1 Introduction

The purpose of this document is to detail the necessary steps and key points for fitting of Datamars active CollarTags and active EarTags.

Products covered

Tru-Test Active CollarTag

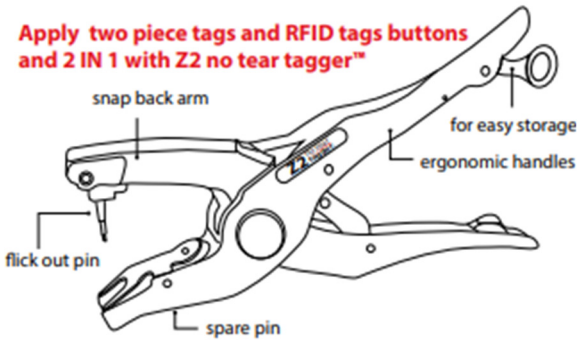
Tru-Test Active EarTag

Tools required

There are no tools required to fit CollarTags.

Ears tags require the following tools:

- Z2 no tEarTagger™



- Z2 male tag (one per EarTag to be attached)
- Sterilising solution – such as Nolvasan, Vetericyn or an iodine solution.

Risk Management

Extreme care and caution must be exercised when attaching tags and collars to cows.

Use two people to attach tags and collars and utilise appropriate equipment and locations while attaching to minise risk to people and animals, e.g. head bails, treatments stalls.

2 Active CollarTag Setup

Attaching collars

It is important to fit the tags to cows as soon as possible to start recording information on cow activity. This information is needed to provide a baseline of activity for each animal and group. This baseline is then used to provide animal insights in future. The baseline activity collection typically takes between 4 and 7 days.

The CollarTag and weight are already mounted on the collar.

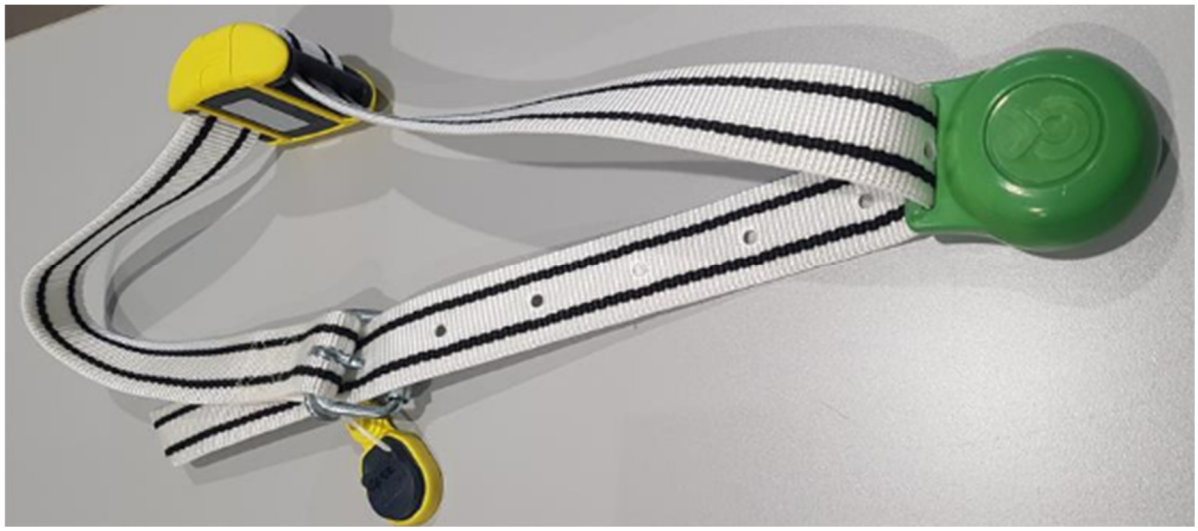


Figure 1: Collar fitted with CollarTag, weight (and also EarTag attached at buckle)

To apply the tag:

1. Collars have been functionally validated and switched to the correct operational mode prior to shipping.
2. Record the number on the rear of the CollarTag, and the Visual ID of the cow that the collar will be installed on (record this information as it will be needed later to complete the setup on the Datamars Livestock information portal).

Figure 2 Collar ID on rear of CollarTag

3. Stand on the right side of the cow and hold the collar by the buckle. Reach over the cow's neck and hang over the far side of the cow. Reach below the neck and hold the end of the collar (with holes) and lift up to the buckle. Fasten the buckle.

Pay attention to; the correct amount of slack (two fingers at the top of the cow's neck); and that the tag is placed directly behind the cow's left ear.

Correct positioning of the CollarTag is critical for performance. CollarTags that are placed too high on the cow or too low on the cow will result in inaccurate data collection.

To position the tag:

1. When the CollarTag is correctly positioned, slide the weight so that it hangs vertically downwards at the lowest point on the collar.

Removal of Collars

In the event that a collar needs to be removed from a cow, please follow the steps below.

1. Unbuckle the collar.
2. Hold collar by the buckle and allow the free end to drop.
3. Lift the collar by the buckle away from the left side of the cow and then up and over her neck.

3 Active EarTag Setup

Attaching EarTags

It is important to fit the tags to cows as soon as possible to start recording information on cow activity.

This information is needed to provide a baseline of activity for each animal and group. This baseline is then used to provide animal insights in future. The baseline activity collection typically takes between 4 and 7 days.

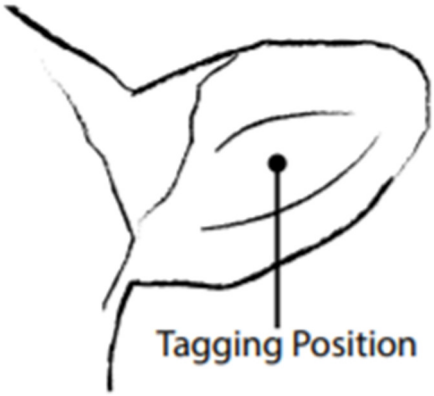
To attach the EarTag please follow the steps below.

1. EarTags have been functionally validated and switched to the correct operational mode prior to shipping.
2. Record the number on the rear of the EarTag and the visual ID of the cow that the EarTag will be installed on.
3. Fit EarTag and male to the Z2 no tEarTagger™ as follows:
4. Depress the metal clamp holder and place the EarTag under the clamp.
5. Push the male tag full onto the tagger pin.

Figure 3 Z2 tagger with EarTag and male fitted

You can view a video on use of the tagger at https://youtu.be/TKcMa4zOJrg

6. Immerse the loaded Z2 tagger in sterilizing solution.
7. Position the tag between the two main cartilages, approximately halfway between the animal's head and the tip of the ear.



If the EarTag is too close to the cow's head, then its range of motion may be limited by catching on the ear.

If there is already a tag in cow's ear, then place the EarTag as close to the mid-point as possible.

ALWAYS APPLY THE MALE TAG IN THE BACK OF THE EAR.

8. Squeeze the handles firmly and hold closed. When the tags have locked together, the tagger arm flicks and releases the tag preventing ripped ears.
9. To remove the tagger, pull straight down from the cow's ear in one smooth motion – no need to open the handles.

Figure 4 EarTag attached next to NAIT tag

How to remove EarTags

In the event that an EarTag needs to be removed then follow the steps below.

1. Grasp the ear of the cow firmly.
2. Using the EarTag removal tool, slip the blade of the tool between the base of the small male side and the ear.
3. Pull the tool firmly and quickly to cut through the shaft of the small male pin and remove the EarTag from the cow.
4. Make sure to clean the EarTag removal tool between uses.

Figure 5 Z-Tags Multi-Cutter EarTag removal tool

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) this device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.

- Increase the separation between the equipment and receiver.

- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

- Consult the dealer or an experienced radio/TV technician for help.

This device must be used in such a way that a separation distance of at least 20 cm (8") is normally maintained between the device and the body of any nearby persons.

This device complies with Industry Canada licence-exempt RSS standard(s).
Operation is subject to the following two conditions:
(1) this device may not cause interference, and
(2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :
(1) l'appareil ne doit pas produire de brouillage, et
(2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Radio parameters:

Max. RF Power +10dBm (CE)

RF bands: 2.402 GHz - 2.48 GHz

Environmental Rating: IP68