

# RoteX<sup>®</sup>

## INSTALLATION, OPERATION & MAINTENANCE MANUAL



# Health and Safety



Stages of the installation may require the use of personal protection equipment.



Ensure the pallet is positioned on firm & even ground before unloading the panels. The pallet should not be unloaded whilst sat on an incline.



Ensure safety chains, located at each end of the pallet are used. When a panel is being unloaded all remaining panels should be secured to the pallet using the safety chain.



Assembly of the RoteX® system will require at least two people.



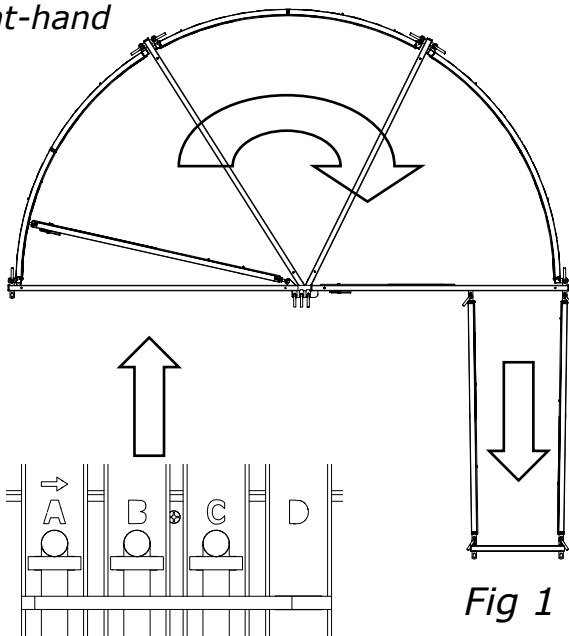
Some items, especially stock boarded items, will be very heavy. Exercise due caution when handling.

## Right-hand and Left-hand setup

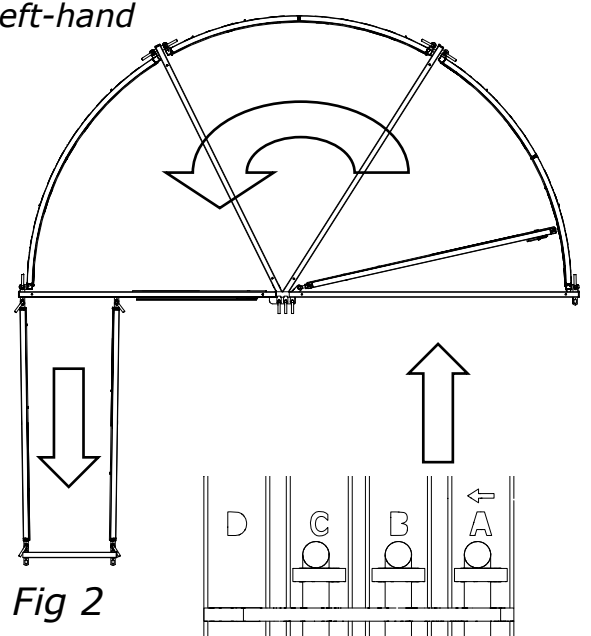


The RoteX® portable cattle handling system can be installed as either a left-hand or right-hand setup.

*Right-hand*



*Left-hand*

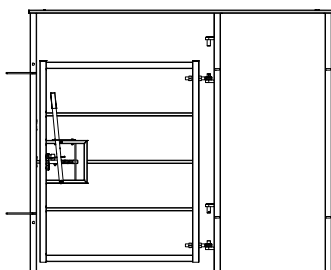


The top labels on the central pillars indicate which way animals will progress through the system. The animal will always progress from “A” to “D” regardless of the setup.

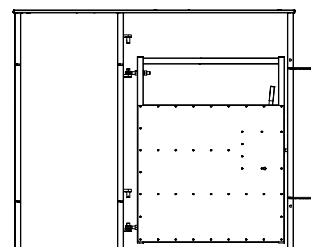


The RoteX® system is supplied as a default right-hand configuration. If you wish to set the RoteX® system up as a left-hand configuration then the access gate mounted on panel “D” will need to be removed, the frame rotated through 180° and the gate re-hung.

*Right-hand system*



*Left-hand system*



# Assembling the RoteX<sup>®</sup> system

These assembly instructions are to complement the installation video and photographic guide at:

[www.iae.co.uk/agriculture/products/rotox/](http://www.iae.co.uk/agriculture/products/rotox/)

Although the system can be erected in any order, we recommend starting with panel “D” and building the system up around that.

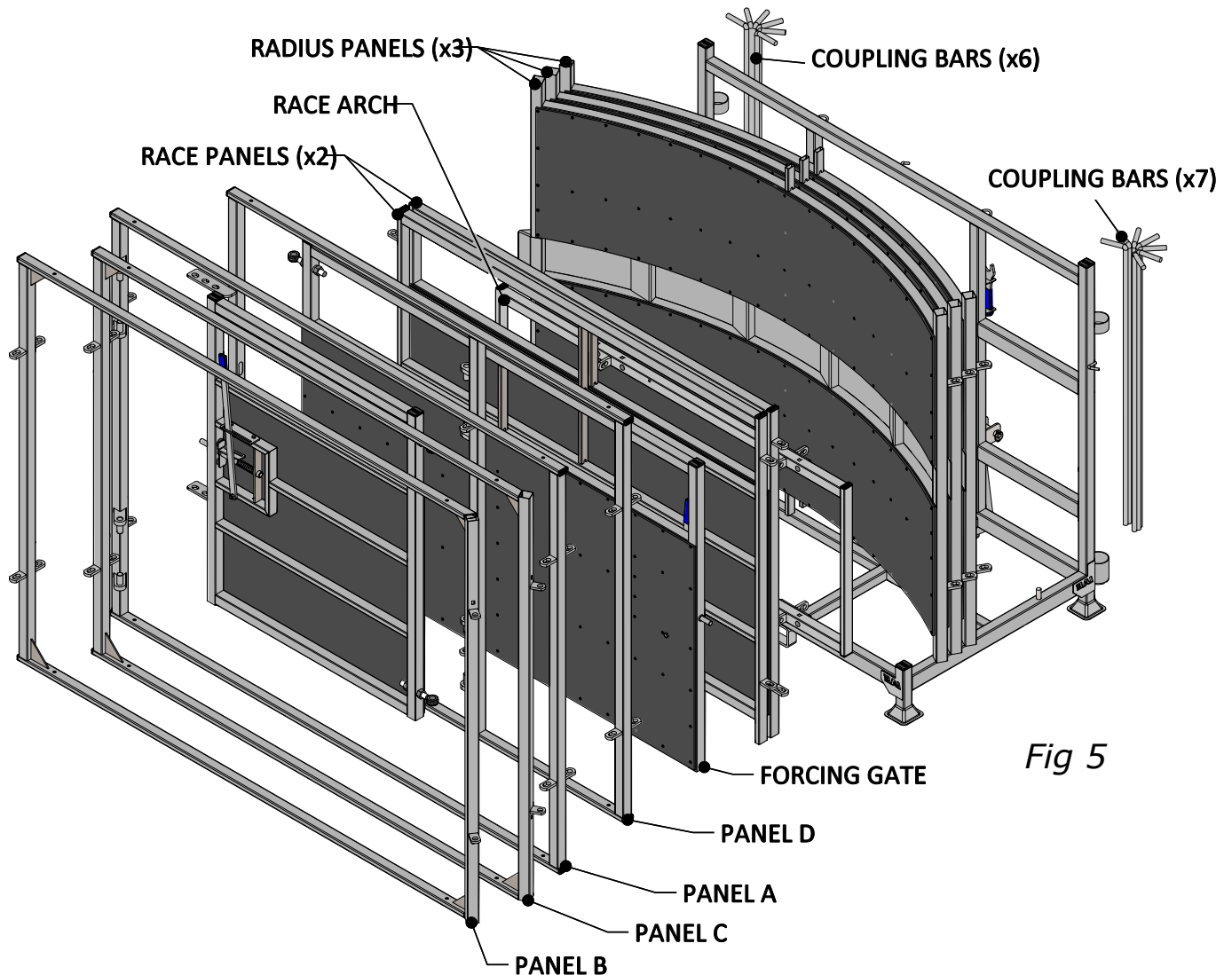


Fig 5

Fig 5 shows the recommended load order for the RoteX<sup>®</sup> pallet. Arranging the components in this way enables the system to be installed quickly on subsequent occasions as well as ensuring that all components fit safely on the pallet.

Care should be taken when removing or placing panels onto the pallet so as not to scrape or damage them. Any damage which leads to the removal of the galvanised finish should be rectified as soon as possible using a suitable rust-proof applicator.

All panels should be handled on and off the pallet by at least two people.

Always use the supplied ratchet strap & safety chains to secure the components to the pallet before transporting.



When installing the RoteX<sup>®</sup> system, make sure that all the cranks on the coupling bars face outwards, away from the animal.

# Assembling the RoteX® system

Remove the RoteX® support frames (A), (B), (C) and (D) from the pallet and arrange them so that they can be easily accessed during installation. Fig 6 shows a typical arrangement for a *right-hand* installation. Refer to page 1 if you are installing the system in a left-hand configuration. Note that *all* panel labels will converge at the centre of the RoteX® arc.

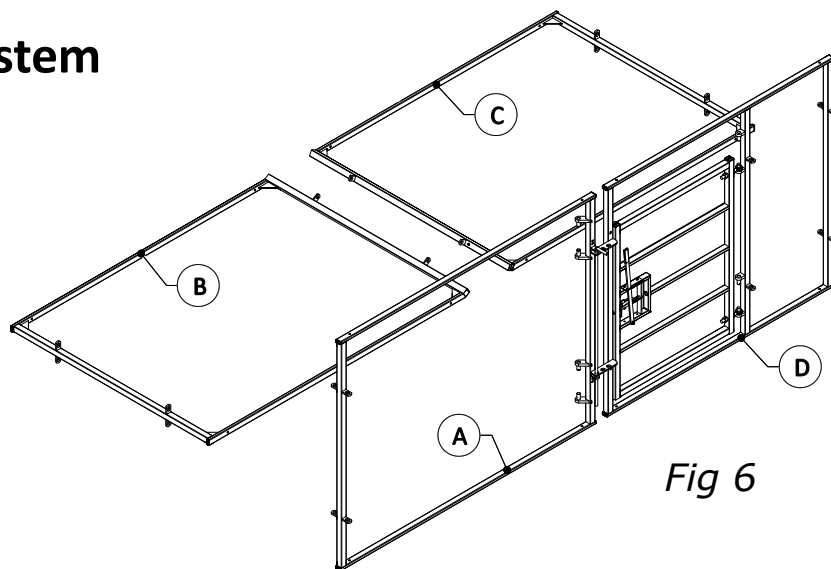


Fig 6

Offer (A) up to (D) and fix the two panels together with one of the supplied coupling bars.

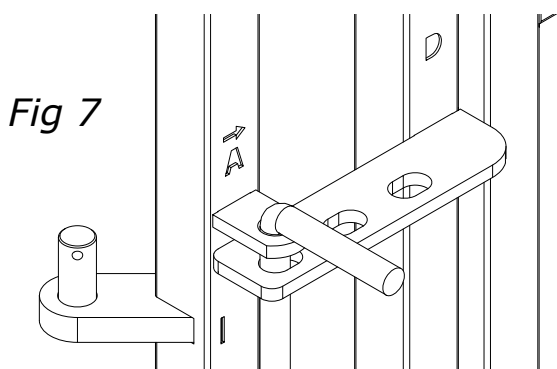


Fig 7

Panel (A) should be joined to panel (D) using the slot at the furthest extent from panel (D). This allows panels (B) and (C) to be fitted to the intermediate slots.

Offer up panel (B) and fix to panel (D) with one of the supplied coupling bars. Use the slot immediately next to panel (A). (Fig 9)

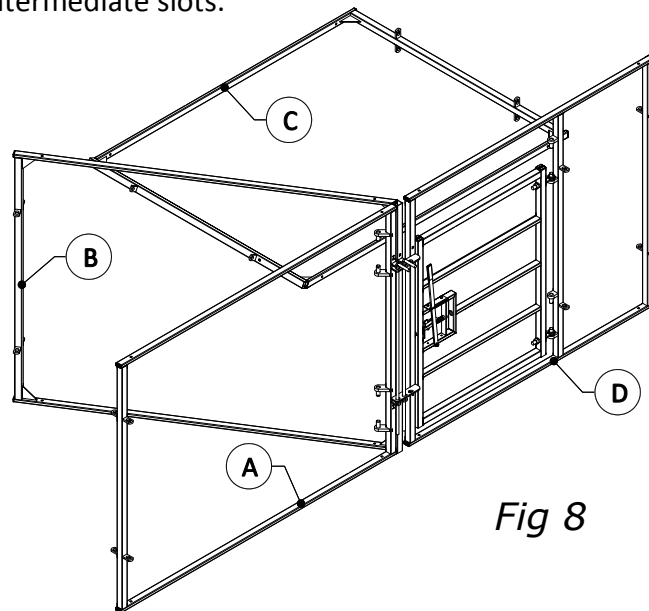


Fig 8

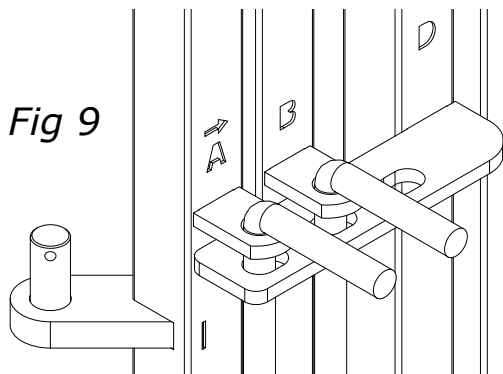


Fig 9

Offer up panel (C) and fix to panel (D) with one of the supplied coupling bars. Use the remaining slot between panel (B) and panel (D). (Fig 10)

Check that each coupling bar passes through all *four* slots along its length before proceeding.

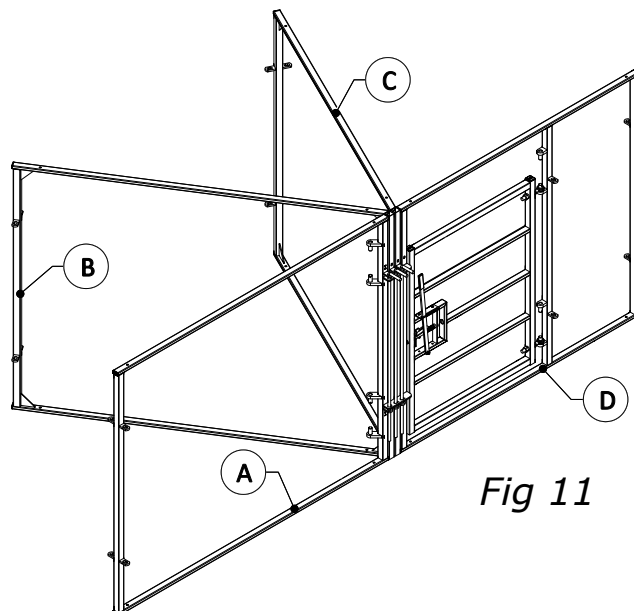


Fig 11

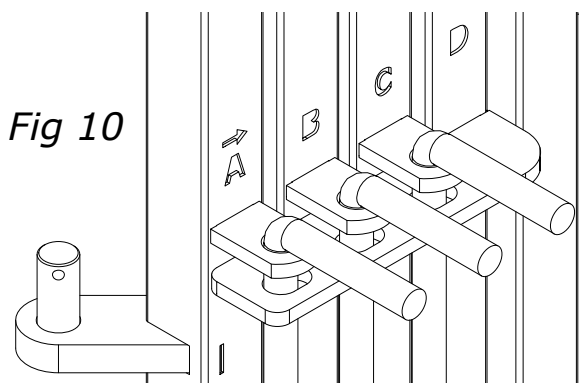


Fig 10

# Assembling the RoteX<sup>®</sup> system

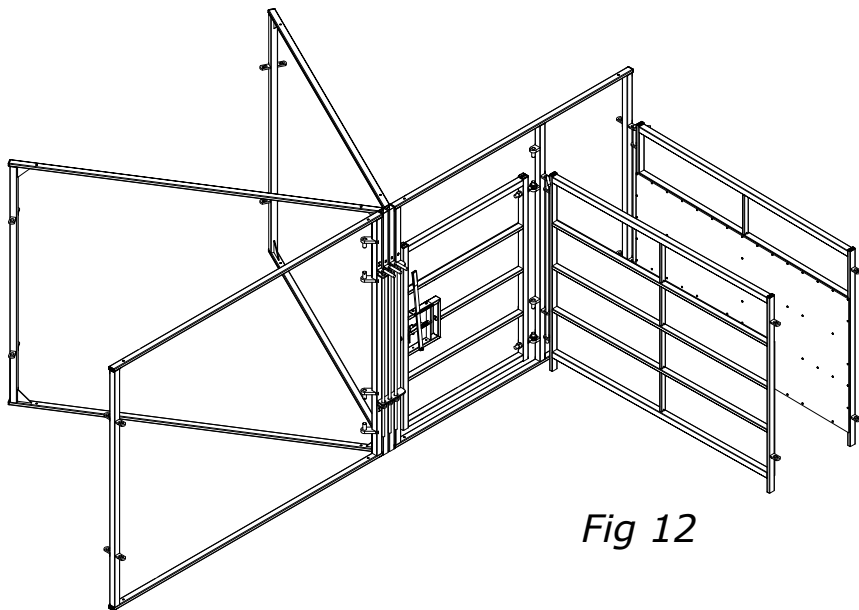


Fig 12

Fix the stock board hurdle panels to the doorway section of panel (D) ensuring that the stock boarded face of the panels face *into* the race.

Use 1no coupling bar per panel ensuring that it passes through all the available eyes.

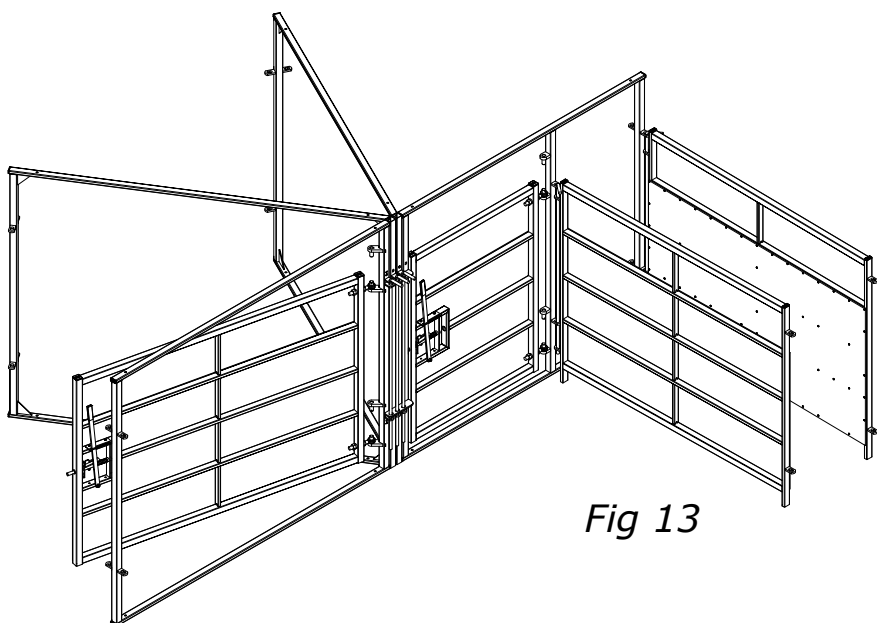


Fig 13

Hang the forcing gate on the hinge hooks on panel (A). On a right-hand system (Fig 13) the stock boarded face will face inward. On a left-hand system the stock boarded face will face outward.

*Always* insert the lynch pin into the top hook.

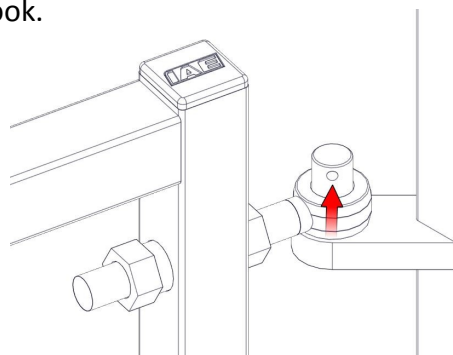


Fig 14

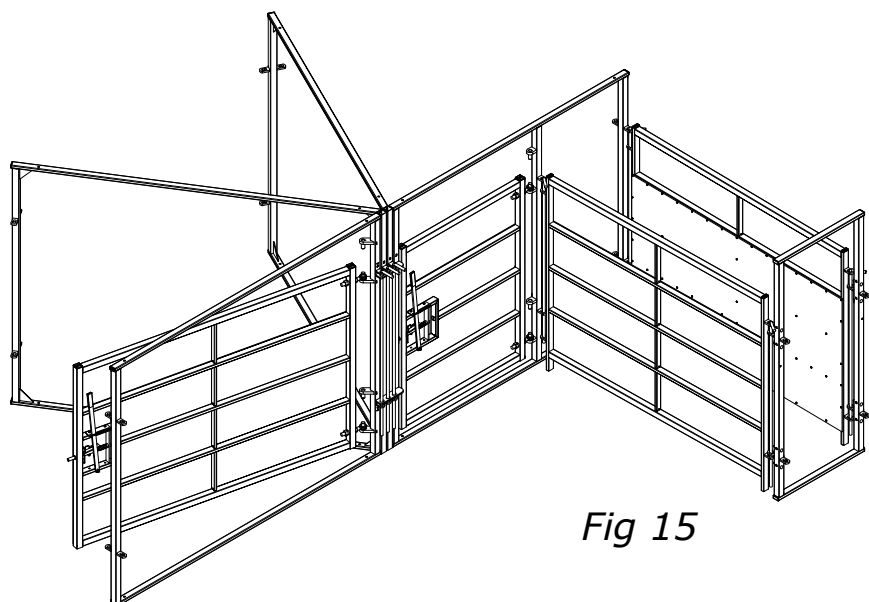


Fig 15

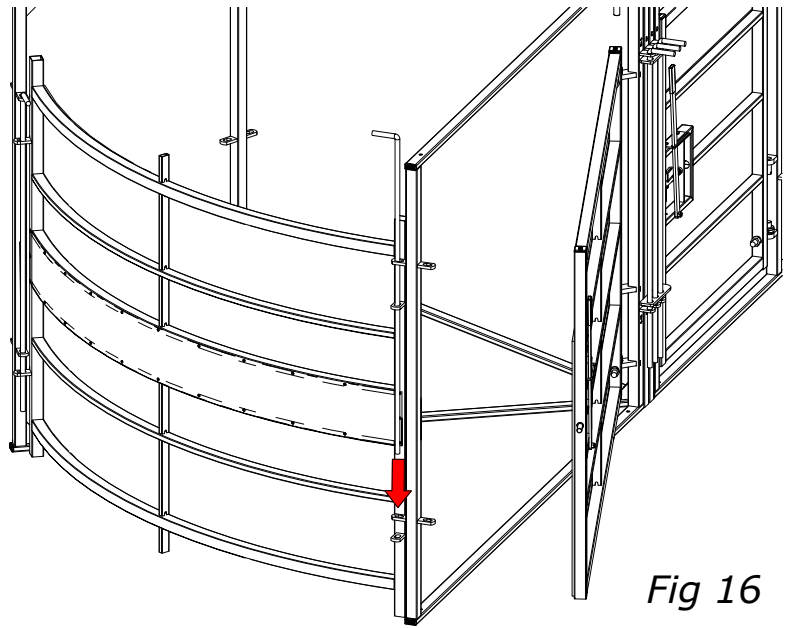
Fix the race arch to the stock board hurdle panels.

Use 1no coupling bar per panel ensuring that it passes through all the available eyes.

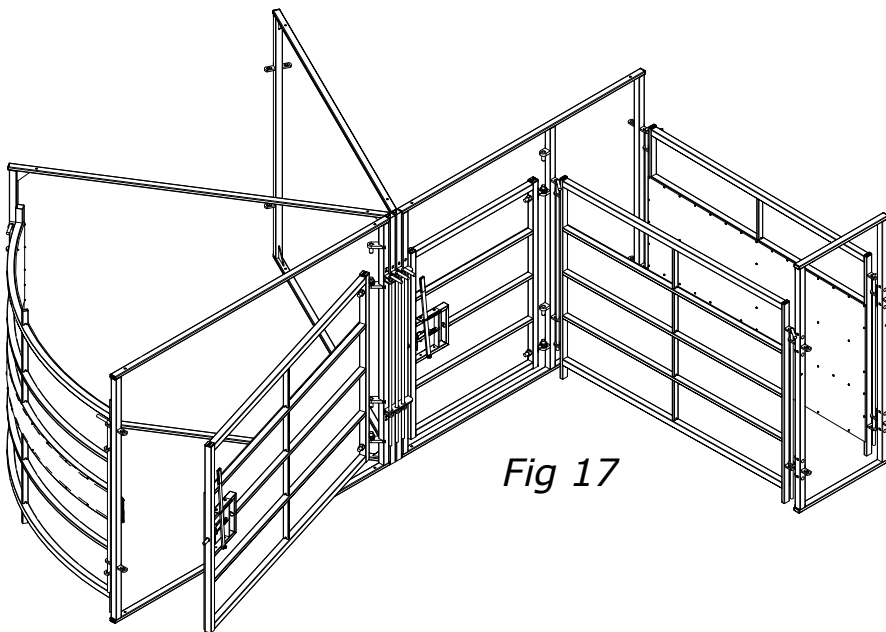
# Assembling the RoteX<sup>®</sup> system

Fit the first radiused stock boarded panel to the support frame making sure that:

- ☉ The stockboard is on the inside of the system
- ☉ The ratchet system is facing the correct way for the forcing gate to move freely in the same direction which the cattle will travel. (Figs 18 and 19).

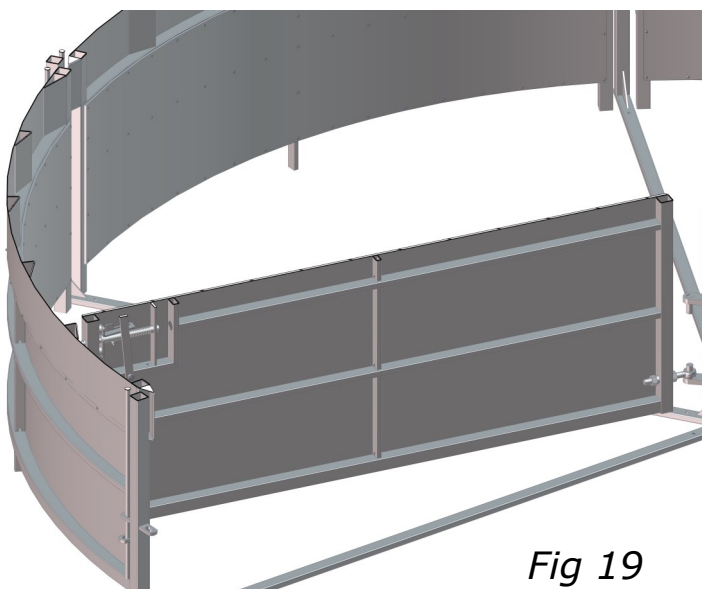


*Fig 16*

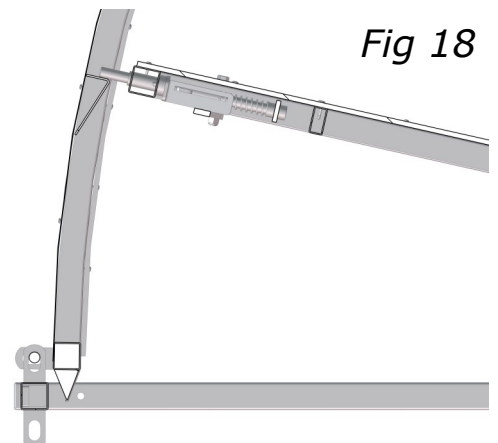


*Fig 17*

Use 2no coupling bars per panel ensuring that it passes through all the available eyes.



*Fig 19*



*Fig 18*

# Assembling the RoteX<sup>®</sup> system

Fit the remaining radiused panels to the RoteX<sup>®</sup> system (Fig 20) making sure that the ratchet system is handed the same way as the first panel (Figs 18 and 19).

Check that every panel is secured at both ends by a coupling bar and that all the panels have been installed the correct way around.

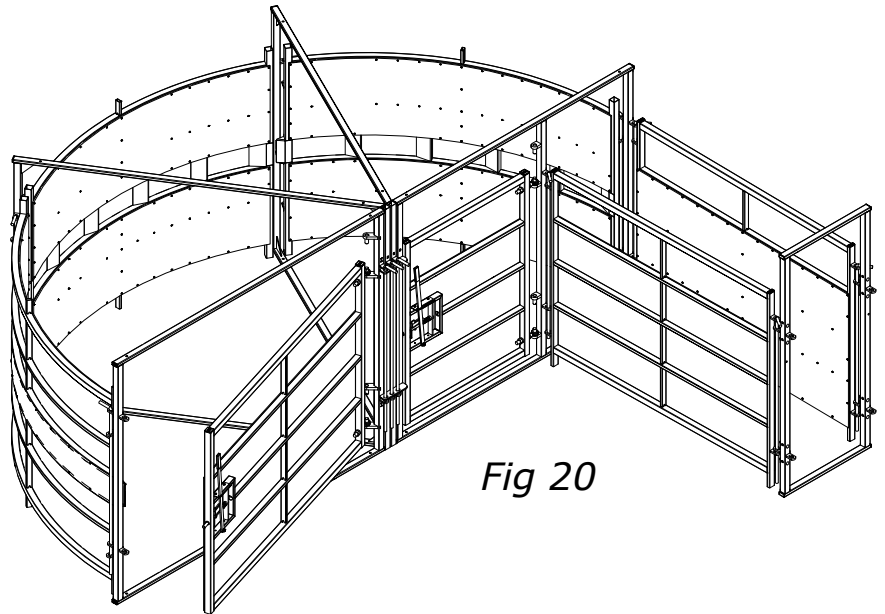


Fig 20

The assembly of the RoteX<sup>®</sup> cattle handling system is now complete.

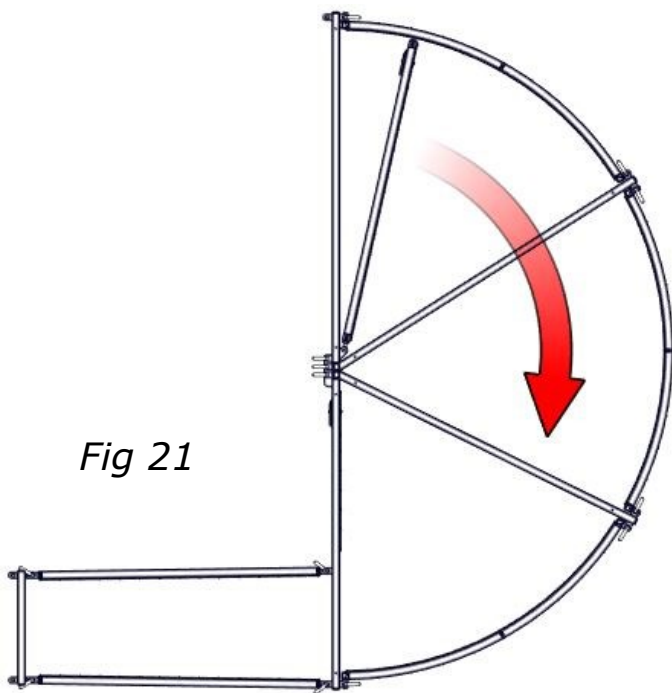


Fig 21

Prior to using the RoteX<sup>®</sup> system, check the operation of the forcing gate.

Push the forcing gate to its furthest extent to check that the spring latch engages at every ratchet point along the outer frame.

It is possible to adjust the hinge setup on the forcing gate using the supplied spanner to achieve the desired result. Furthermore the bolt shoot can be adjusted.

To return the forcing gate to its open position the latch must also be in the “open” position in order to open the forcing gate so that the latch clears the ratchet system.

Take care when returning the forcing gate to its “open” position not to trip over the internal framework of the system.

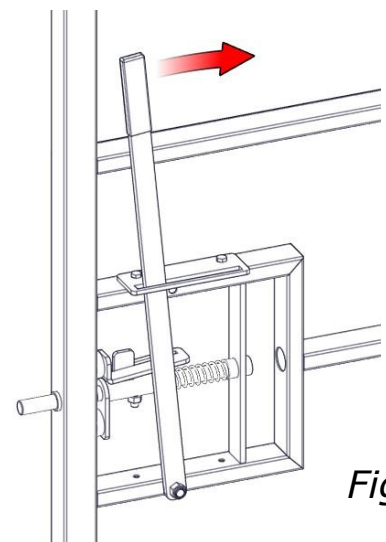


Fig 22



# Operating the RoteX<sup>®</sup> system

The IAE RoteX<sup>®</sup> system is designed to funnel animals from a wide area down a single file race from which they can then be moved into a cattle crush for instance. You can see the RoteX<sup>®</sup> portable cattle handling system in action on our website:

[www.iae.co.uk/agriculture/products/rotex/](http://www.iae.co.uk/agriculture/products/rotex/)

Animals can be made to travel through the system in an orderly way, without panic and with the safety of the animal and the operator of paramount importance.



Before admitting animal(s) into the RoteX<sup>®</sup> system, first attach a crush, neck yoke, weigh system or other equipment to the end of the race arch with coupling bars.



Make sure that the single leaf access gate is closed and that the latch is securely located in order to prevent the gate accidentally opening when guiding animals through the system.



Open the forcing gate as wide as is necessary to admit animal(s) into the forcing area.



When the required number of animal(s) have entered the forcing area, close the forcing gate until the spring-latch engages on the central ratchet system located within the radius hurdles. This will prevent the gate from being kicked back by the cattle.



Slowly close the forcing gate, guiding the animal(s) towards the race at the opposite end of the system. Access to the forcing area can be gained at any point by using the smaller access gate situated next to the race.



Once an animal has entered the system, it should only exit through the race section extending from panel (D). Never open the forcing gate while animals are in the forcing area.



When animals have passed through the forcing area, leave the forcing gate closed until all animals have exited the race.








When re-opening the forcing gate to admit more animals, be careful not to trip over the bottom sections of the RoteX<sup>®</sup> support frame.








Access to the forcing area can be gained by using the smaller gate. When doing so, considerable care should be taken when cattle are present.

## Maintenance

Although IAE equipment is designed to withstand adverse weather conditions and to withstand prolonged heavy usage, monthly inspections and regular maintenance will help to extend the longevity of the product. The following checklist may be useful:

-  Check steel framework for any signs of corrosion, distortion or wear. Replace or repair using galv paint.
-  Check all coupling bars for any signs of corrosion, distortion or wear. Replace or repair using galv paint.
-  Check the operation of the sprung latch on the forcing gate before each usage. Tighten/replace any fittings as necessary.
-  Pressure wash or steam wash stock board panels & gates after each usage.
-  Check all nuts & bolts, pay particular attention to the nyloc nuts fitted to the eyebolts. Over time the nylon contained can degrade. Replace nylocs if required, 4 spares are supplied.

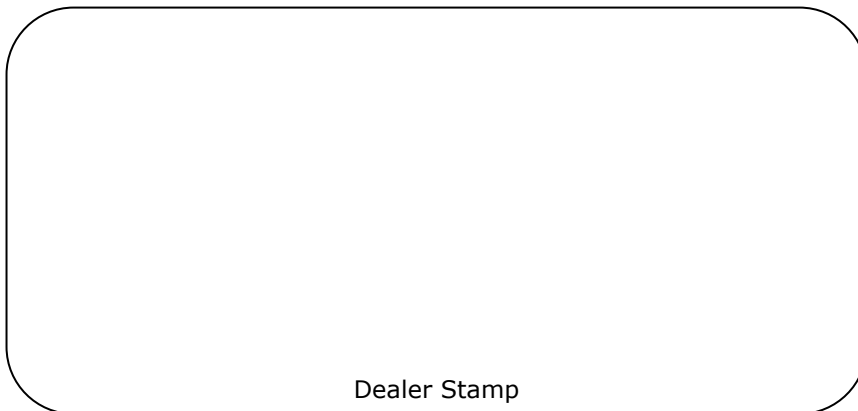
## Storage

-  Clean off any excess mud with water and pressure wash all components before storing on the pallet.
-  Remove the forcing gate from panel (A) and store on the pallet separately.
-  Make sure that the access gate is in the closed position and that the latch is securely located.
-  Always fasten the ratchet strap around all components on the pallet and check that all components are safely stowed. Ensure that the safety chains are secured in place.
-  Refer to the pallet loading order on page 2 of this manual for the recommended stowage order.





For further information contact your  
Authorised Dealer



Dealer Stamp

