ADVANTAGE FEEDERS

USER MANUAL

1300 88 15 75
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ADVANTAGE FEEDERS

CONTENTS

QUICK START GUIDE

TERMINOLOGY: There are numerous references to sheep within this document. If not expressly specified, an assumption can be made that references to sheep and goats can be applied to both types of ruminants.

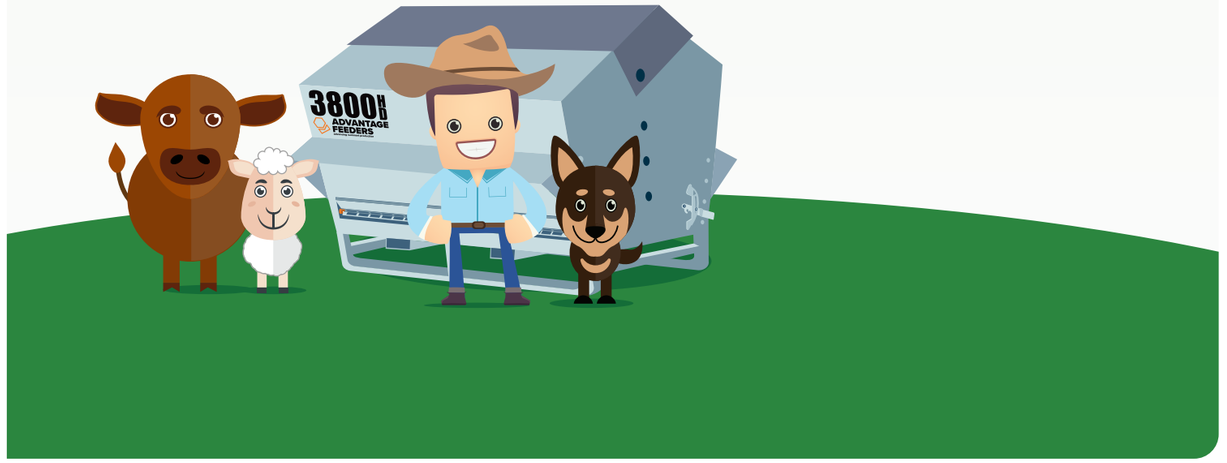
WELCOME TO ADVANTAGE FEEDERS

Advantage Feeders is passionate about helping farmers. We invest in research and development and share the results from our existing customers with our new customers. We want to see all customers succeed with their investments.

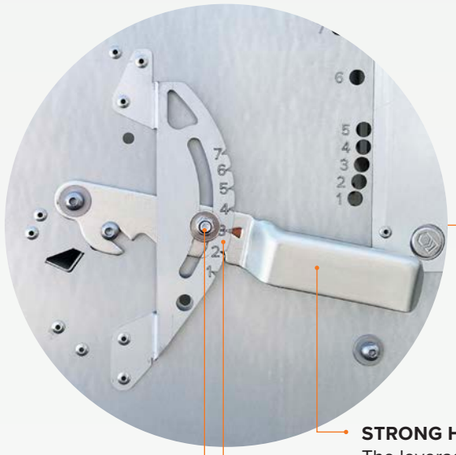
This User Manual provides information on how Advantage Feeders grain feeders can be implemented on your farm.

The most essential element for success is that stock are trained to access their supplement. Once stock are trained to eat from Advantage Feeders grain feeders, the benefits are enormous and quickly justifies the initial investment.

Gerard Roney
Founder and Managing Director



01.
GETTING TO KNOW YOUR FEEDER



STRONG HANDLE
The leverage of the 5mm pressed handle allows the Upper Adjuster to be moved in small and accurate increments

GAUGE SYSTEM
Each position is numbered for easy communication and setting

LOCKING NUT
The nyloc nut locking system makes it fast to reposition the Upper Adjuster

LOCKING BOLT
The locking bolt system makes it fast to reposition the Lower Adjuster

GAUGE SYSTEM
Each position is numbered for easy communication and setting

13MM EXTRUSION
Provides a leverage point for easy repositioning of the Lower Adjuster with the supplied tool

UNIQUE PRODUCT ID NUMBER
The number makes it easier to communicate with our sales team

LARGE SIGHT GLASSES AT BOTH ENDS
Check the approximate feed volume from a distance

UPGRADED ROOF PIVOT
Reinforced to provide additional strength

ADJUSTER GUARD HOUSING AND LATCH
When not in use, the Adjuster Guard is housed in a secure location

REINFORCED EXTREMITIES
All outer areas are braced with a minimum of 30mm wide sections

UPPER ADJUSTER HANDLES
Adjustments to the Upper Adjusters are made from the end of the feeder

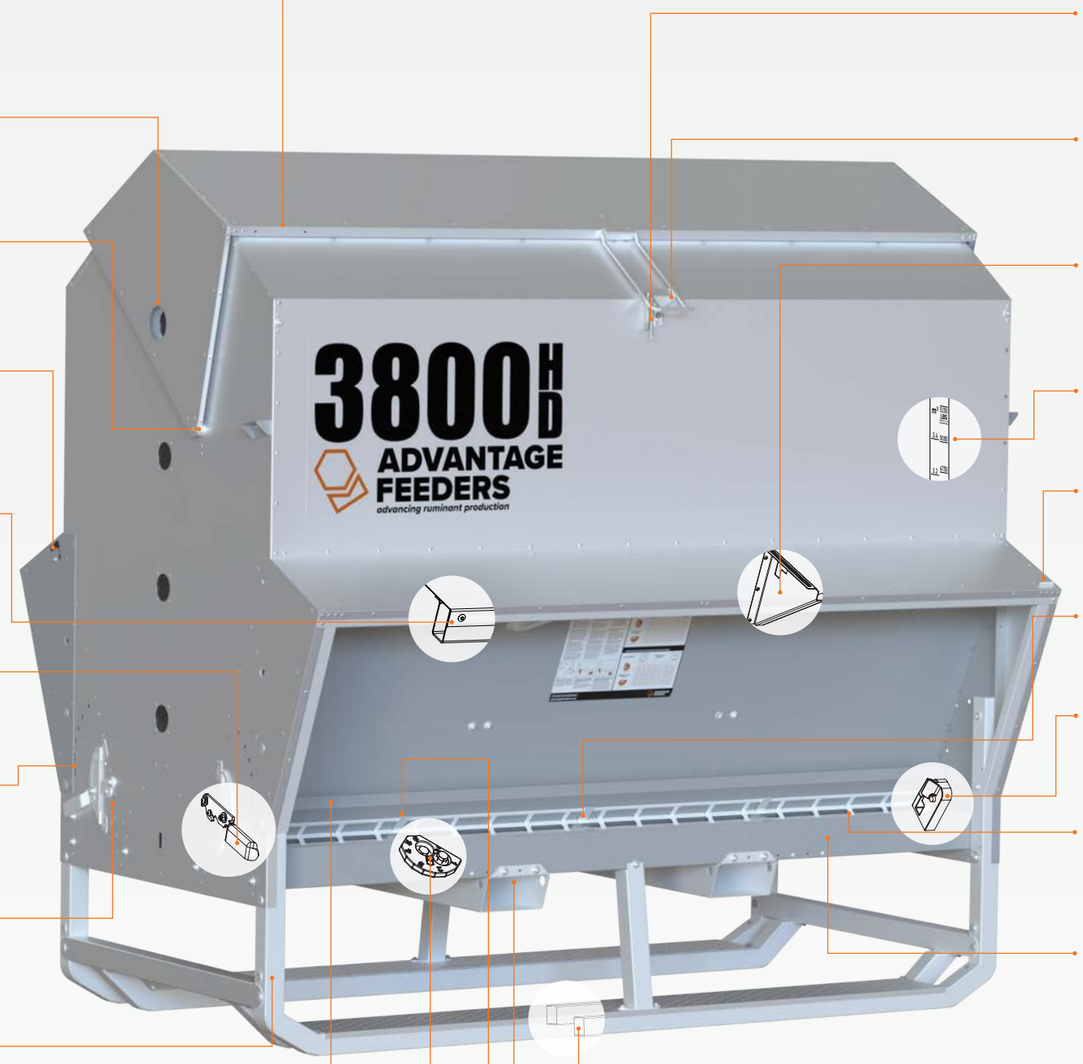
CREEP FEEDING NUMBERS
Each position is numbered for easy communication and setting

SIDE WALL GUTTERS
Enlarged gutters prevent moisture running into the trough

ADJUSTABLE HEIGHT SKIDS
The feeding height can be easily changed to suit all types of livestock

STAINLESS STEEL FEED AREA
Stainless steel troughs and adjusters ensure the product endures corrosive feeds

LOWER ADJUSTER CAMS
Rotating the cams makes adjusting to the Lower Adjusters easy and accurate



HOUSED TUBE SPANNER
Stored in a visible, accessible and secure location

DROP LOCK PIN ROOF LATCH
Reliable, simple and strong latching system

STRONG RAIN GUARD BRACING
Rain protection bracing increases the weather protection strength

VOLUME STICKER
Obtain an accurate measure of the volume of feed in the hopper

HOUSED CLEANING TOOL
Stored in a visible, accessible and secure location

SIX ADJUSTER BRACES
Highly accurate and stock proof feed access area

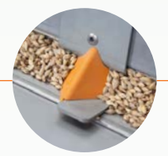
ADJUSTER LOCK
Lock the adjuster guard in position and prevent food lodging

ADJUSTER GUARDS
Adjuster Guards stop livestock from bulldozing feed out

DEEP TROUGHS
110mm deep troughs prevent waste and are strong enough for front end loader use

FOUR HOT GAL DIPPED SKIDS
60mm SHS skids provides superior strength, longevity and stability

ADJUSTABLE TINE GUIDES
Five width positions to set the large 200x100mm tine guides



FLOW ASSIST
Minimise lodging of feed on the Adjuster Braces

GRAIN FEEDER ACCESSORIES

Calf Creep Gates • Creep Gate Lift Assist Bands • Lamb Creep Panels • Mineral Attachment* • Rubber Mats Blower Attachment • HD Pivot Transporter • Hungry Boards • Hopper Emptying Chute* • Lamb Barriers*

02.
GETTING STARTED

SETTING THE ADJUSTERS

The tables on your grain feeder gauge sticker can be used as a starting point for positioning the Upper and Lower Adjusters.

SET UP INFORMATION AND WARNINGS

Full set up information and warnings are contained within the Advantage Feeders User Manual. This can be downloaded from:
www.advantagefeeders.com

1 Acidosis can be caused by over consumption of certain feeds. This can be prevented by controlling the quantity fed with Advantage Feeders 3-Way Restriction System. Before filling the feeder, see the User Manual to find out which feeds are safe to use.

2 Training stock to use Advantage Feeders 3-Way Restriction System is most successful when stock receive a rewarding experience on their initial visits. This is achieved by setting the Upper Adjuster and Lower Adjuster at medium to wide openings for the first 7-10 days. The feed used for this situation must be risk-free from acidosis.

3 The Adjuster Guard (the white component that has a series of cut outs) can be positioned in two orientations. When using clean and dust free feed, position it so the arrows at each end of it are pointing up. Then using dusty feed, position it so the arrows are pointing down.

4 The Adjuster Guard is locked in position by a push pin at the right side of the trough. To remove the Adjuster Guard, press the push pin and lift it. When inserting the Adjuster Guard (other than on the 200HD and 150 HD feeders), ensure it is slid between the Upper Adjuster and the brace/s that support the Upper Adjuster.

5 When the adjuster guard is not in use there is a designated storage location. In most cases the adjuster guard slides into the end of the feeder. If you are unable to identify the storage location please contact us for support.

6 Too many stock per feeder will increase the risk of shy feeding. See the User Manual for the recommended number of stock per feeder.

7 Do not allow the feeder to become completely empty when stock are receiving the majority of their diet from it. Refilling an empty feeder in these situations can result in trampling and aggressive behavior from hungry stock.

8 Stock can erode and pug the soil around the feeder. This can be prevented by placing rubber matting where the stock stand.

9 Stock consume spherical feeds (eg. legumes) easier than elongated feeds (eg. grain, pellets). When restricting consumption of spherical feeds, mix them with elongated feeds to achieve your desired intake.

10 In the application of paddock/field supplementation, feeders are best positioned 400 metres (¼ of a mile) or as far away from the water source as possible. This positioning encourages pasture consumption.

11 The 8000HD, 5500HD, 5300HD and 3800HD feeders can be lifted or skidded with 1500kg (3300lb) of feed in them. All other stationary feeders can be lifted or skidded full.

12 The Upper Adjuster Handles and Lower Adjuster Cams have locking bolts to secure them in position. The Lower Adjuster Cams also have an extrudes lug that can be used to rotate it.

CONSUMPTION TABLE INFORMATION

- The tables are guide only. The daily consumption is impacted by the size of the feed, quality and quantity of pasture available, breed, size, age and familiarity of the animal to the feeder.
- The tables are based on cereal and small pelletised feeds less than 6mm or ¼" in diameter.
- Generally, stock can consume 3-4% of their body weight of grain, pellets or a meal mix per day. Where the figures in the tables indicate 10kg (22lb)/head/day for cattle or 1kg (2.2lb)/head/day for sheep and goats, stock may be able to consume more.

Setting the Upper Adjuster Position
Align the triangle cut-out (pictured in orange) in the Upper Adjuster Handle at the notch with the desired number. See the image above showing Upper Adjuster position 1.

Setting the Lower Adjuster position when the Adjuster Guard is orientated for free flowing feed (arrows are pointing up)
Rotate the Lower Adjuster Cam to rest the Lower Adjuster at the desired number. See the image above showing Lower Adjuster position 3.

Setting the Lower Adjuster position when the Adjuster Guard is orientated for dusty feed (arrows are pointing down)
When the arrows on the ends of the Adjuster Guard are pointing down, increase the setting on the Lower Adjuster Cam by 3 to achieve the correct width opening. See the image above showing the Lower Adjuster Cam position 6 resulting in the Lower Adjuster position 3.

CONSUMPTION GUIDE FOR MATURE CATTLE

KG-LB/HEAD/DAY

POSITION 1

UPPER ADJUSTER POSITION

POSITION 7

POSITION 1

LOWER ADJUSTER POSITION

POSITION 7

	1		2		3		4		5		6		7	
	KG	LB	KG	LB	KG	LB	KG	LB	KG	LB	KG	LB	KG	LB
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	1.5	3.3	2.0	4.4	2.5	5.5	3.0	6.6	3.5	7.7	4.0	8.8	5.0	11.0
4	2.0	4.4	3.0	6.6	4.0	8.8	5.0	11.0	6.0	13.2	7.0	15.4	9.0	19.8
5	3.0	6.6	4.0	8.8	5.0	11.0	6.0	13.2	8.0	17.6	10.0	22.0	10.0	22.0
6	4.0	8.8	5.0	11.0	6.0	13.2	8.0	17.6	10.0	22.0	10.0	22.0	10.0	22.0
7	6.0	13.2	7.0	15.4	9.0	19.8	10.0	22.0	10.0	22.0	10.0	22.0	10.0	22.0

CONSUMPTION GUIDE FOR MATURE SHEEP AND GOATS

KG-LB/HEAD/DAY

POSITION 1

UPPER ADJUSTER POSITION

POSITION 7

POSITION 1

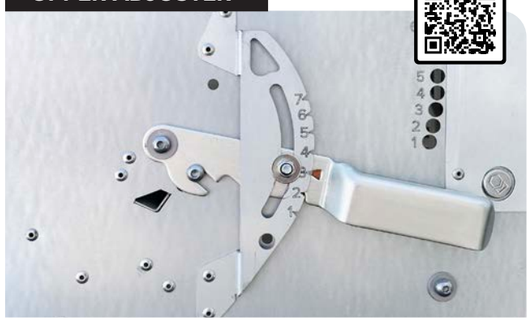
LOWER ADJUSTER POSITION

POSITION 7

	1		2		3		4		5		6		7	
	KG	LB	KG	LB	KG	LB	KG	LB	KG	LB	KG	LB	KG	LB
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.15	0.33	0.20	0.44	0.25	0.55	0.30	0.66	0.35	0.77	0.40	0.88	0.50	1.10
3	0.20	0.44	0.30	0.66	0.40	0.88	0.50	1.10	0.60	1.32	0.70	1.54	0.90	1.98
4	0.30	0.66	0.40	0.88	0.50	1.10	0.60	1.32	0.80	1.76	1.00	2.20	1.00	2.20
5	0.40	0.88	0.50	1.10	0.60	1.32	0.80	1.76	1.00	2.20	1.00	2.20	1.00	2.20
6	0.60	1.32	0.70	1.54	0.90	1.98	1.00	2.20	1.00	2.20	1.00	2.20	1.00	2.20
7	0.80	1.76	0.90	1.98	1.00	2.20	1.00	2.20	1.00	2.20	1.00	2.20	1.00	2.20

It is best if the Upper and Lower Adjusters are both set on similar settings. For example, if you are aiming to feed 4kg/head/day to cattle, set the Upper Adjuster at 3 and the Lower Adjuster Cam at position 3.

UPPER ADJUSTER



LOWER ADJUSTER

It is important to understand that using the Gauge Sticker is only a starting point, as daily intake can vary based on several factors, including paddock size, age of stock, breed of stock, pasture quality and quantity. To achieve the desired feed intake, see the 'Calculating feed consumption and altering the adjuster positions' instructions on page 7 for more information.

POSITIONING THE ADJUSTER GUARD

Using the Adjuster Guard is dependent on your feeding situation. It should be used any time the feed ration needs to be controlled or when stock are bullying others and preventing them from accessing the feeder.

The Adjuster Guard forces stock to lick through small gaps at the feed access area, which serves two key purposes:

1. Preventing Overconsumption

With the adjuster guard the stock can't move their tongues sideways along the feeding area to push food into the trough. They can only move their tongues in and out. This movement causes the saliva on their tongues to dry up, and when that happens, the food no longer sticks to their tongues anymore. As a result, the animals will leave to graze or drink.

2. Preventing Shy Feeders

With the Adjuster Guard in, all stock have consumption limited by their saliva production, therefor bossy or dominant stock leave the feeder to graze or drink once their saliva depletes. This allows shy animals to feel comfortable approaching the feeder, knowing they are unlikely to be pushed around.

THE ADJUSTER GUARD CAN BE POSITIONED IN TWO WAYS

The 'standard' position provides the ability to achieve lower rations. If the feed in the feed access areas is flowing consistently, the Adjuster Guard can be used in the 'standard' position.

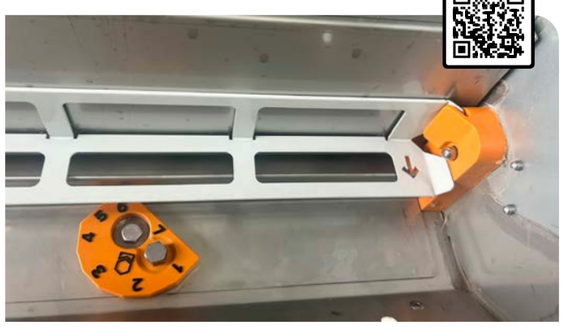
If the feed access area is blocking more than, twice per week, use the Adjuster Guard in the 'inverted´ position. When the Adjuster Guard is in the 'inverted' position, the feed access areas don't require cleaning as frequently. This can be common when using dusty or pelletised feed types.

ADJUSTER GUARD STANDARD POSITION

The Adjuster Guard in the 'standard' position with the arrow pointing up, allows full access to the feed in the feed access area.

ADJUSTER GUARD INVERTED POSITION

The Adjuster Guard in the 'inverted' position with the arrow pointing down, restricts some access to the feed in the feed access area.



02.
GETTING STARTED

WHICH FEED TO START WITH & HOW TO INTRODUCE STOCK TO A FEEDER

All livestock must be trained to the Advantage Feeders system as receiving the correct quantity of supplement feed can be critical to the health, productivity, and profitability of an animal. Taking steps to train stock ensures they become familiar with the system quickly and eliminating health risks.

If the wrong feed is put in the feeder and needs to be changed to adoption of the livestock to the Advantage Feeders system, there is a lot of labour needed and inconvenience caused to empty the hopper and replace the feed with a suitable feed.

INTRODUCING STOCK TO A FEEDER

- Stock that have previously fed from an Advantage Feeders system should not require re-training.
- If a maternal animal is being fed with a feeder while they have their offspring with them, the young stock shouldn't require training because their mothers will have taught them.

STEPS TO INTRODUCE STOCK TO A FEEDER

1. Reward Stock

Untrained stock must receive a good reward the first time they visit the feeder. The reward will imprint on them that the feeder is worth returning to. Some techniques to try include:

Use an appetising and safe feed that avoids acidosis. A commonly used feed for this training is forage based pellets or oats.

Set the Upper and Lower Adjusters so that the feed is almost flowing into the trough. Depending on the feed, this is often position 7 on the Upper Adjuster and 7 on the Lower Adjuster. This allows stock to learn where the feed access area is.

2. Use Previously Trained Stock

Introducing several previously trained stock into a mob with untrained stock can reduce the time needed for stock to become familiar with the system as the trained stock will show the untrained stock how to access the feed from the feeders.

Top Tip

Train stock when they are in good condition. It is more challenging to train stock if they are in poor condition and heavily reliant on supplement feed as their behaviour becomes aggressive towards other stock around the feeder.

NOTE: The time necessary to provide unrestricted feed varies (Step 1). The objective of this period is for a high proportion of the mob to be coming to the feeder on a regular basis. Factors that influence the duration of this period is the stocks familiarity with supplement feeds, the maturity of the stock, stock breed, the number of stock per feeder and the mob size.

For example, it may take less than one day for mature stock to become familiar with the Advantage Feeders system, while it may take up to 10 days for weaned calves or lambs to learn. Refer to BFD?

TRANSITIONING TO SAFELY FEEDING GRAIN & AVOIDING ACIDOSIS

Cereal grains are used to supplement livestock as they are found to be the lowest cost energy feed available. Care needs to be taken when feeding cereal grains to stock to avoid acidosis. Acidosis is caused due to highly digestible starch they contain. Precautions can be taken to prevent acidosis.

ACIDOSIS IN RUMINANTS

Acute acidosis usually occurs when the pH in the rumen decreases to a level of 5.5. At this low pH, it changes the balance of rumen bugs, with acid-producing bacteria taking over from acid-consuming bacteria. The lowered pH of the rumen's contents is then absorbed through the rumen wall, causing acidosis. In severe cases, it will lead to death.

TIPS TO REDUCE THE RISK OF ACIDOSIS

Controlled Transition to High Starch Feeds

PHASE 1.

Start by feeding 100% of a safe feed. Fill the hopper with enough feed for roughly two days or 2kg per head for sheep and 10kg per head for cattle. Fully open the feeding area by setting the Upper Adjuster to position 7 and the Lower Adjuster set to position 7. This will encourage stock to approach the feeder, and be rewarded for their effort.

PHASE 2.

Close the Upper Adjuster to position 4 and the Lower Adjuster to position 4 and insert the Adjuster Guard. After a couple of days or when stock are frequently visiting the feeder, you can alter the ration. Change the ration to ½ 'safe feed' and ½ cereal grain (by weight) for at least two days or 2kg per head for sheep and 10kg per head for cattle.

PHASE 3.

Close the Upper Adjuster to at least position 3 and the Lower Adjuster to at least position 3 with the Adjuster Guard in use. When the hopper is close to empty, you are safe to alter the ration to 100% cereal grain.

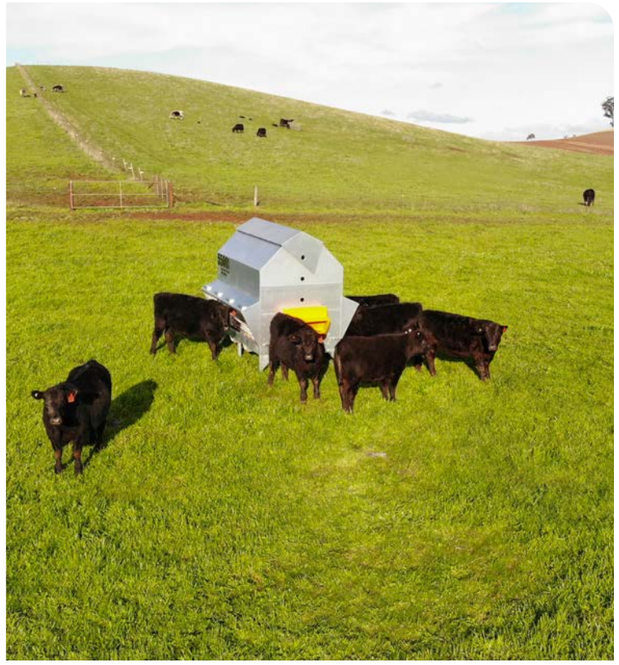
02.
GETTING STARTED

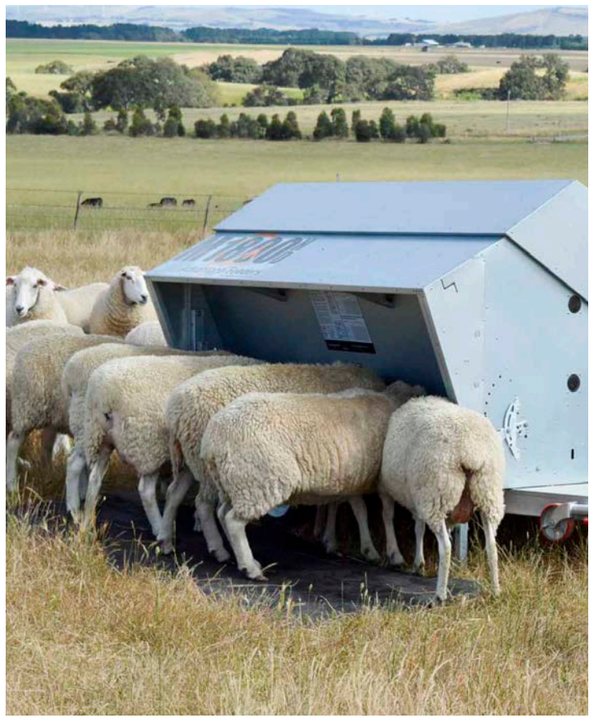
POSITIONING THE FEEDER IN A PADDOCK

Where to position the feeder depends on what you are trying to achieve. When encouraging stock to visit the feeder in the training phase, it is best to place the feeder in close proximity to water, shelter, minerals or other high traffic areas.

After stock are trained to the feeder, and it is being used to supplement their diet, it is best to have the feeder more than 400 metres from the water point. This encourages the stock to graze in between drinking and receiving their supplement.

Other factors to consider in positioning the feeder are the ability to access the feeder and fill it when it empties and the type of ground it is placed upon. For example, placing the feeder on a rocky section of a paddock can avoid issues with soil erosion and pugging.





AVOIDING SOIL EROSION & PUGGING AROUND FEEDERS

The foot traffic of stock can quickly erode soil around the feeder or cause pugging of moist soil. This area is usually 1.0m to 1.5m out from the skids of the feeder. The pace and depth of erosion will depend on the soil type, seasonal conditions, and the number of stock feeding from the feeder.

One solution to these issues is putting a material on the ground over the area that is being eroded.

A common and cost-effective material for this purpose is repurposed rubber conveyor belting that is 1.2m wide and 3m long. Rubber mats are available to purchase from our range of grain feeder accessories.

ALLOCATING STOCK PER FEEDER

Many factors influence the number of stock per feeder. The following tables are suggestions. The main factor that dictates the number of stock per feeder depends on whether you are using the feeders to supplement or substitute the animal's diet.

SUBSTITUTE vs SUPPLEMENT FEEDING

- Substitute feeding is when stock are receiving most or their whole ration from the feeder.
- Supplement feeding is when stock are receiving less than half of their diet from the feeder.

Stock receiving a substituted diet frequently need to access the feeder more often and for longer than stock receiving a supplement so the suggestions are separated into the two tables below.

When the feeders are used to creep feed calves and lambs, the stock numbers in the supplement feeding table can be used.

After using the feeders for some time, farmers can use their experience to decide whether to run more or less stock per feeder.

SUPPLEMENT FEEDING*

	TROUGH SPACE REQUIRED	NO. STOCK FOR 1800HD FEEDER & ABOVE	NO. STOCK FOR 800HD FEEDER
SHEEP	24mm	200	100
CATTLE	100mm	48	24

**Based on recommended numbers*

SUBSTITUTE FEEDING*

	TROUGH SPACE REQUIRED PER HEAD	NO. STOCK FOR 1800HD FEEDER & LARGER	NO. STOCK FOR 800HD FEEDER
SHEEP	35mm	136	68
CATTLE	150mm	32	16

**Based on recommended numbers*

NOTE: The increase of stock per feeder will increase the frequency of assessing the condition of the stock and the time to ensure that all the animals are receiving adequate supplementation.

A common situation where fewer stock per feeder is required is when ewes that are heavily pregnant or lambing, are using a feeder. Ewes, especially with multiple lambs, often receive a larger supplement and need to be at the feeder for longer than non-pregnant animals. During lambing, having fewer ewes and lambs around the feeder also makes it more likely that the ewe will leave the feeder with all their lambs. In this situation, use the same number of stock per feeder as substitute feeding.

Another situation arises when feeding weaners. Weaners are more susceptible to being bullied and developing into shy feeders. When using the feeders with stock that are in their initial months of weaning, use the same number of stock per feeder as substitute feeding.

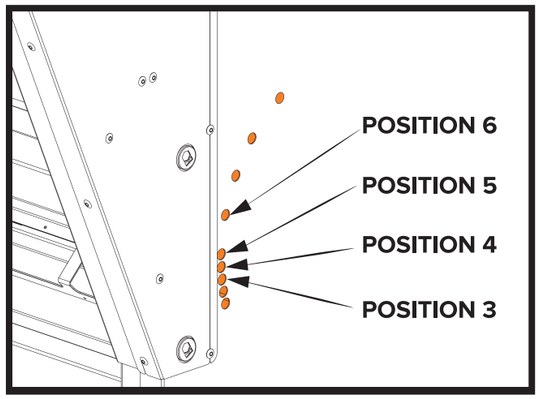
02.
GETTING STARTED

POSITIONING THE CREEP PANEL & CREEP GATES

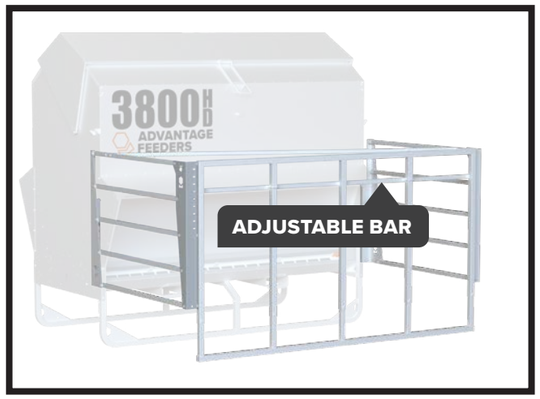
At the commencement of creep feeding, the Creep Panels should start on Position 3. Once lambs start tugging to get their heads out from under the Creep Panel, open this to Position 4. This commences when lambs are approx. 10 weeks of age. Once tugging starts, there is generally a fortnight before they cannot tug hard enough to get their head out.

The horizontal bar on the Creep Gates should be positioned at the height of the back on the largest calf. As calves increase in size, move the bar up.

CREEP PANEL POSITIONING



CREEP GATE HORIZONTAL BAR



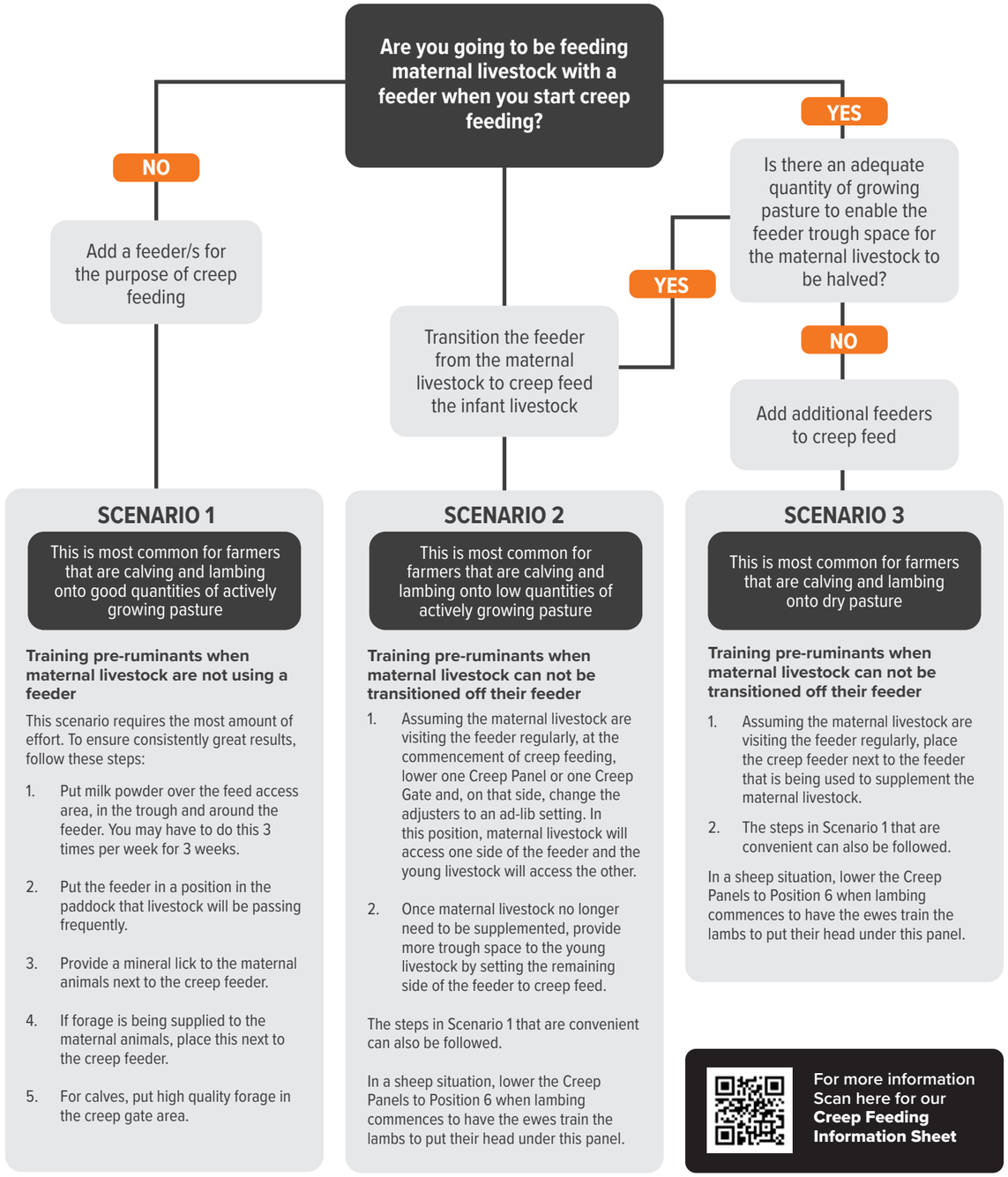
POSITIONING THE CREEP PANEL & CREEP GATES

Pre-ruminant lambs and calves should be offered an ad-lib ration. The Upper and Lower Adjuster should each be set at a minimum of position 6. The Adjuster Guard should not be used and placed in its storage location under the weather rain guard.

Depending on the flow of the feed, the Upper and Lower Adjuster can be opened further, however, avoid feed flowing into the trough. Livestock prefer fresh feed so if the trough fills up too much and the livestock do not consume this, the feed can be wasted.

TRAINING YOUNG LIVESTOCK TO CONSUME STARCH DIETS

The methods of training pre-ruminants vary depending on the scenarios that are facing the maternal livestock:



SCENARIO 1

This is most common for farmers that are calving and lambing onto good quantities of actively growing pasture

Training pre-ruminants when maternal livestock are not using a feeder

This scenario requires the most amount of effort. To ensure consistently great results, follow these steps:

1. Put milk powder over the feed access area, in the trough and around the feeder. You may have to do this 3 times per week for 3 weeks.
2. Put the feeder in a position in the paddock that livestock will be passing frequently.
3. Provide a mineral lick to the maternal animals next to the creep feeder.
4. If forage is being supplied to the maternal animals, place this next to the creep feeder.
5. For calves, put high quality forage in the creep gate area.

SCENARIO 2

This is most common for farmers that are calving and lambing onto low quantities of actively growing pasture

Training pre-ruminants when maternal livestock can not be transitioned off their feeder

1. Assuming the maternal livestock are visiting the feeder regularly, at the commencement of creep feeding, lower one Creep Panel or one Creep Gate and, on that side, change the adjusters to an ad-lib setting. In this position, maternal livestock will access one side of the feeder and the young livestock will access the other.
2. Once maternal livestock no longer need to be supplemented, provide more trough space to the young livestock by setting the remaining side of the feeder to creep feed.

The steps in Scenario 1 that are convenient can also be followed.

In a sheep situation, lower the Creep Panels to Position 6 when lambing commences to have the ewes train the lambs to put their head under this panel.

SCENARIO 3

This is most common for farmers that are calving and lambing onto dry pasture

Training pre-ruminants when maternal livestock can not be transitioned off their feeder

1. Assuming the maternal livestock are visiting the feeder regularly, place the creep feeder next to the feeder that is being used to supplement the maternal livestock.
2. The steps in Scenario 1 that are convenient can also be followed.

In a sheep situation, lower the Creep Panels to Position 6 when lambing commences to have the ewes train the lambs to put their head under this panel.

For more information Scan here for our **Creep Feeding Information Sheet**

NOTE: For farmers with small flocks of animals the 800HD has a division sheet so two different feeders can be fed to different livestock groups. Unless you are using this feeder, the feed being used to supplement the maternal livestock will be the same as the creep feed for the infant livestock.

03.
MANAGING YOUR FEEDER

Measuring and controlling feed intake is important to ensure stock receive the correct amount of supplement to maximise profitability. Over consumption leads to higher than required feed expense and under consumption leads to lower stock performance outcomes.

CALCULATING FEED CONSUMPTION & CONTROLLING FEED INTAKE

1. Initial Reading

Level the feed in the hopper and take a reading using the volume sticker and record the feed level in the Advantage Feeders Consumption Log (See Page 22):

- The volume scale in the feeder measures cubic meters (or litres) and bushels. Different feeds have varying densities so volumetric measurement is the best system for calculating feed consumption.
- The volume scale only goes to the top of the side panels. If the hopper is completely full and the feed is peaked over the side panels and hard against the roof of the 2.4 metre long feeders, this amounts to an extra 0.2 cubic metres of feed.

2. Second Reading

After several days, level the feed and record the feed level in the Advantage Feeders Consumption Log

- Daily consumption can vary so it is more accurate to wait three days between readings. It is best to take the readings at the same time each day.

3. Calculate

Use the formula on the Advantage Feeders Consumption Log to calculate the average intake of the mob.

- To effectively evaluate average livestock consumption, it is recommended that:

  i) values from at least three calculation of "Grams/head/day' and

  ii) at least 600 litres or 0.6 cubic meters in the hopper has been consumed

MOVING THE ADJUSTERS TO ACHIEVE THE DESIRED CONSUMPTION

Compare the calculated daily feed consumption with the desired consumption.

- If stock are consuming less than desired, open up one or both of the Upper and Lower Adjuster.
- If stock are consuming too much, close down one or both of the Upper and Lower Adjuster.

NOTE: Small movements of the 3-Way Adjustment System can significantly change feed intake. It is best to make small adjustments, calculate the new daily feed consumption and then make further adjustments if necessary.

As a general rule, control over feed consumption is more consistent when the Upper and Lower Adjuster have similar settings (i.e. both adjusters set at 3).

When making assessments in feed consumption, it is important to take into consideration the impact from weather. On wet days, it is common for stock to want more supplement feed than grass and travel to the feeder more frequently, increasing their consumption. Conversely, warm and sunny days can make pasture more desirable.

WARNING: See the warning on page 18 to make sure you don't allow feed to go under the Lower Adjuster when it is being moved.

CALCULATING FEED DENSITY

The density (the relationship between the weight and how much space it takes up) of feeds varies. This makes it impossible to have a sticker inside the hopper to indicate the weight of feed in the hopper.

Advantage Feeders grain feeders have volume stickers in the hopper. When the volume in the hopper is multiplied with the feed density, weight of feed consumed can be calculated. This is needed to ensure the stock are receiving the correct amount of nutrients.

Depending on the users desire for accuracy, the density of a sample of feed can be calculated or a generic feed density can be used.

NOTE: If you purchase feed from a commercial feed supplier, they may also be able to provide the density of the feed you have purchased.

GENERAL DENSITY OF DIFFERENT TYPES OF FEEDS

FEED	KG/L	LB/L
PELLETS	0.65	1.43
BARLEY	0.65	1.43
OATS	0.51	1.12
WHEAT	0.77	1.69
SOYA MEAL	0.60	1.32
PEAS	0.75	1.65
BEANS	0.75	1.65

STEPS TO CALCULATE FEED DENSITY

1. Get a bucket. It is best if the bucket is 10-20 litres.
2. Weigh the bucket. As a guide, 20 litre plastic buckets weigh about 0.9kg.
3. Fill the bucket over the brim with the feed. Bounce the bucket gently onto the ground three times to have the feed compact. Level the feed off on the top of the bucket with a straight edge.
4. Weigh the bucket with the feed in it.
5. Empty the bucket and fill it to the brim with water.
6. Weigh the bucket with water in it.
7. Calculate the weight of the feed: Subtract the measurement in step 2 from the measurement in step 4.
8. Calculate the weight of the water: Subtract the measurement in step 2 from the measurement in step 6.
9. Calculate the density of the feed: Divide the amount in step 7 by the amount in step 8.

EXAMPLE

Step 2: The bucket weights 0.9kg

Step 4: The feed and the bucket weighs 14.5kg

Step 6: The water and the bucket weighs 21.5kg

Step 7: The feed weighs 13.6kg (14.5 – 0.9 = 13.6)

Step 8: The water weighs 20.6kg (21.5 – 0.9 = 20.6)

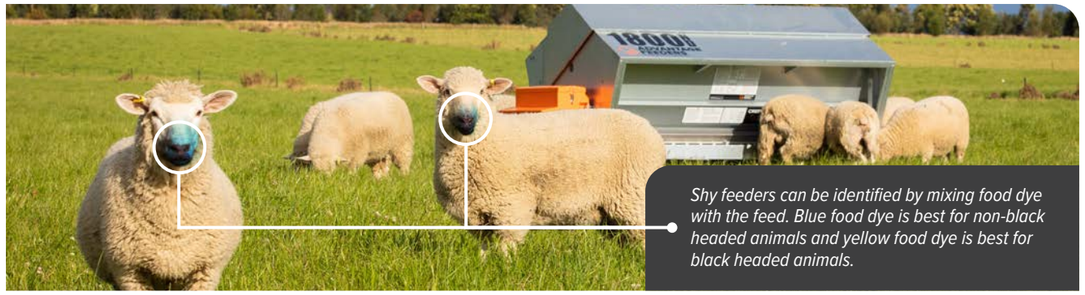
Step 9: The density is 0.66 (13.6 / 20.6 = 0.66)

03.
MANAGING YOUR FEEDER

IDENTIFYING SHY FEEDERS

Shy feeders are stock that do not consume their full allocation of supplement feed. They are apparent in all commonly used feeding systems, including trough feeding and feeding on the ground.

Several factors influence whether an animal is a shy feeder including the amount of trough space available, the differential in size between the large and small animals within a mob, the breed of the animal and the availability of other feed sources. Depending on the number of animals and their place in the production cycle, it can be important to identify these animals and treat them uniquely.



Shy feeders can be identified by mixing food dye with the feed. Blue food dye is best for non-black headed animals and yellow food dye is best for black headed animals.

STEPS TO IDENTIFY SHY FEEDERS WITH FOOD DYE

1. Find an area protected from the wind and put a protective mask and body suit on.
2. Fill a 10-20 litre bucket with feed. It is important that the bucket has a lid.
3. Push the jar of food dye (with the jar lid remaining on) into the feed to the bottom of the bucket.
4. Open the lid on the jar and empty the contents of the food dye powder.
5. Put the lid back on the jar, remove it from the bucket of feed and dispose of it.
6. Slowly mix the feed and the dye in the bucket. Once mixed, put the lid on the bucket.
7. Ensure the feeder for the test is empty.
8. Position the feeder protected from the wind or in a position that you can stand upwind of it being filled.
9. Put 50kg of fresh feed in the feeder and evenly spread ½ the contents of the bucket.
10. Put 100kg of feed in the feeder and evenly spread the remaining ½ of the bucket.
11. Put 50kg of feed in the feeder, then use a shovel to slowly mix the feeder contents.
12. After 24-48 hours, check the animal's noses. The animals with dye around their mouth will be accessing the feeder. A general assumption can be made by the quantity of dye around the animal's mouth as to how much it has been feeding from the feeder.

WHAT TO DO IF SHY FEEDERS ARE IDENTIFIED

Assess the consequences of the animal's welfare of not receiving supplement and manage them according to their needs. Some situations to consider are:

- If a heavily pregnant ewe doesn't consume its allocated supplement, it may have difficulties with foetal development, birth and lactation – high profit consequence. Depending on the availability of pasture, this may be a risk to the welfare of the animal.
- If a weaned lamb doesn't consume its allocated supplement, it may take longer to grow out to target weight – low profit consequence. The welfare of the animal is not affected if they are also grazing pasture.

FILLING YOUR FEEDER

Depending on the size of your feeder and the equipment available to you, there are a range of techniques that can be used to fill your feeder with your chosen feed.

FILLING YOUR FEEDER FROM A SILO

Feeders can be picked up or towed to your silo/bin and transferred back to their location in the paddock. The 800HD and 1800HD models can be picked up and moved when full. The 3800HD and 5500HD can be moved with up to 2,000kg of feed in them. All mobile feeders can be towed and moved when they are full.

FILLING YOUR FEEDER USING A FRONT END LOADER

Feeders can be filled using a front end loader. It's important to check the width of your feeder and the width of your loader bucket to prevent spillage. Hungry Boards are available as an additional accessory to help prevent waste.

FILLING YOUR FEEDER USING BULK BAGS

It is important to know what height your front end loader can safely lift. If lifting height is an issue, attachments like Bulk Bag Lifters can be purchased from other agricultural suppliers to be lifted higher.

FILLING YOUR FEEDER USING A HOPPER WITH AUGER

If filling the 3800HD or 5500HD grain feeder models, the auger height will need to be measured to ensure it can reach the feeder opening.

FILLING YOUR FEEDER WITH 25KG OR 50KG BAGS

Filling or topping up your feeder can be done by hand. Check the height of your feeder before commencing. The 3800HD can be difficult to fill due to it's overall height.

03.
MANAGING YOUR FEEDER

AVOIDING AN EMPTY FEEDER

WARNING: Don't let a feeder go empty!

It is rare for stock to gorge feed when they have access to a constant supply of supplement using an Advantage Feeders grain feeder.

If a feeder runs empty and stock don't have a constant supply, it can change the behaviour of livestock. With the fear of missing out and the need of the supplement, stock can become aggressive, visit it more often, prevent others from going to the feeder and squash animals while trying to access the trough.

If the feeder does inadvertently become empty, the rumen environment will change. If this occurs, we recommend you follow the steps on page 9 to reduce the risks of acidosis.

DON'T ALLOW FEED TO GO UNDER THE LOWER ADJUSTER WHEN IT IS BEING REPOSITIONED

If the locking bolts on the Lower Adjuster are undone too much, it risks feed flowing between the Lower Adjuster and the trough, losing control over how much stock eat and stock overconsumption.

If this happens, it can be a time-consuming issue to resolve. Understanding how to prevent this is important.

STEPS TO PREVENT FEED FLOWING UNDER THE LOWER ADJUSTER

1. Loosen the locking bolts of all 4 Lower Adjuster Cams half a turn.
2. Attempt to reposition the Lower Adjuster to the desired location. If the Lower Adjuster doesn't move, repeat step 1.
3. Tighten the locking bolts of all 4 Lower Adjuster Cams.

STEPS TO RESOLVE THE ISSUE IF FEED DOES FLOW UNDER THE LOWER ADJUSTER

1. Shut the upper adjuster to stop the feed flow. Depending on the feed in the hopper, this may completely stop the flow of feed into the trough.
2. If the trough has feed in it, empty it.
3. Remove the 4x Lower Adjuster Cams and Lower Adjuster
4. Remove any feed from where the Lower Adjuster will be put back.
5. Put the Lower Adjuster and 4x Lower Adjuster Cams back while ensuring there is no feed between the Lower Adjuster and the trough.

CLEANING YOUR FEEDER

To ensure the longevity and functionality of your investment, clean your feeder after each season.

STEPS TO CLEANING YOUR FEEDER

1. Remove the Adjuster Guard and Lower Adjuster.
2. Reposition the Upper Adjuster to the highest position.
3. Pressure wash inside the hopper.
4. Pressure wash the troughs.
5. Pressure wash the skids.
6. Wait for the feeder to dry.
7. For the areas of the feeders that had feed that needed to be removed in steps 3 and 4, spray these areas with a rust prevention liquid, like lanolin.

NOTE: The Adjuster Guard and Lower Adjuster can remain loose in the trough until the feeder is setup and ready for its next application.

04.
FREQUENTLY ASKED QUESTIONS

HOW DO I FEED AD LIB?

It is a common misconception that to feed ad lib or to full ration, the feed must be flowing freely into the trough. The issue this causes is that the trough can fill up with feed and stock ignore and waste this due to their preference of fresh feed.

To feed ab-lib, open the upper and lower adjusters to position 7 and 7. This gap allows stock to scoop fresh feed out of the feed access area with their tongue while still having to work to access the feed. This means less wastage as stock will not ignore the spilled feed in the trough, and maintain a clean and empty trough.

CAN "TOTAL MIX RATIONS" AND PALM KERNEL BE FED?

Farmers with mixing equipment often put a total mix ration in the feeders. The mixes have less than 25% roughage and the roughage is chopped less than 25mm long.

Palm kernel and other meals are commonly used. The peak of the trough is comparatively steep, being 45 degrees, which allows this feed to flow when mixed with 25-50% of pellets or grain.

CAN THE SAME FEEDER BE USED FOR CATTLE AND SHEEP?

All feeders can be used for sheep and cattle* as the skids have a feature that allow them to be fastened at different heights. The height of the skids can be changed by lifting the unit up, taking the bolted pins out of the skids, repositioning the skids and refastening the pins.

**Except the 5500HD - available at cattle height only.*

CAN LARGE PELLETS BE FED?

Yes, however the lowest ration that can be restricted with 6mm pellets is about 750g/head/day for sheep and 2.5kg/head/day for cattle as the adjusters need to be opened wider to allow this size pellets to flow. For 9mm pellets the adjusters need to be so wide that there is no control over feed consumption for sheep and 5kg/day is the minimum for most cattle. For 12mm pellets or nuts, there is no restriction for cattle or sheep.

WHAT IS THE BEST WAY OF CHANGING FROM ONE FEED TYPE TO ANOTHER?

When you are transitioning to a high starch feed, it is recommended to change the feed incrementally over a period of time. A suggested ration when transitioning from a safe feed, like oats or pellets containing sufficient rumen buffers, to acidosis prone cereal feed is as follows:

- All pellets for 5 days;
- 1/2 of the ration is pellets, 1/2 of the rations is a cereal grain, for 5 days;
- All cereal grain

It is best to have ad lib straw or hay available during this time to enhance rumen function. For more information, please see the 'TRANSITIONING TO SAFELY FEEDING GRAIN AND AVOIDING ACIDOSIS' on page 9.

HOW CAN CORROSIVE SUPPLEMENTS BE FED WITH ADVANTAGE FEEDERS?

Most mineral mixes contain corrosive substances, like salt, and can damage the galvanising of the feeder. Advantage Feeders does not guarantee the use of these supplements in the feeders. The Advantage Feeders Mineral Attachment is an ideal product to put minerals in.

The Mineral Attachment has the capacity to hold 85 litres or 110kg. If the Mineral Attachment is used to supplement 200 sheep, consuming 25grams/head/day, it will take 22 days before it empties. It can be attached to the ends of a feeder or hung on gates or posts.

WHAT IS THE MINIMUM INTAKE THE FEEDERS CAN BE SET TO?

FEED	SHEEP	CATTLE
CEREAL GRAIN	< 200g / day	< 1.5kg / day
80% CEREAL GRAIN, 20% 3mm PELLETS OR SOYA MEAL	< 300g / day	< 1.5kg / day
3mm PELLETS	< 500g / day	< 1.5kg / day
6mm PELLETS	< 750g / day	< 2.5kg / day
9mm PELLETS	Ad-lib	< 5kg / day
12mm CUBES	Ad-lib	Ad-lib

WHEN THE FEEDER HAS FEED IN IT, WHICH ADJUSTER SHOULD I MOVE TO CHANGE THE RATION?

It is generally recommended to keep the Upper and Lower Adjusters on the same numbers (ie. 4 and 4 respectively) to minimise blockages. This means if the Lower Adjuster is at position 3, the Upper Adjuster is at position 4 and you wanted to increase the ration, you could open the Lower Adjuster from position 3 to position 4.

Warning: see the warning on page 18 to make sure you don't allow feed to go under the Lower Adjuster when it is being moved.

WHAT IS THE SMALLEST FEED ACCESS AREA GAP STOCK CAN EAT OUT OF THE FEEDER?

Many users of Advantage Feeders grain feeders assume that the minimum feed access area gap sheep and cattle tongues can fit in (between the Upper and Lower Adjusters) is 15mm and 25mm respectively. The minimum feed access area gap for sheep is 8mm (setting 1.5 on the Lower Adjuster Cam) and for cattle, it is 15mm (setting 3 on the Lower Adjuster Cam). Having these narrow gaps will play an important role in restricting the ration and preventing over consumption issues. For example, a 20mm gap compared to a 15mm gap can double the intake.

WHAT CAN I DO IF MY STOCK SHOWS SIGNS OF ACIDOSIS?

When used correctly, Advantage Feeders grain feeders allows a safe feeding system for high acidosis risk feedstuffs. If the feeders are not used correctly and the stock do show some signs of acidosis, bi-carbonate soda should be immediately provided to stock in addition to a vet being contacted.

Bi-carbonate soda can be provided by spreading it over the grain, in the feed access area and in the trough so the stock quickly consume it or mixed with water and administered orally with a large syringe or drench gun.

CAN I GET PARTS FOR MY FEEDER?

Advantage Feeders offer replacement parts for all feeders. Contact Advantage Feeders directly for more information or to order.

WHAT ARE WAYS TO REDUCE THE FREQUENCY OF CLEANING THE FEED ACCESS AREA?

1. Use the 'Inverted' position of the Adjuster Guard. This creates a larger gap between the Upper and Lower Adjusters while still providing the same gap where the animal's tongue licks. This larger gap means that it takes longer for clumps to form, allows feed to flow better for longer and reduces cleaning frequency. For more information see 'Positioning the Adjuster Guard' on page 7.
2. If whole grain has adequate nutrition for your livestock, change the ration to this feed type to minimise dust.
3. Change pellet supplier or request a harder pellet. Pellet quality can vary a lot between suppliers. Some pellet manufacturers are prepared to increase the integrity of their feeds by screening out dust, increase the hardness of the pellets and/or increase the level of fat (to prevent moisture absorption).
4. Replace cracked grains with 'bruised' grains. Bruised grain is squashed but unbroken whole grain.
5. Feed a mix of cereals and high protein pellets instead of standard pellets. The separation of the pellets in the mix with the whole grain prevents the pellets forming clumps and not flowing into the feed access area. Pellets are often fed because cereal grains can have an inadequate level of protein. A cereal grain and high protein pellet mix is also often more cost effective than a complete pelleted feed.

WHAT IS THE BEST WAY TO CLEAN THE FEED ACCESS AREA BETWEEN THE UPPER AND LOWER ADJUSTERS?

If the feeder contains feed, and you want to make less than a 50% change to the ration, it is recommended that you move the Upper Adjuster. If you need to make more than a 50% change to ration it is recommended that the Upper the Lower Adjusters are relocated.

Warning: see the warning on page 18 to make sure you don't allow feed to go under the Lower Adjuster when it is being moved.

HAVE QUESTIONS?
WE WOULD LOVE TO HEAR FROM YOU!
GIVE OUR CUSTOMER SUPPORT TEAM A CALL ON
1300 88 15 75

05.
ADDITIONAL RESOURCES

CONSUMPTION LOG

Our Advantage Feeders Consumption Log is a simple table that can assist you in tracking and calculating feed consumption for your mob or herd and then enabling you to determine the average intake of each animal.
Use the QR code to download your printable version.

SCAN HERE TO DOWNLOAD & PRINT A COPY OF OUR CONSUMPTION LOG

ADVANTAGE FEEDERS 5 YEAR EXTENDED WARRANTY*

ADVANTAGE FEEDERS 30-DAY MONEY BACK GUARANTEE*

At Advantage Feeders, we stand behind the quality and performance of our products. We are confident that our feeders and accessories are designed to meet your needs and exceed your expectations.

This is why we offer a standard 2-year warranty on all of our products, and an extended 3-year warranty to a total of five years from the date of delivery for all our customers who complete the application form.

Terms and Conditions:

Eligibility: This guarantee applies to all Advantage Feeders products purchased directly from our official website or authorised dealers, with proof of purchase supplied.

Duration: The extended warranty is valued for a further 3-years from the date of delivery of the goods, and is confirmed by the shipping carrier documentation.

However, if for any reason you are not completely satisfied with your purchase, we offer a 30-day money-back guarantee to ensure your satisfaction.

Terms and Conditions:

Eligibility: This guarantee applies to all Advantage Feeders products purchased directly from our official website or authorised dealers, with proof of purchase supplied and the product is in it's original condition.

Duration: The 30-day period begins from the date of delivery as confirmed by the shipping carrier.

To see our full T&C's please go to: https://advantagefeeders.com.au/resources/extended-warranty-form/

*Advantage Feeders 5 Year Extended Warranty and 30 Day Money Back Guarantee are not available in New Zealand.

FOR PRODUCT SUPPORT

AUSTRALIA
Website: www.advantagefeeders.com.au
Phone: 1300 88 15 75

NEW ZEALAND
Website: www.advantagefeeders.co.nz
Phone: 0800 341 466

GREAT BRITAIN
Website: www.advantagefeeders.co.uk
Phone: 08000 786 030

IRELAND
Website: www.advantagefeeders.ie
Phone: 1800 817 462

USA
Website: www.advantagefeeders.com
Phone: 1-800-806-0715

CANADA
Website: www.advantagefeeders.ca
Phone: 1-800-806-0715