

numnuts[®]

Instruction Manual

Read before use

UK Version 1 | 2024



Don't like reading manuals?
Head to www.numnuts.co.uk/helpvideos
to watch the quick guides.

Thank you for purchasing Numnuts!

By choosing to use the Numnuts system you are being proactive in your approach to animal welfare.

The Numnuts design started in 2010 with the aim of improving the well-being of farm animals during the marking process.

Numnuts has been designed as a modular system, with easily replaceable spares. The main unit (ring applicator) should last several years, if cleaned and looked after. The needles and local anaesthetic bottles will be replaced during use. To maintain hygiene and performance, the fluid junction should be replaced every 2000 doses or at least every season depending on use. The dual stage injector can be replaced when required.

It can take around 30 procedures to get used to using the device, thereafter, you should find your throughput rate returns close to normal. The time you invest in learning how to use the device will pay off with increased efficiency and the joy of seeing your lambs mother up quicker, move back to the paddocks sooner and displaying fewer setbacks after marking.

We welcome your feedback and questions. Please contact us at the website:

www.numnuts.co.uk

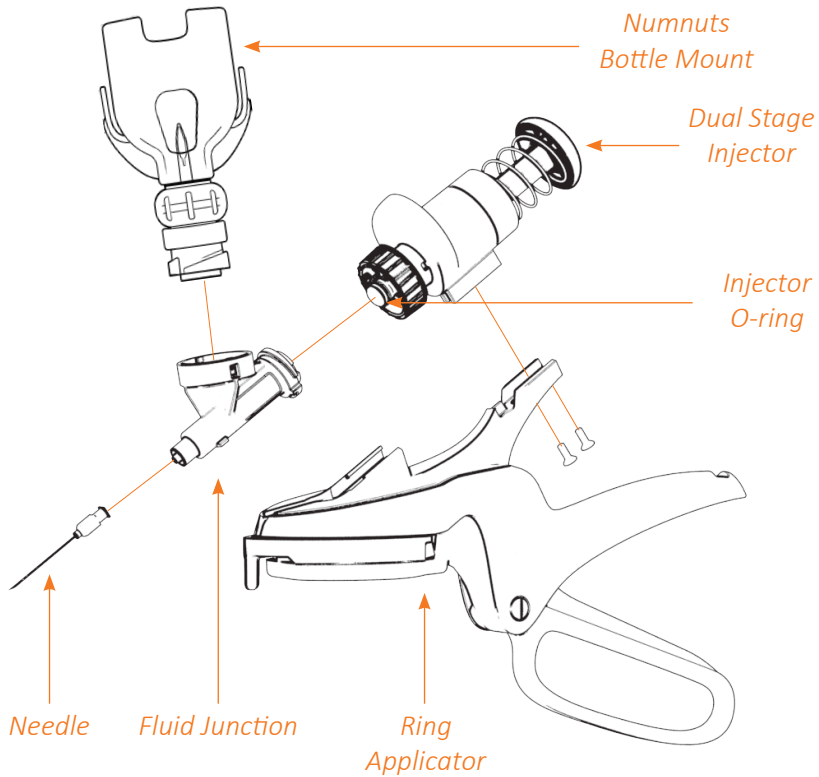
Happy marking!

Robin Smith

Numnuts | Founder

Robin@numnuts.store

Contents of Box



1 x Numnuts Device
(Includes fluid junction and dual stage injector)

1 x Numnuts Bottle Mount

1 x Tray of 12 Needles
(Specific to Numnuts device)

2 x Spare Fluid Junctions

In order to use Numnuts, you will need to purchase local anaesthetic from your usual Vet.

Maintenance

Whilst Numnuts comes ready to use, for optimal results and longevity of your equipment, make sure to keep up general maintenance.

The device and injector can be fully immersed in hot, soapy water and cleaned with a brush.

The fluid junction can be removed and cleaned in hot, soapy water.

Once cleaned, add some olive or vegetable oil to the o-ring piston to help keep the injector working smoothly.

Go to our website for videos on how to look after your Numnuts equipment www.numnuts.co.uk/helpvideos

We recommend that you change the fluid junction every 2000 lambs or after every season, whichever comes first.

Spares can be bought at: www.numnuts.co.uk

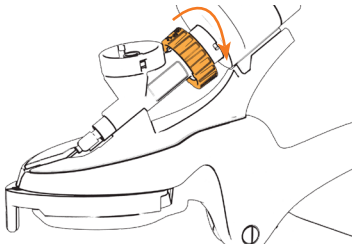
Handy Tools

- 2.5mm hex key to adjust needle distance
- Needle nose pliers to remove old needles and secure new ones

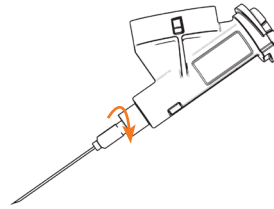


We recommend you change the needle after 130 injections (2 bottles). Sharp needles cause less pain to the lamb. Spare needles are available at www.numnuts.co.uk/shop

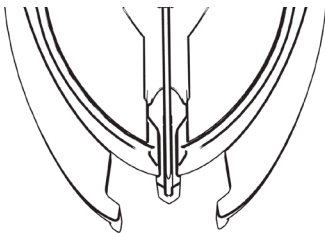
Attaching the Needle



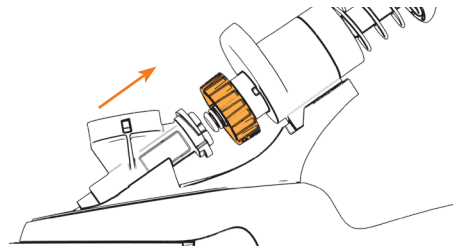
- 1** Detach fluid junction and needle from injector by rotating the orange lock nut and sliding fluid junction forward to remove.



- 2** If needle is already attached, remove (this may require needle nose pliers). Screw needle on to fluid junction until finger tight.



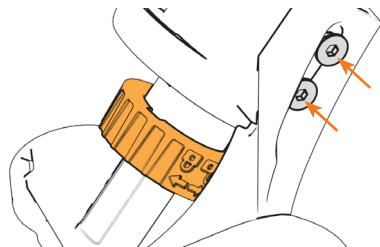
- 3** Squeeze device trigger to open front pins. Place needle into the front pin slot and fluid junction lugs in to the slots in device.



- 4** Slide fluid junction back into injection mechanism and secure by turning the orange lock nut until finger tight.

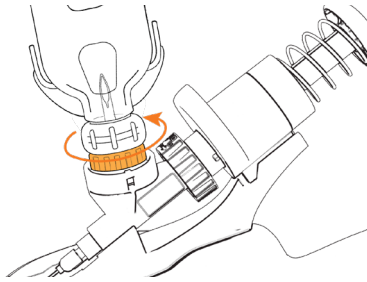


- 5** Check the position of the needle. When injector is fully retracted, the needle tip should be around 2mm hidden inside the front pin.

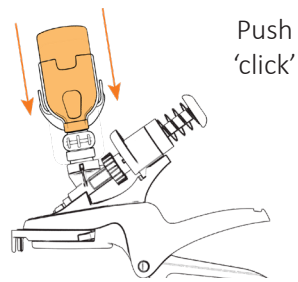


- 6** To adjust needle position, loosen the two screws under the injector (with a 2.5mm hex key), move accordingly and tighten to secure.

Attaching the Bottle Mount & Bottle

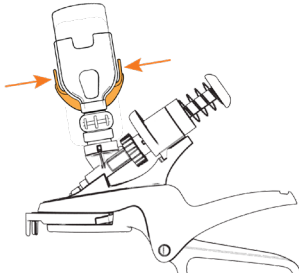


1 Gently twist the Bottle Mount onto the Fluid Junction.



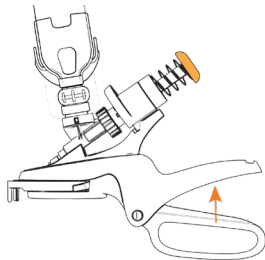
2 Push the bottle straight down into the Bottle Mount until you hear a 'click'.

Removing a Bottle

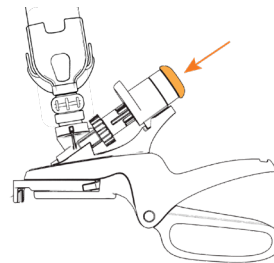


1 Gently press the tabs of the Bottle Mount to release the bottle for removal.

Priming the Device



1 Squeeze the device trigger to open the pins.

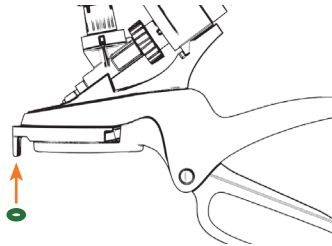


2 Fully depress and release the injector button. Repeat 1-2 times until fluid is present in fluid junction.

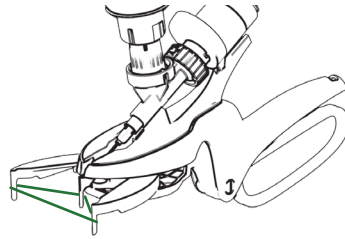
Notes

- It is normal to have a small air bubble in the injector and the device will still function.
- Hold device with needle pointing upwards, press injector fully to eject any trapped air and keep pressed. Whilst still pressing injector, rotate tool so that it is level again and release button.
- The bottle will work until empty but watch remaining local anaesthetic, keeping the bottle level to ensure final dose is accurate.

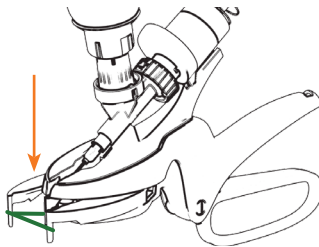
Using the Numnuts Device



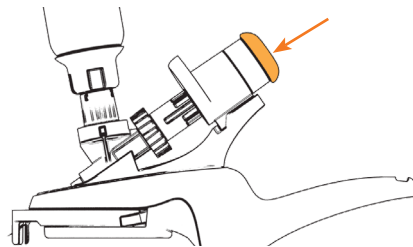
1 Press ring fully onto the three front pins on the Numnuts device.



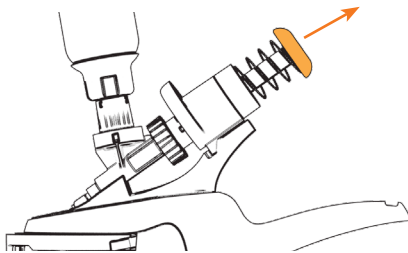
2 Squeeze the trigger to open the ring fully.



3 Place the ring over the tail / scrotum and release the trigger.



4 Fully depress the injector. One push of injector for testicles and one for tails.



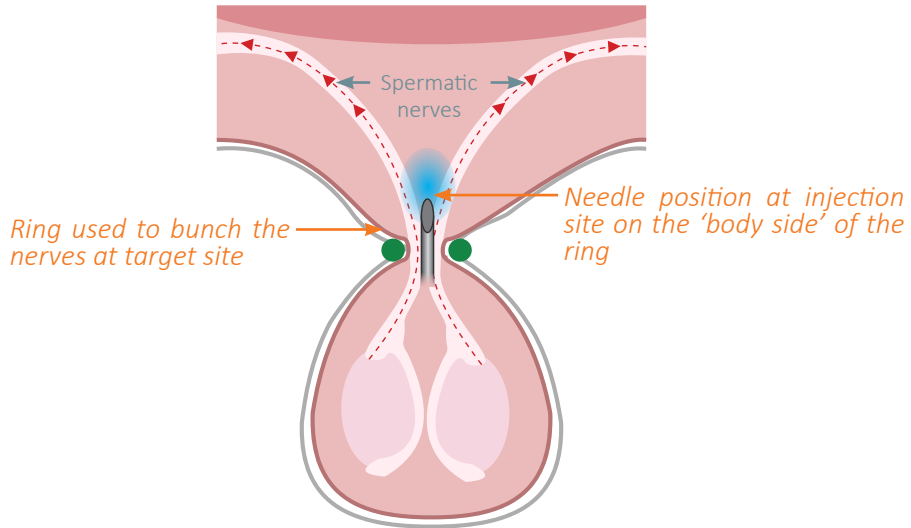
5 Release the injector button.

Notes

- *Keep the device upright for best reliability. A holder to dock the device can improve work flow. Ideas here: www.numnuts.co.uk/numnuts-holder/*
- *Once the ring is in position, release the trigger and the stretched ring will hold the tool in position whilst you inject.*
- *Ensure the injector button is fully depressed to deliver the entire 1.5ml dose*
- *For wrinkled sheep, or mis-injection, scoop forward and slightly up, to create skin tension around the testicles prior to injection. www.numnuts.co.uk/mis-injection-tips/*

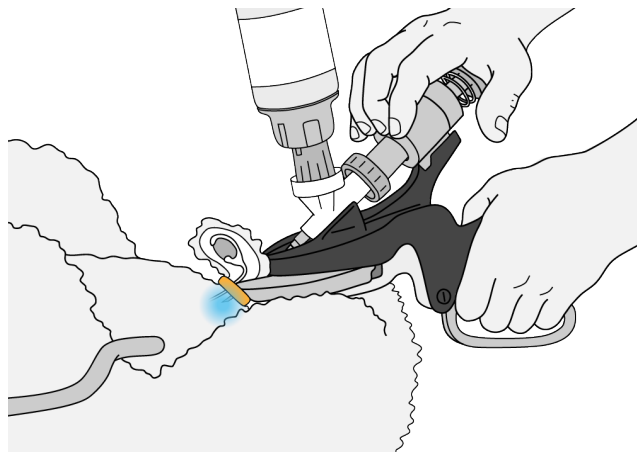
Dispensing Local Anaesthetic to Testis

Numnuts® Target Site for Castration



Numnuts technology deposits the anaesthetic at the target site consistently.

Correct Position



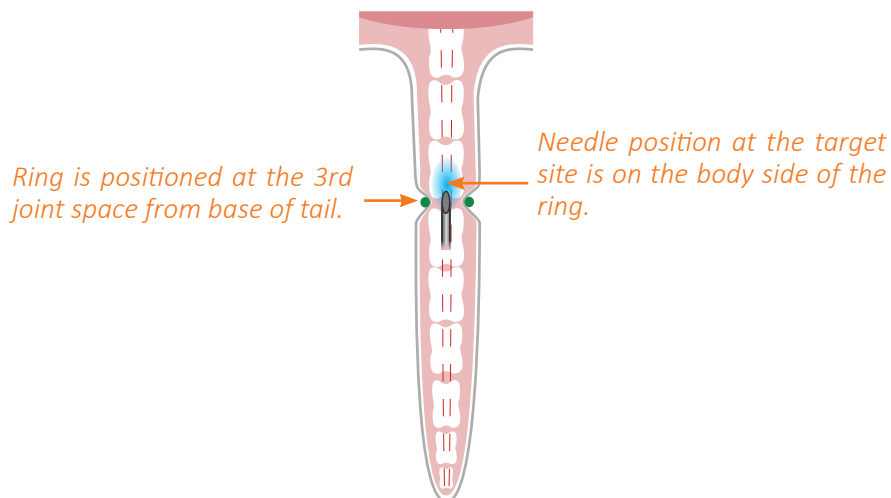
Position the lamb on its back in the cradle, with its tail nearest the operator. Applying the ring with the device. The ring bunches nerves together at the target site.

Next, press the dual stage injector as shown.

The device automatically extends and angles the needle to the correct position, injecting local anaesthetic on the body side of the ring.

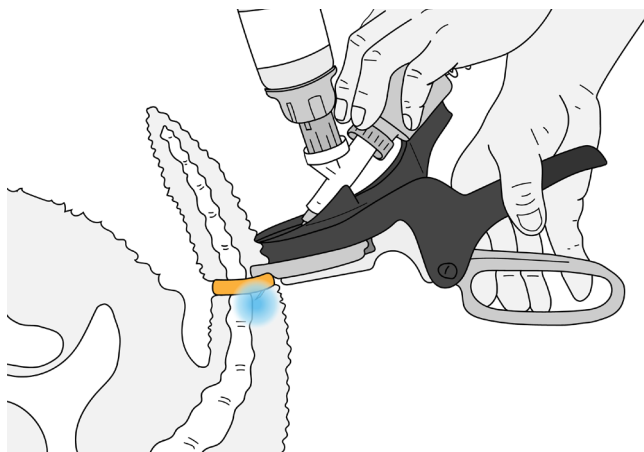
Dispensing Local Anaesthetic to Tail

Numnuts® Tail Target Site for Tail Docking



Numnuts technology deposits the anaesthetic at the target site consistently.

Correct Position

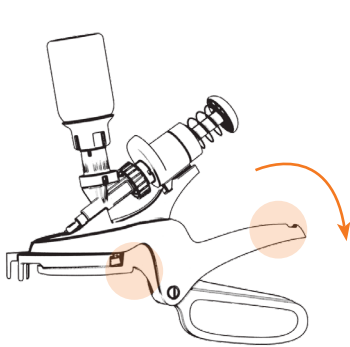


Position the lamb on its back in the cradle, with its tail nearest the operator. Apply the ring with the device. The recommended location is the 3rd or 4th joint space, felt by hand. The device automatically extends and angles the needle to the correct position, injecting local anaesthetic on the body side of the ring.

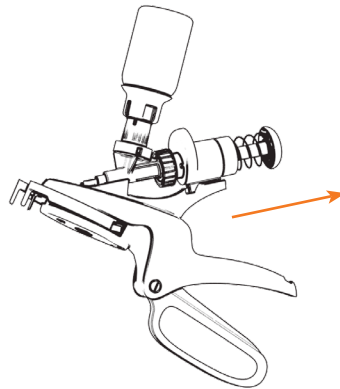
Ring Removal Technique



Numnuts makes removing rings easier compared to previous ring pliers, but requires a slightly different action to remove the device from the ring.



1 Hold the tool by the neck or tail of the Numnuts device.



2 Tilt the applicator down and back to release the ring in position.

Notes

- **Do not** squeeze the trigger when releasing the ring.
- Holding the tail or testicles whilst tilting makes ring removal easier



We recommend using a banana or something similar to get used to the device before using it on lambs.

Local Anaesthetic Details and Safety

Dosage	1.5 mL dose
Doses per bottle	65 doses per 100 mL bottle
Shelf Life	24 months*
Storage	Do not store above 25°C. Protect from light.*

Indications

For castration and tail docking of lambs aged 4 – 12 weeks of age, by application of rubber rings in accord with industry best practice guidelines for sheep husbandry.

Safety

- Bottle Mount ONLY for use with Numnuts tool for castration and tail docking of lambs in accord with industry best practice guidelines
- Applicator design ensures needle is retracted between procedures minimising risk of needle stick injury

Benefits

Clinical trials showed local anaesthetic reduced pain from ring marking for up to 60 minutes and improved mothering up, though some lambs

may show signs of residual pain during this period.

Restraints

DO NOT use local anesthetic for any other purpose other than the purpose approved by your vet.

Precautions

Only use Numnuts on 4-12 week old lambs. Use with caution to avoid overdosing.

Dosage and Administration

Each injection delivers 1.5ml.

Administer according to the directions provided with the Numnuts applicator device.

The injection must be administered under the skin (subcutaneously) at the dorsal midline (see page 9) or dorsal midline of the tail (see page 10) with the Numnuts applicator as

*Please note, these are general guidelines only. Check specific shelf life and storage instructions for the prescribed local anaesthetic being used.

illustrated in the diagrams.

First Aid

First aid is not generally required. If in doubt, seek medical advice and show the package leaflet or label to the physician.

Combination therapy

Combined use of Numnuts with a NSAID has not yet been evaluated, yet all indications are that a multi-modal approach will provide improved efficacy.

Hygiene and cleaning

As there may be dags or faeces at the injection site, best practice for minimising infection is to change the needle at the same time as the local anaesthetic.

Disposal

Please speak to your vet about appropriate disposal. Any unused veterinary medicinal product or waste materials derived from such veterinary medicinal product should be disposed of in accordance with local requirements.

Troubleshooting

1. Injector not fully depressing

The most likely cause is the needle hitting a hard element, such as a tail bone. Reposition the device at another angle moving slightly to the side, and try again.

2. Injector not returning smoothly

If injector doesn't return smoothly or sticks, lubrication may be required. Remove the fluid junction as shown on page 6, 'Attaching the Needle', and lubricate the o-ring with vegetable / olive oil. Replace if worn.

If injector does not cycle smoothly when fluid junction is detached, clean the injector body and apply a PTFE lubricant (i.e. GT 85) into the injection mechanism only (**not on the o-ring**).

If the injector works as normal **without** a bottle attached, but becomes problematic with a bottle attached, check the fluid flow from the Bottle Mount to fluid junction barrel refer to troubleshooting item 5.

3. Leaking at front or rear of Fluid Junction

Ensure that the needle and orange lock nut securing the fluid junction are firmly attached.

If leaking continues, replace fluid junction.

4. Bottle Mount and Fluid Junction leaking or not priming

- i. Ensure local anaesthetic is fully broached, push into bottle mount

until feel a 'click' (pg7)

- ii. Ensure Bottle Mount is installed correctly to the Fluid Junction (pg7)
- iii. Check Fluid Junction for hairline crack around the connection points and fluid channels

If there is no improvement, contact Numnuts for a replacement.

4. Bottle Mount seems blocked / fluid flow is very slow

A sign of this is a slow return of the injector. If the plunger return slows and fluid is slow to reach the barrel from the Bottle Mount then stop using the Bottle Mount.

- i. Try rotating the Bottle Mount on the bottle 2 turns - this can free any rubber bung material from blocking the spike. If this doesn't work, then...
- ii. Check if air bubbles have entered the bottle from the top of the spike. Remove Bottle Mount and leave the bottle sitting on its base for at least 30mins
- iii. After 30mins, install bottle and conduct two more pumps to check if it works

6. Mis-injections or Blowback

For more wrinkled sheep, or mis-injection occurring around testicles, scoop tool forward and slightly up to create skin tension around the testicles prior to injection.

www.numnuts.co.uk/mis-injection-tips/

5. Lambs with wobbly back legs

An epidural effect of local anaesthetic has been observed in a very small number of lambs when tail docked with the Numnuts system. This is a rare outcome, with temporary hind-limb paralysis lasting less than 1 hour.

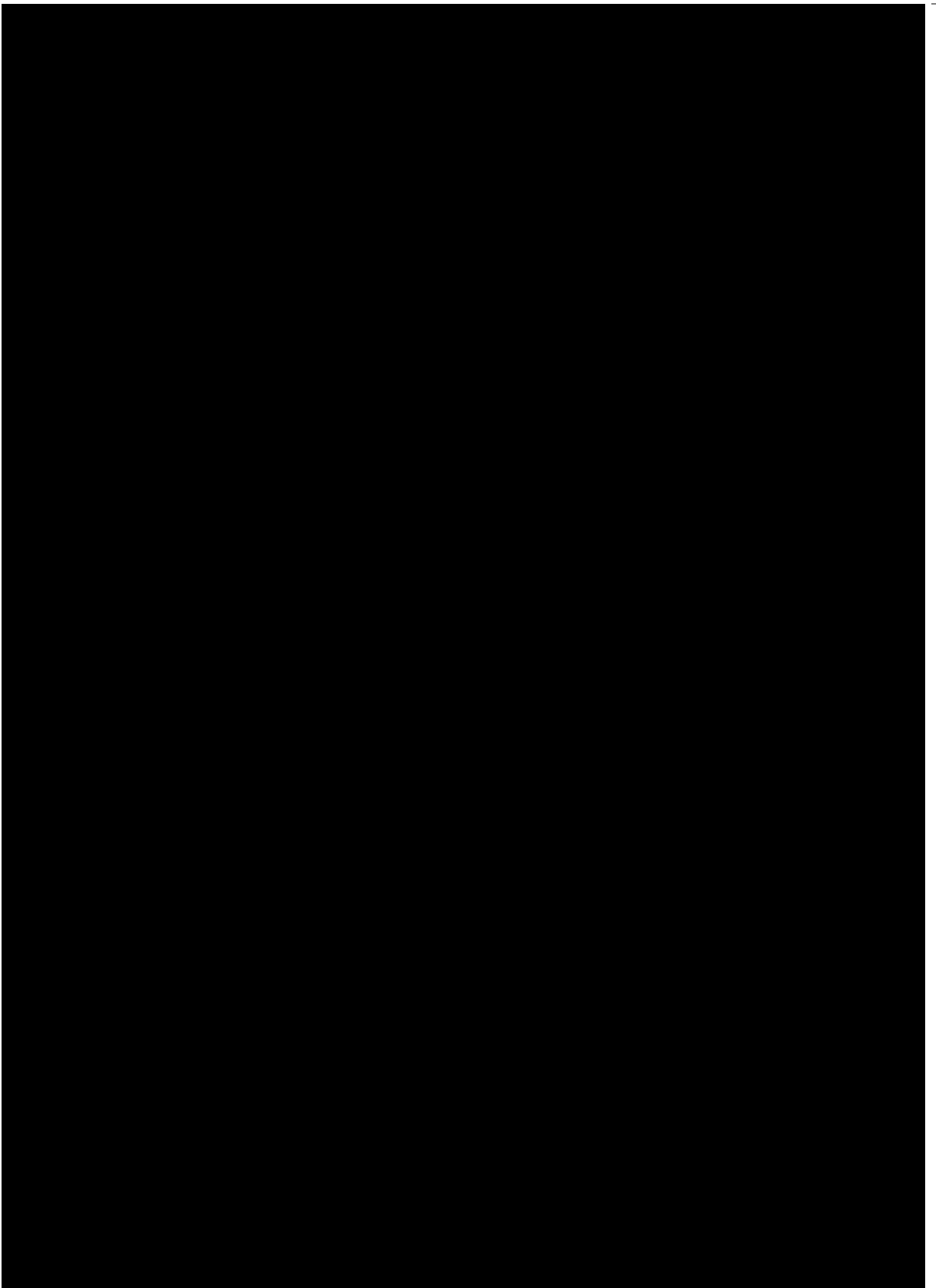
If wobbly hind legs are seen after tail docking, place lamb in a large holding pen or in isolation so it will not be trampled by the flock.

Return lamb to usual paddock once hind-limb movement regained.

To help avoid epidural effect:

- Take extra care when injecting local anaesthetic into the tail - slow and steady plunger action
- Do not force the injection

See page 4 for terminology & part descriptions





For spares

www.numnuts.co.uk/shop

For more information and support

www.numnuts.co.uk

info@numnuts.store

Developed in collaboration with

