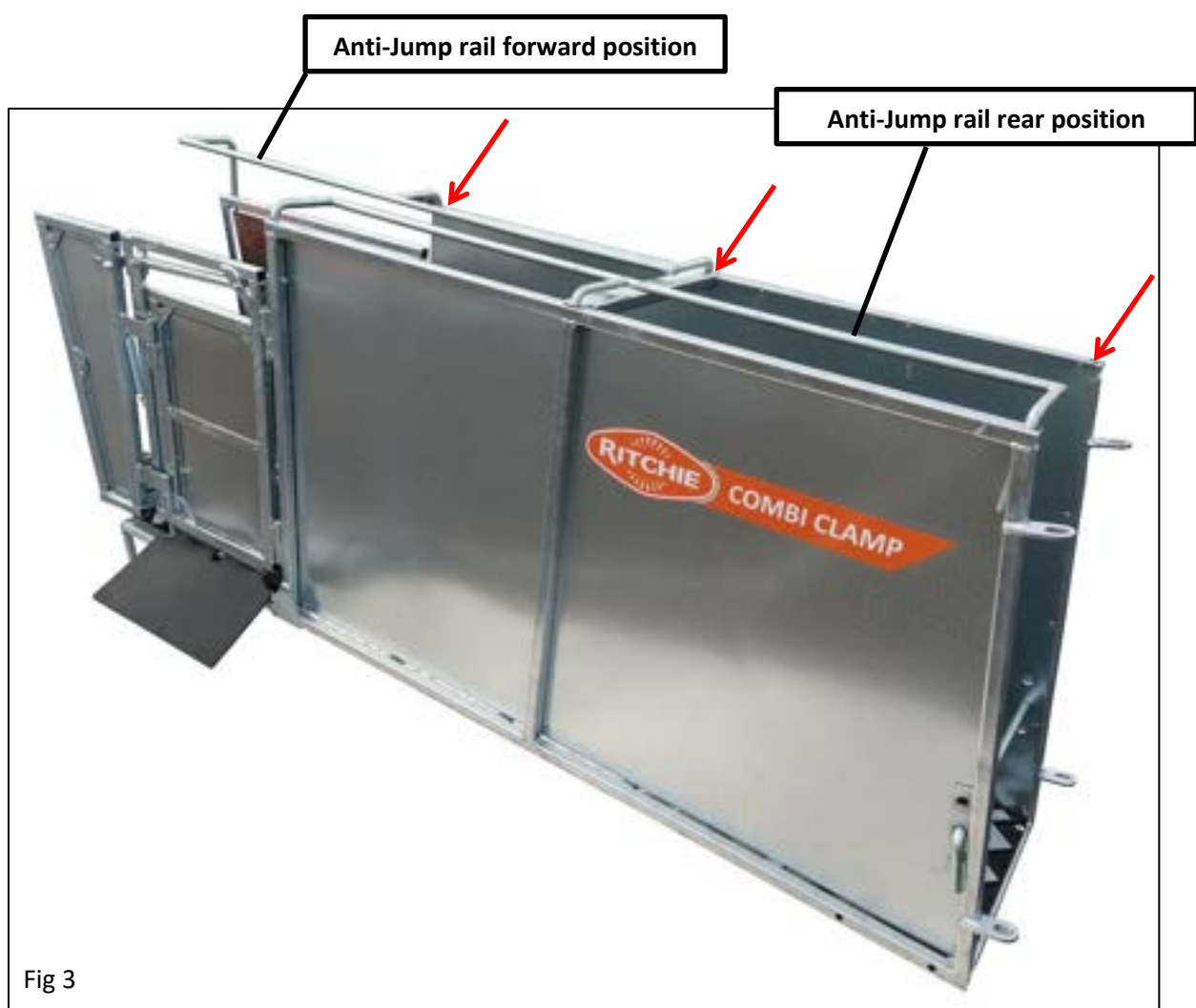
(If using the Combi-Clamp for dagging or Crutching hoggets or ewes, the Bi-fold gate can be left off. This enables you to dag through the gap without closing the gate for every sheep. You may need it on when dagging lambs as they may try to escape through the gap).



Leave the gate and Bi-fold gate in an open position. Hook the Bi-fold gate spring into a hole on the edge of the Stop gate by holding the spring with one hand and pulling it out and downward whilst positioning the hook with the other hand.

Position the Anti-jump rails into the holes on top of the approach race. The Anti-jump rails can be placed in either of the three holes

provided, Fig 3, or you can move the far Anti-jump rail forward one hole, so that it extends over the extension wall to prevent the sheep from jumping out over the side. When vaccinating, or any other procedures where you are working at the front of the Handler, both anti-jump rails can be moved into the forward position.



Replace the cushion wall at an angle, into the slots on the Handler, Fig 4. Make sure that you have the wall angled narrow at the shoulder end of the sheep, and wider at the back end. This will assist in preventing the sheep from slipping out.

To turn the Handler around, remove the gates on the Approach race, straddle the race and lift it off the Handler. Rotate the Handler around, ensuring the Locking rail is down before moving it.

Reattach the race and the gates, swapping them over from one side to the other. Change the angle of the Cushion wall. Alter the Anti-jump rails if you have one forward.

If storing your Combi-Clamp outdoors, please cover when not in use to prevent the Rubber wall from fading or hardening due to the effects of prolonged exposure to the sun.



Fig 4

Adjusting the Pressure for Sheep size and Operator Weight

Pressure adjustment: Before using your handler, you have to adjust the Pressure Adjustment to suit the body weight of the operator.

A = for operators who weigh less than their ewes.

B = for operators who weigh the same as their ewes.

C = for operators who weigh more than their ewes.

The Pressure Adjustment is labelled A, B, C.

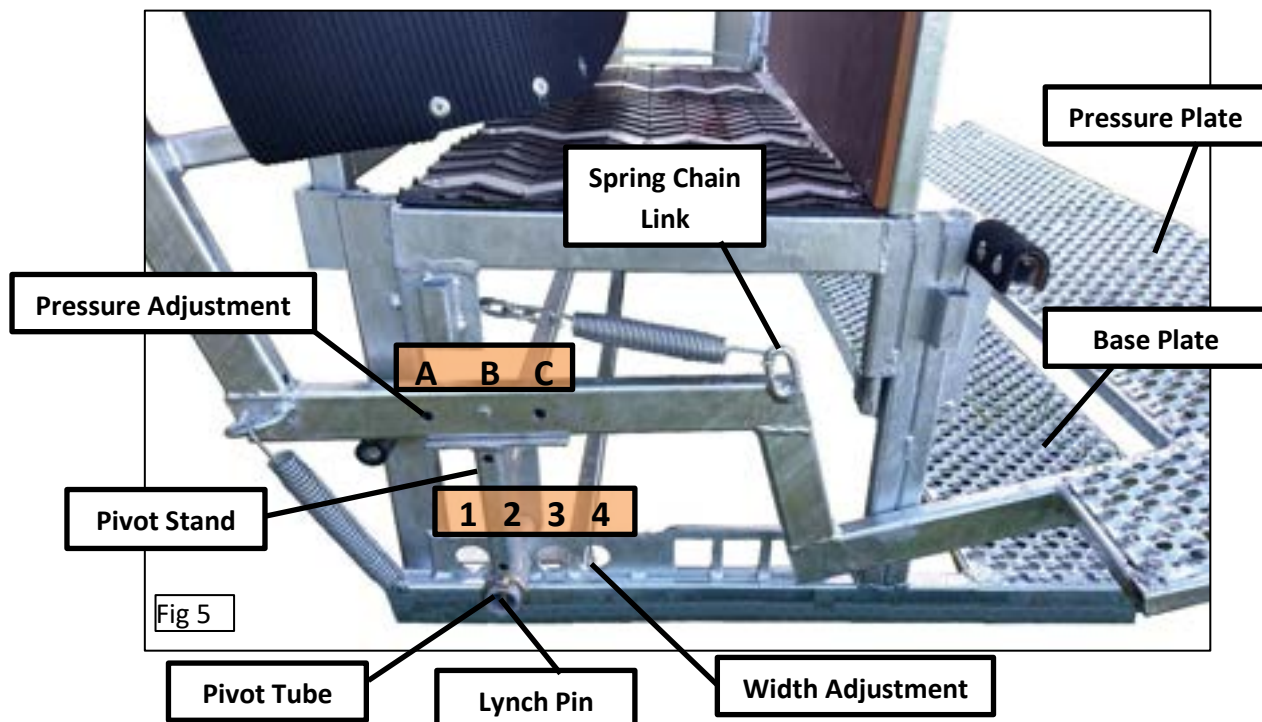


Fig 5



(Warning:- only move the pressure plate from the front edge, as stated below, to prevent the risk of hurting your fingers). Refer to Fig 5 for following instructions.

Firstly raise the Locking bar to allow the pressure plate to rise. At the other side of the Combi Clamp, crouch, and at either side is a chain and spring arrangement. Pull the chain to allow you to remove it from the round bar.

Repeat for the other side of the handler. Remove the pin from the pressure adjustment hole at both ends of the handler. Move to the front of the handler and grasp the pressure plate by the front edge, with both hands, and slide the pressure plate arm along to the chosen hole, lining both sides up evenly. Replace pins in the pressure adjustment.
(Replace chain if no Width Adjustment required).

Width Adjustment

After setting the Pressure Adjustment, then adjust the width of the handler to suit the size of the sheep that you are about to work on. The larger the sheep the wider the setting. The width adjustment is trial and error as there are a large range of ewe sizes and wool lengths. The following can be used as a guide.

A light operator would use:

A or B & 1, 2, 3 for rams to lambs

A heavy operator would use:

B or C & 3, 4 for rams to lambs

If you need to change the width of the adjustment, remove the Lynch Pin from the end of the Pivoting Tube, at both sides (from under the approach race end, if connected to the handler).

Pull the Pivot tubes out completely.

Once again grasp the pressure plate from the front edge and slide it either forward or back to line up to the desired tubes on the width adjustment. Slide Pivot Tubes back into place, moving the pressure plate from the front edge, if any minor adjustment is required to line up the tubes. Replace the Lynch Pin. Replace the chain by pulling the chain towards yourself with both hands. **Ensure that the chain is located on the round bar with the same amount of links on both sides.**

There should be enough tension on the chain spring to allow the Rubber Wall to fully open quickly, but to prevent the wall from bouncing, once in the open position.

Hints:- ideally you should be catching the average sized sheep with the **pressure plate no lower than 3-5 cm's above the Base Plate.**

This allows the pressure plate to travel lower to catch any skinny or smaller sized sheep, and still allow enough pressure to catch fatter and larger sheep.

If the **Pressure Plate is up high and bounces** with you on it holding a sheep in the clamp, you may have the **Width Adjustment too narrow.**

If the **Pressure Plate is touching the base plate**, and the sheep can escape, the **handler is set too wide.**

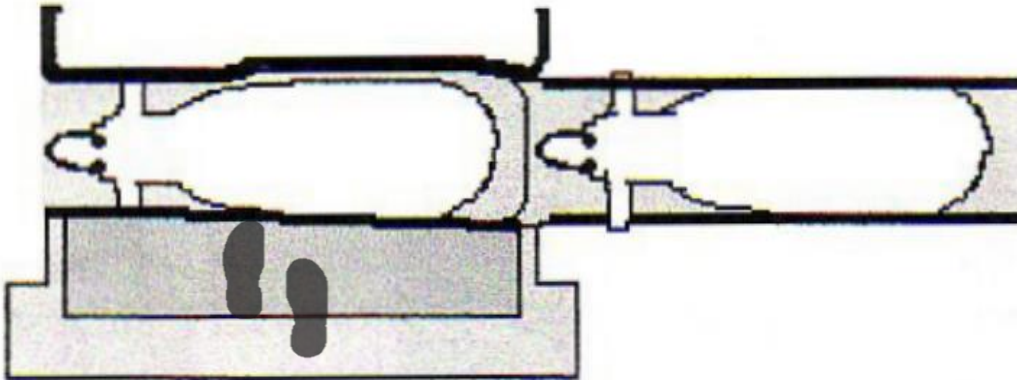
If the **sheep are able to push their way out** when you have them caught, and the Pressure Plate is not tight down touching the Base Plate, then you will need to **adjust both the width and the pressure** e.g. from B3 to A2.

The Pivot Stand needs to be further away from the Pressure Plate. This will give you more leverage.



Foot Positions for Operation

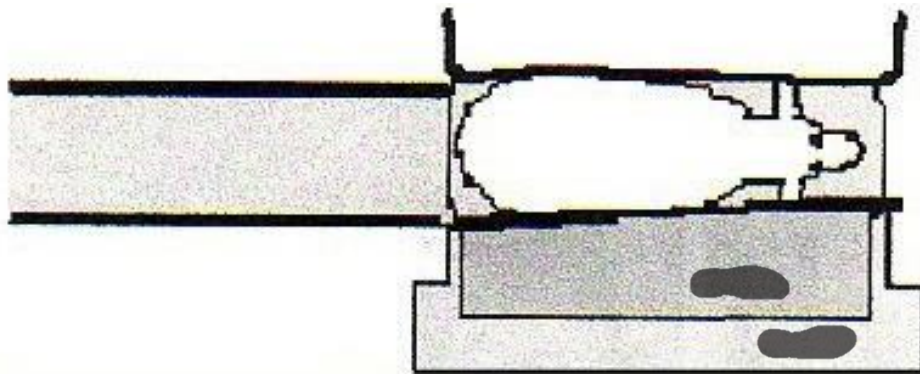
Caution:- Always use solid protective footwear when using your Combi Clamp.
Avoid placing toes under the edge of the pressure plate when closing.



Weighing (with sheep entering from either direction)

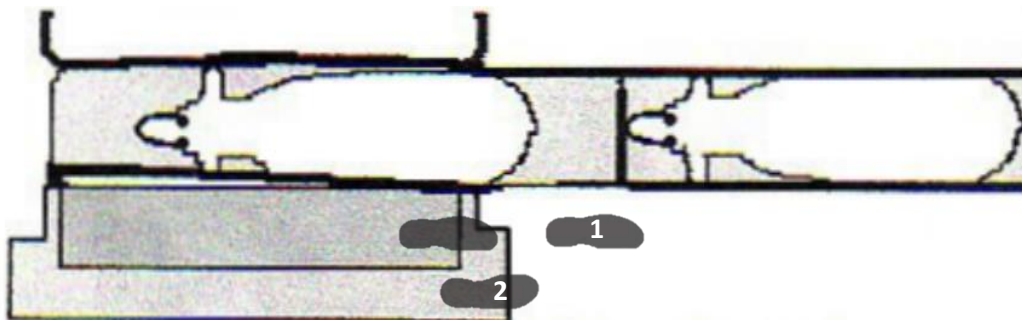
Vaccinating (Right handed)

Alternate your leg position to prevent your legs from tiring.



Drenching and Mouthing (Right handed)

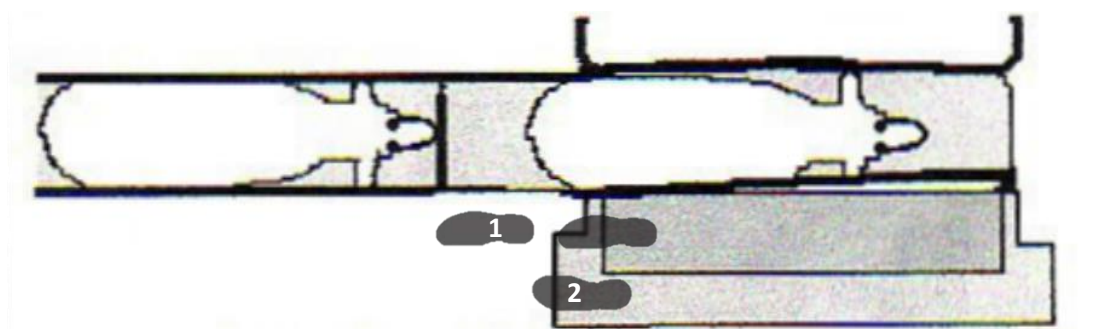
Mouthing can also be done from the left hand side of the sheep, as per Vaccinating position.



Dagging or Crutching (Right handed) Bi-fold gate removed



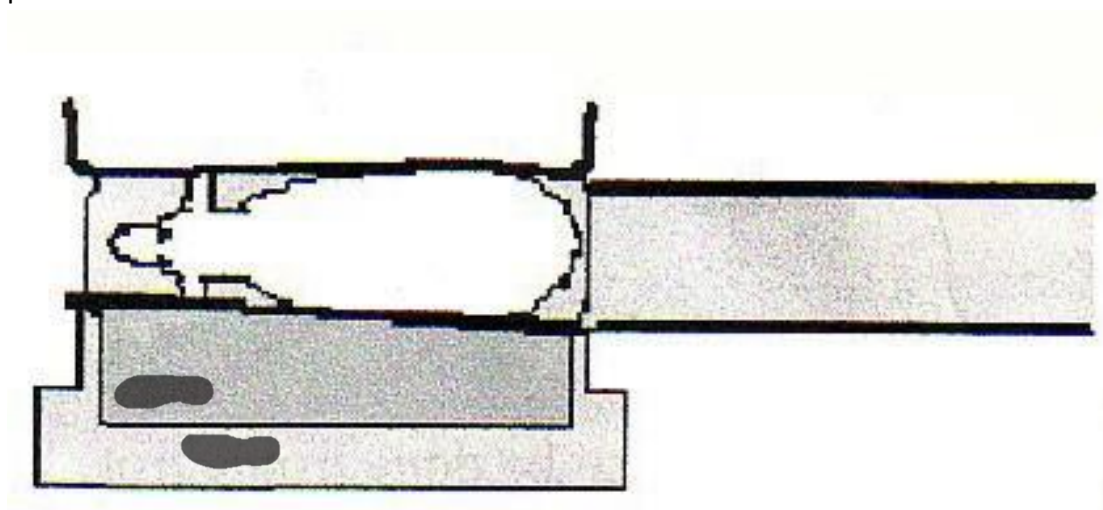
Foot Position for Operation (Continued)



Dagging or Crutching (Left handed) Bi-fold gate removed

(Use this method if you have to step forward to bring sheep up)

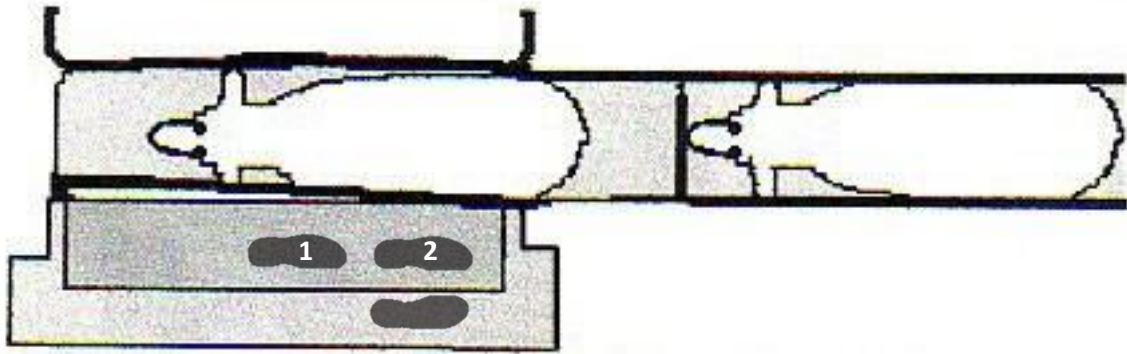
Stand with the inside foot (1) in front of handler and rest the toes of the outside foot (2) on the edge of the pressure plate. When the sheep enters, place your weight back on the outside foot, then step back onto the pressure plate with your inside foot. Lean your hip against the cushion and use your hand on the tail of the sheep to make it stand up or to adjust position. To adjust position of the sheep, take a little weight off the pressure plate, move sheep then apply pressure again, or walk along the pressure plate to the other end, hand under chin of sheep, raise pressure plate slightly whilst you adjust sheep, close down again, then walk back to dag position.



Capsuling

You may prefer to turn the Handler around

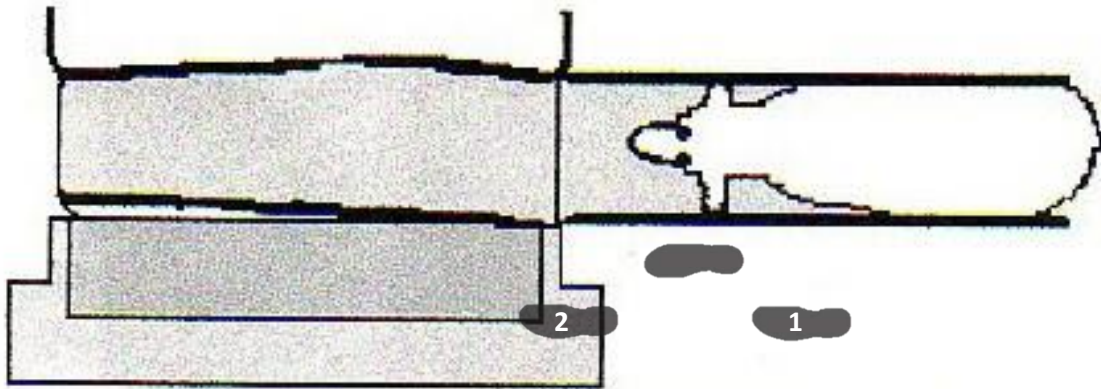




Right Hand Dag

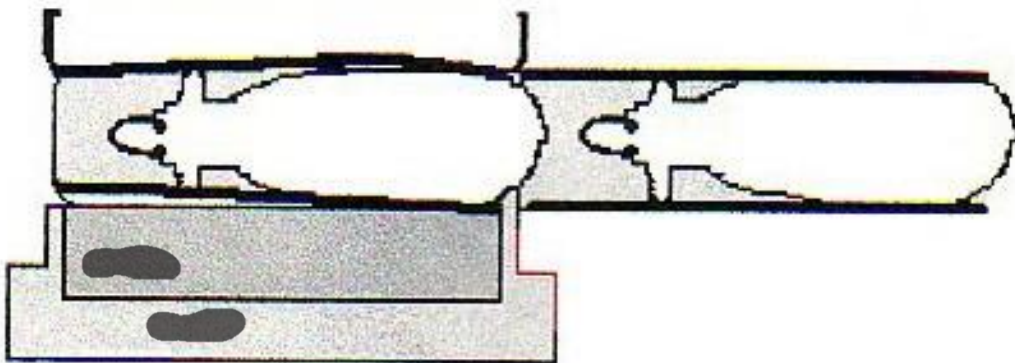
Step forward with inside foot, once sheep is caught.

Remove Bi-Fold gate when dagging ewes, then you can dag through the gap without closing the stop gate every time. Every time you open the stop gate, it will sweep out the dags.



Chasing sheep up into Handler

Walk along behind the sheep with your hand on its tail. Time it so that you step onto the pressure plate with your outside foot.



*Drenching

Stand facing the oncoming sheep. Hide left arm behind yourself as sheep enters. Once caught, swing left arm under sheeps jaw. The sheep will raise its head allowing you to drench with right hand.

Reverse foot and Handler positions for Left hand operators.



Setting up the Weighing frame (4669G-800/4669G-800LB).

Fastener Kit (4669G-800):

4 x M10 x 40 Setscrews.
4 x M10 Washers.
8 x M12 x 35 Setscrews.
8 x M12 Nyloc Nuts.
16 x M12 Washers.
(4669G-800LB has Load bars already attached using M12 fasteners)

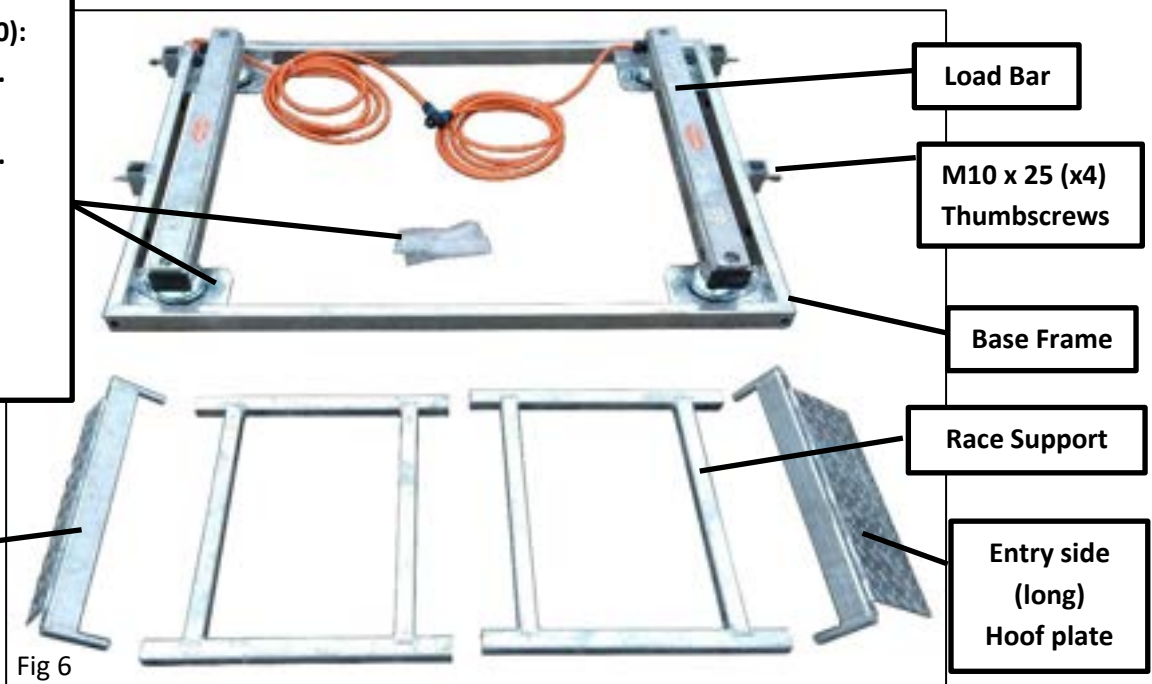


Fig 6

The components for the Weigh Frame, Fig 6, allow the Combi Clamp to be connected to the load bars & weigh frame.

Set the Combi Clamp in position as required where handling operations are to take place.

Ensure the load bars are bolted to the base frame using the M12 fasteners, Fig 6. With the weigh frame prepared, turn the Combi Clamp on its back, to make ready for positioning the weigh frame in place, Fig 7.

Bring the Combi Clamp back down on top of the weigh frame. Manoeuvre into position, so that the 2 holes at the front and 2 slots at the back line up with the holes in the load bars. Secure with the M10 fasteners provided Fig 8 & 9.

Note: Take care to ensure cables are not snagged or trapped between clamp and weigh frame.

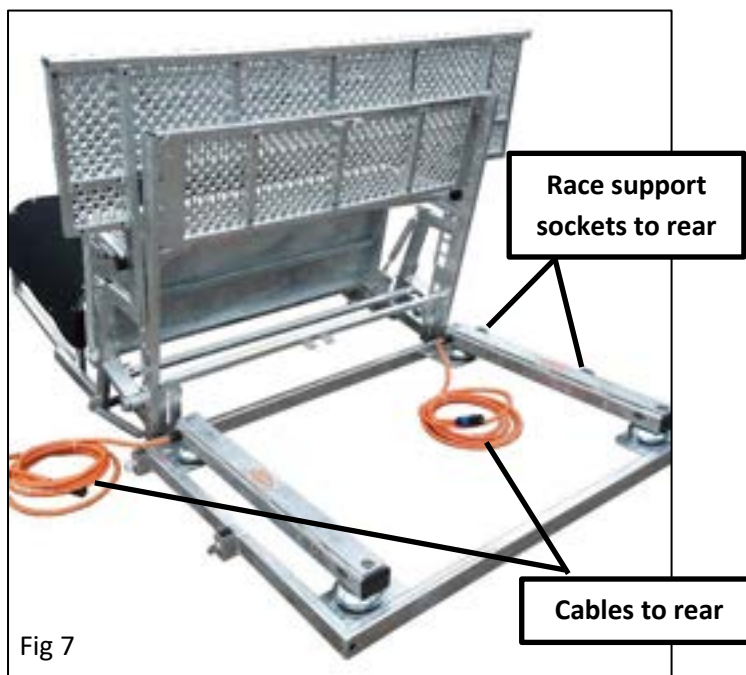


Fig 7

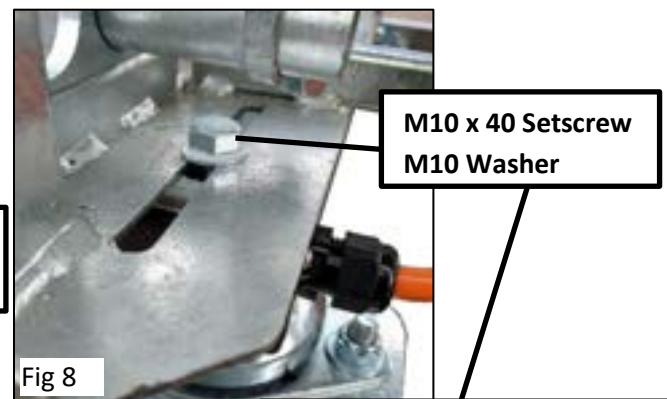


Fig 8

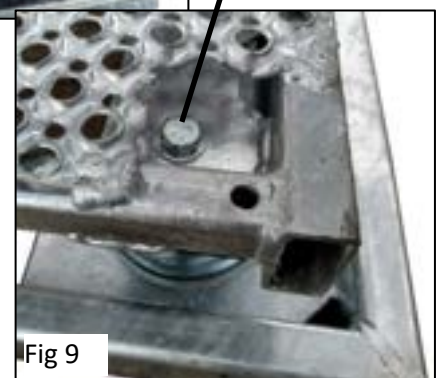


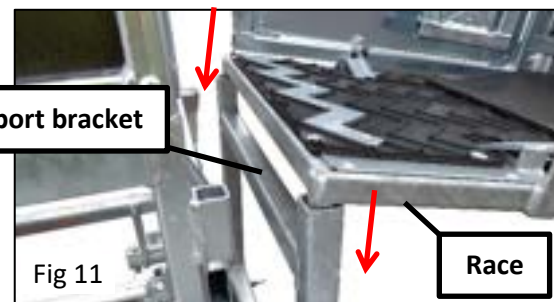
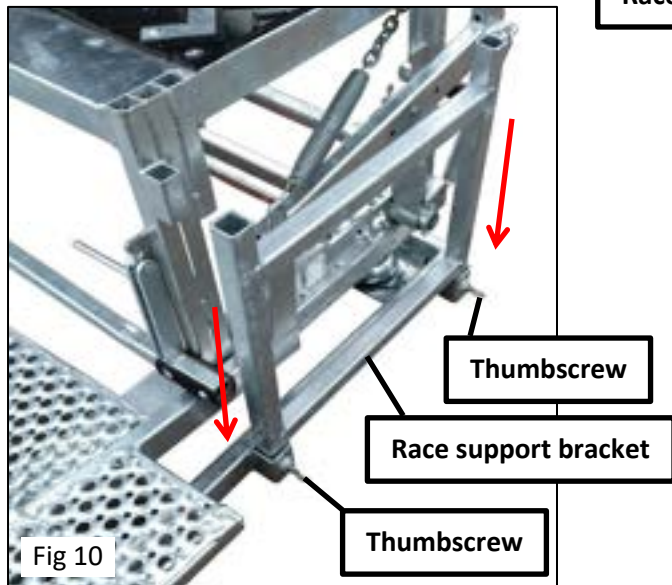
Fig 9

Fit the race support bracket at the ramp end and secure with the thumbscrews, Fig 10.

Lift the race into position allowing race hooks to slot into the top of the support bracket, Fig 11.

Slot the supplied entry side (long) hoof plate into the tube ends on the clamp, Fig 12.

Note: Only fit the corresponding support bracket at the opposite end (exit) of the clamp if a 3 way draft is to be fitted.

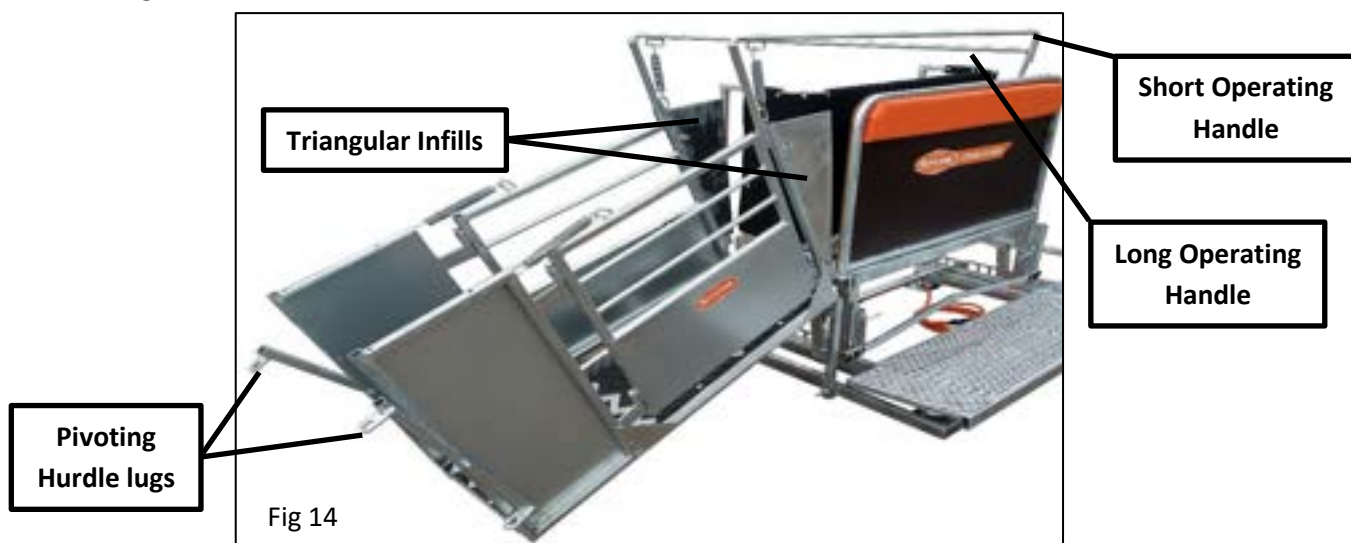
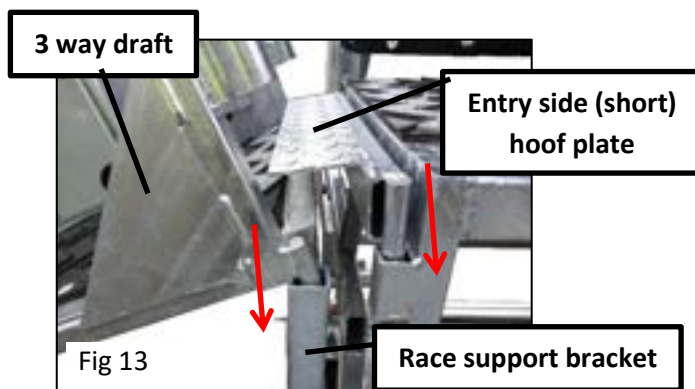


If fitting a 3 way draft (4669G-300) - fit the support bracket into the slots on the shedder side of the weigh frame, Fig 13.

Lift the draft into position and slot into the top of the support bracket.

Slot the supplied exit side (short) hoof plate into the tube ends on the clamp.

The 3 way draft should be fitted out ready for use as indicated in Fig 14.

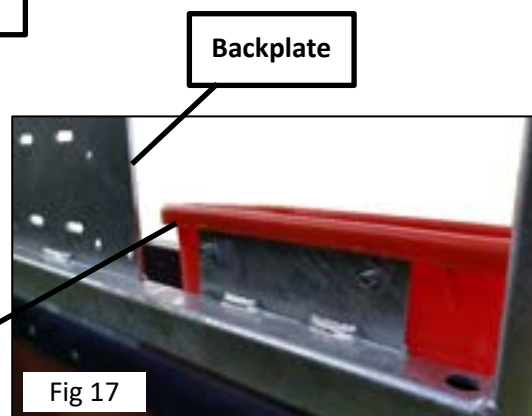
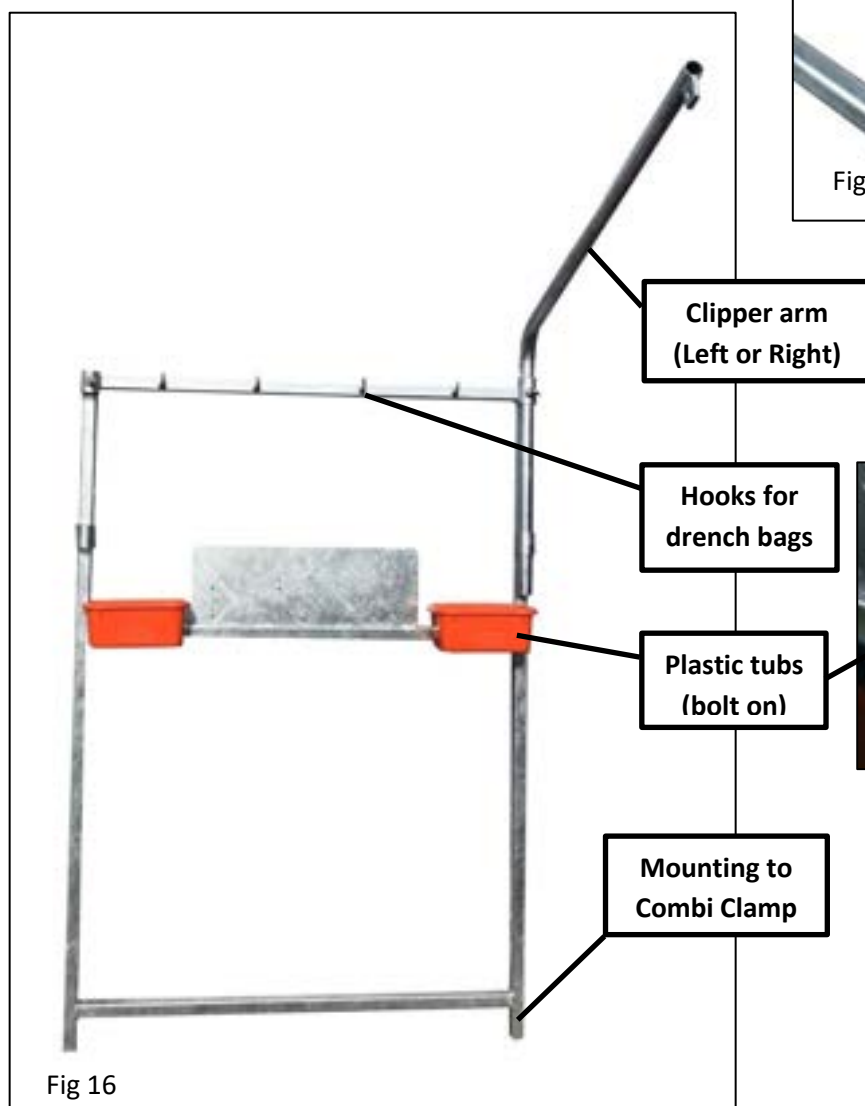
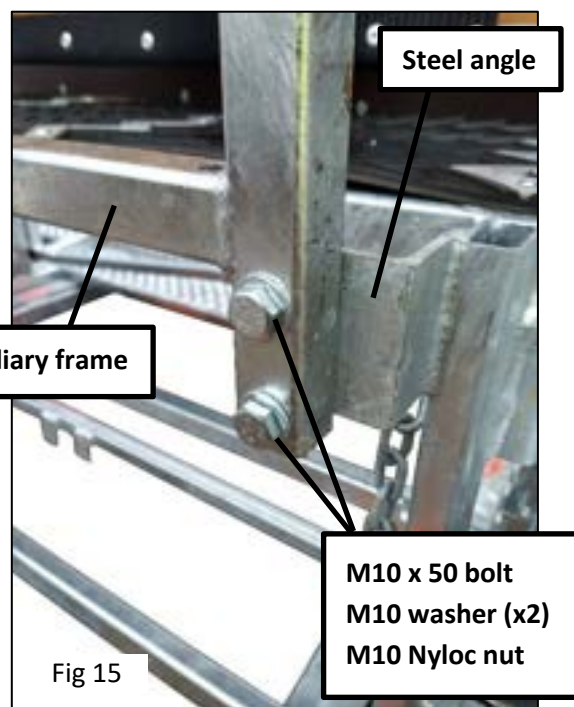


Auxiliary Frame (4669G-600)

The Auxiliary Frame is bolted to the outside of the angle at the back of the Combi clamp. Using the M10 fasteners supplied with the frame, Fig 15.

The Clipper frame can be fitted to either the left or right hand upright to suit the operator. Hooks are provided for dosing or vaccines. Tubs, for aerosols and other equipment, bolt to the plates either side of the backplate, Fig 16 & 17.

The backplate has pre-drilled holes to suit a range of Tru-Test weigh indicator mount brackets. Fig 18.

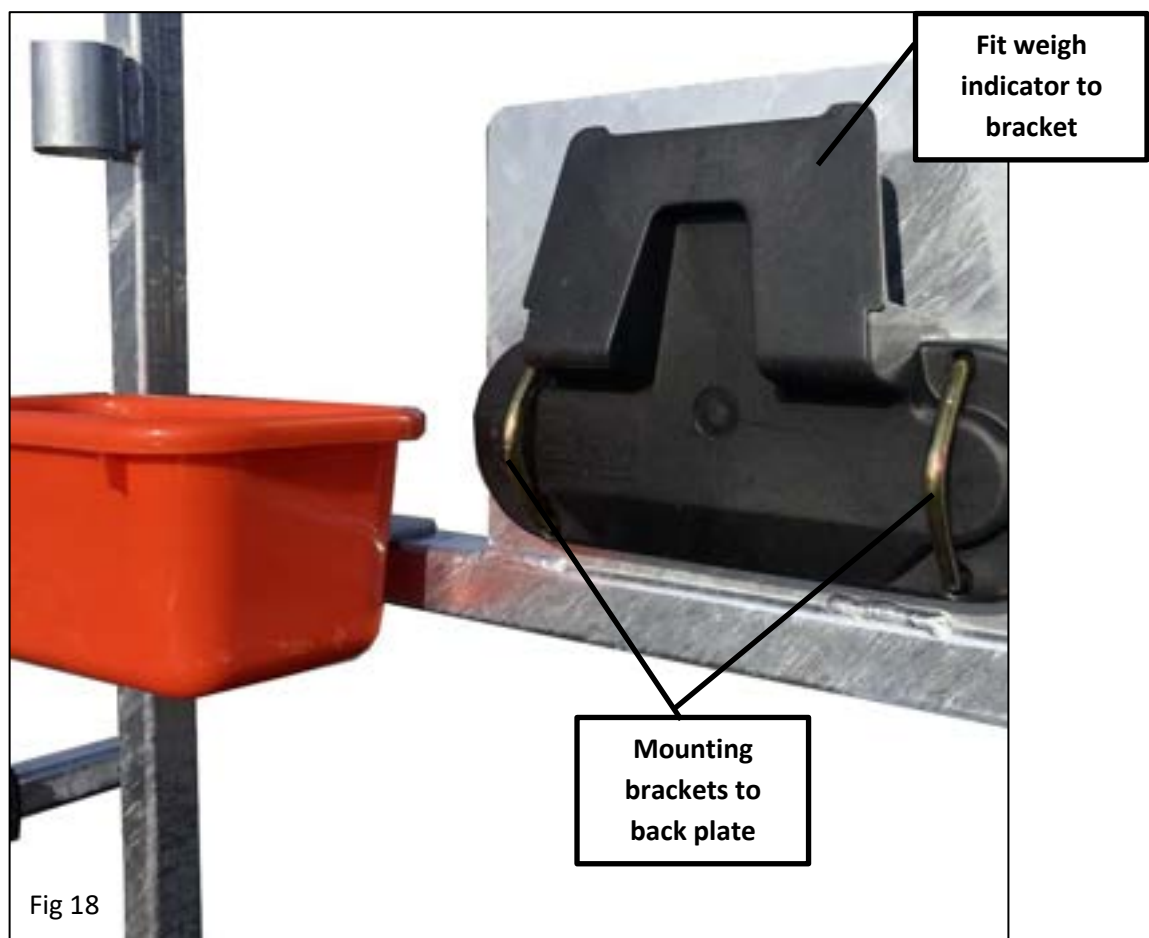


Tru-test Weigh Indicators

S3 weigh scale, eWeigh unit, Eziweigh 7i and ID5000 Tru-Test indicators are some of the options available for weighing using the Ritchie 4669G Combi Clamp.

Fit the indicator mount bracket to the backplate on the Auxiliary frame using the pre-drilled holes provided Fig 18.

Attach indicator to the two load bars and secure on the mounting plate and power up to try. The operator needs to zero the indicator whilst standing on the Combi Clamp before running any animals over the clamp.



ATV Trailer Set Up (669G-700)

1. Separate the race from the Handler
2. Lock pressure plate in closed position. Raise handler up to stand on one end. (The end that the sheep will enter from when you next use the Combi-Clamp)
3. Remove "D" pin from draw bar, then lean drawbar against underside of handler, with coupler at the top, Fig 19, being careful that it does not fall.
4. Position axle between square shaped lugs located on each side of the underside of the handler, lining up the box section on the draw bar and handler. (Make sure that the letter 'P' that is welded on the axle, is placed on the pressure plate side of the handler. This is because of the off-set draw bar).

Rest one knee against the axle to prevent axle from falling out, then raise the towbar above the handler, with the coupler upmost, and lower drawbar down through box section from above the handler, Fig 20, through the axle box section, then handler again, making sure that you have the drawbar facing the right way up. Once drawbar is in position, hold onto the coupling end of drawbar and lower the handler onto the wheels, being careful that the drawbar does not slide out of the box section.

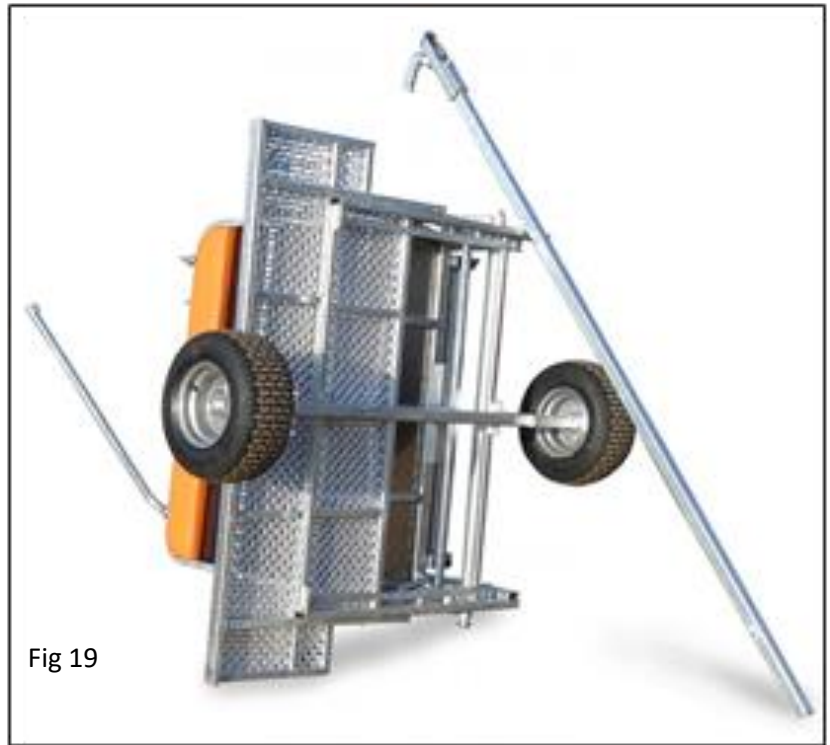
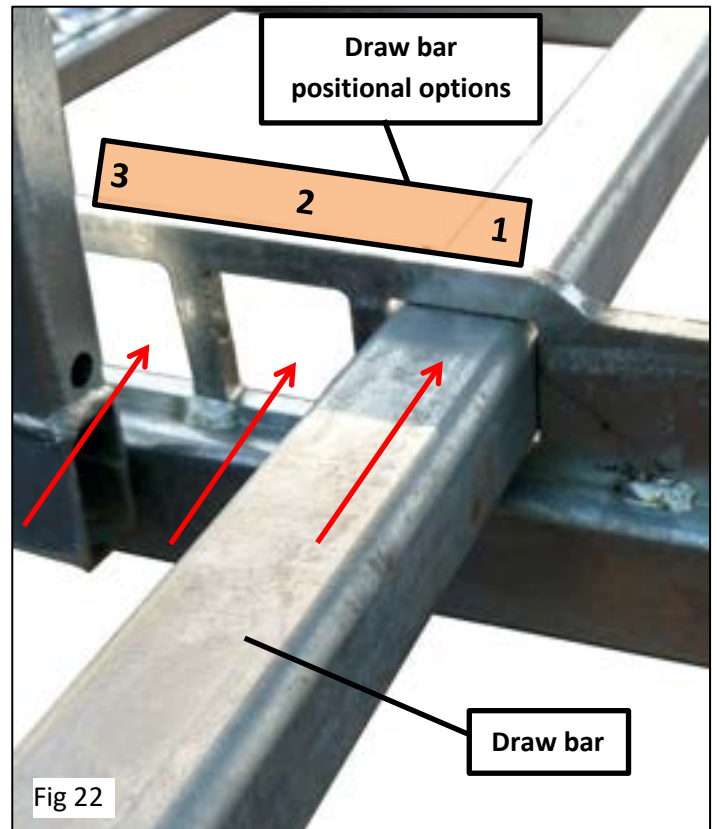
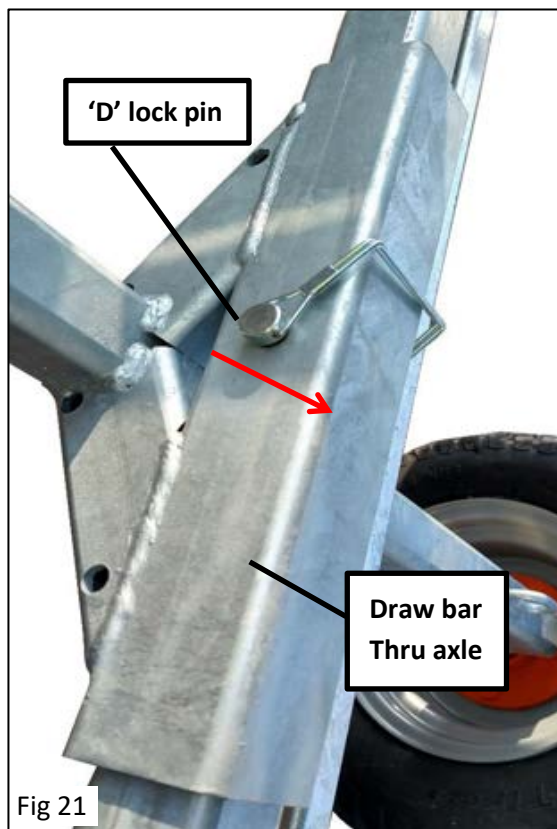


Fig 19



Fig 20





Secure drawbar by placing 'D' pin through the hole in the middle of the drawbar, and handler box section Fig 21. The draw bar may go through any pair of square holes, 1, 2 or 3. Depending on how the Combi clamp has been set up, Fig 22.

5. Wheel the trailer unit to halfway alongside the approach race, with the gate end of the race facing towards you. Leave the drawbar raised above the ground and the far end of the handler resting on the ground. Remove all the gates from the approach race to lessen the weight, lift race by the hooks at front of race, and swing the race over the pressure plate and against the cushion wall, slide the race completely against the wall, Fig 23.



6. Replace gates with the extension wall against the handler side, and Bi-Fold gate, in a closed position, on the outside of race. Lift the anti-jump rails slightly at the gate end of the race, and fit wall brace over the top of walls.

Tie Downs - Using the tie-down, hook the long strap onto ring on pressure plate side of axle. Pass the strap around the back of race above the two hinges, Fig 24.

Hook ratchet end onto top side of axle on the other side of handler. Fit tie down together then adjust to take up slack only. (this is to be tightened later).

Repeat for the front tie down. Tighten up both ratchets firmly, but not over tight, as this can bend the race walls. Roll up excess straps and secure.

If you own a Standard Unit, you are ready to go.

If you also own a 3 way draft - After you have fitted the approach race onto the pressure plate, **do not** fit the extension wall and bi-fold gate. (These will go inside the approach race). Fit the 3 way draft onto the approach race at the front of the trailer and over the draw bar, Fig 25.

Place all remaining loose items on the floor of the approach race.

Important:- the Tie-Downs are 500 daN rated and very strong, so be careful that you don't over tighten them resulting in bent race walls, etc.

Important

Check trailer wheels regularly.

Torque setting for wheel nuts - 85Nm.

Tyre pressure - 25 psi.



Optional Curved Race (669G-500)



An optional Curved Race can be added if required by fitting joining rods through connecting tubes, Fig 26.





the perfect partner

David Ritchie (Implements) Ltd,

Carseview Road, Forfar, Scotland, DD8 3BT

Tel: 01307 462271 fax: 01307 464081

e-mail: agrisales@ritchie-uk.com

www.ritchie-uk.com